OECD Reviews of School Resources

CHILE

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OECD

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Please cite this publication as:
Santiago, P. et al. (2017), *OECD Reviews of School Resources: Chile 2017*, OECD Publishing, Paris.
http://dx.doi.org/10.1787/9789264285637-en

ISBN 978-92-64-28562-0 (print)
ISBN 978-92-64-28563-7 (PDF)
ISBN 978-92-64-28564-4 (epub)

Series: OECD Reviews of School Resources
ISSN 2413-4333 (print)
ISSN 2413-3841 (online)

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Foreword

This report for Chile forms part of the OECD Review of Policies to Improve the Effectiveness of Resource Use in Schools (also referred to as the School Resources Review*, see Annex A for further details). The purpose of the review is to explore how school resources can be governed, distributed, utilised and managed to improve the quality, equity and efficiency of school education. School resources are understood in a broad way, including financial resources (e.g. expenditures on education, school budget), physical resources (e.g. school infrastructure, computers), human resources (e.g. teachers, school leaders) and other resources (e.g. learning time).*

Chile was one of the countries which opted to participate in the country review strand and host a visit by an external review team. Members of the OECD review team were Paulo Santiago (OECD Secretariat), co-ordinator of the review; Ariel Fiszbein (Director of the Education Program at the Inter-American Dialogue); Sandra García Jaramillo (Associate Professor at the School of Government at the Universidad de los Andes in Colombia) and Thomas Radinger (OECD Secretariat). The biographies of the members of the review team are provided in Annex B. This publication is the report from the review team. It provides, from an international perspective, an independent analysis of major issues facing the use of school resources in Chile, current policy initiatives, and possible future approaches. The report serves three purposes: i) to provide insights and advice to Chilean education authorities; ii) to help other countries understand the Chilean approach to the use of school resources; and iii) to provide input for the final comparative analysis of the OECD School Resources Review.

The scope for the analysis in this report includes early childhood education, pre-primary education and school education. At the request of Chilean authorities, the focus areas of the Review of School Resources in Chile are: i) the funding of school education (including planning, distribution, incentives and monitoring); ii) equity resourcing policies targeted at specific groups of students; iii) school organisation and the operation of schools; and iv) the teaching profession. The analysis presented in the report refers to the situation faced by the education system in September 2015, when the review team visited Chile.

*Chile's involvement in the OECD review was co-ordinated by the Ministry of Education in collaboration with the Agency for Quality Education and the Education Superintendence. The national co-ordinator was Eduardo Candia, Co-ordinator of the Research Unit on School Education, Studies' Centre (*Centro de Estudios*), Ministry of Education. Within the Ministry of Education, he was supported by Daniela Barrera and Hadabell Castillo, Researchers at the Studies' Centre, Ministry of Education. In the course of 2017, the co-ordination within the Ministry of Education was supported by Carla Guazzini and Amanda Castillo, Researchers at the Studies' Centre. The contribution of the Agency for Quality Education was co-ordinated by Raúl Chacón, Advisor at the Agency while the contribution of the Education Superintendence was co-ordinated by Mauricio Farías, Head of the Audit Division within the Superintendence. An important part of Chile's involvement was the preparation of a comprehensive and informative Country Background Report (CBR) on school resource use authored by the Ministry of Education (Eduardo Candia, co-ordinator;*

and Hadabell Castillo), the Agency for Quality Education (Raúl Chacón; Fabián Guajardo; and Miguel Ruz) and the Education Superintendence (Cesar Muñoz; and Priscila Valdés) in collaboration with the UNESCO (United Nations Organization for Education, Science and Culture) Regional Office for Education in Latin America and the Caribbean (OREALC/UNESCO). The OECD review team is very grateful to the authors of the CBR and to all those who assisted them in providing a high-quality informative document. The CBR is an important output from the OECD project in its own right as well as an important source for the review team. Unless indicated otherwise, the data for this report are taken from the Chilean Country Background Report. The CBR follows guidelines prepared by the OECD Secretariat and provides extensive information, analysis and discussion in regard to the national context, the organisation of the education system, the use of school resources and the views of key stakeholders. In this sense, the CBR and this report complement each other and, for a more comprehensive view of the effectiveness of school resource use in Chile, should be read in conjunction.

The review visit to Chile took place on 22-30 September 2015. The itinerary is provided in Annex C. The visit was designed by the OECD in collaboration with Chile's Ministry of Education. It also involved a preparatory visit by the OECD Secretariat on 11-12 December 2014. The review team held discussions with education officials at the national (Ministry of Education), regional (Education Regional Secretariats, Secretarías Regionales Ministeriales, *SEREMI), provincial (Education Provincial Departments,* Departamentos Provinciales de Educación, *DEPROV) and municipal levels; representatives of the Education Commissions of the National Congress; authorities in charge of public expenditure (Ministry of Finance, Ministry of Education); quality assurance agencies (Agency for Quality Education (*Agencia de Calidad de la Educación*); other relevant agencies dealing with the use of school resources (Education Superintendence; the National Audit Office); teacher associations and representatives of non-teaching staff (e.g.* Colegio de Profesores*); representatives of municipalities (Chilean Association of Municipalities,* Asociación Chilena de Municipalidades, *AChM)); representatives of schools (e.g. organisations representing private schools); students' organisations; representatives of initial teacher education providers; international organisations with representation in Chile; representatives of Indigenous people; representatives of children with special needs; non-governmental organisations; and researchers with an interest in the effectiveness of school resource use. The team also visited a range of schools in three regions (La Araucanía, O'Higgins and Santiago Metropolitan Area) and four municipalities (Graneros, La Pintana, Nueva Imperial, Temuco), interacting with school management, teachers, parents and students. The intention was to provide the review team with a broad cross-section of information and opinions on school resource use and how its effectiveness can be improved. Overall, the OECD review team held 45 meetings and interviewed about 200 individuals.*

The OECD review team wishes to record its gratitude to the many people who gave time from their busy schedules to inform the review team of their views, experiences and knowledge. The meetings were open and provided a wealth of insights. Special gratitude is due to the National Co-ordinator, Eduardo Candia, for his commitment and efforts to provide the review team with the best possible conditions for this work. In addition, the review team is grateful for the support provided by Raúl Chacón and Mauricio Farías throughout the whole process. Very special words of appreciation are also due to Daniela Barrera for organising the perfect review visit and going to great lengths to respond to the questions and needs of the review team. The review team was impressed by her efficiency, expertise and kindness. Our gratitude extends to Hadabell Castillo, for providing additional support to the review team. The courtesy and hospitality extended to us throughout our stay in Chile made our task as a review team as pleasant and enjoyable as it was stimulating and challenging.

The OECD review team is also grateful to colleagues at the OECD. Luka Boeskens provided analytical support and Eleonore Morena provided key administrative, editorial and layout support. Deborah Nusche and Claire Shewbridge provided advice while Yuri Belfali provided guidance and support.

This report is organised in five chapters. Chapter 1 provides the national context, with information on the Chilean school system. Chapter 2 analyses the funding of school education. Chapter 3 reviews resourcing policies targeted at specific groups of students. Chapter 4 looks at school organisation and operation while Chapter 5 looks at the management of the teaching workforce. Chapters 2 to 5 present strengths, challenges and policy recommendations.

The policy recommendations attempt to build on and strengthen reforms that are already underway in Chile, and the strong commitment to further improvement that was evident among those the OECD review team met. The suggestions should take into account the difficulties that face any visiting group, no matter how well briefed, in grasping the complexity of Chile's education system and fully understanding all the issues. This report is of course the responsibility of the OECD review team. While the team benefited greatly from Chile's CBR and other documents, as well as the many discussions with a wide range of Chilean personnel, any errors or misinterpretations in this report are its responsibility.

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Abbreviations and acronyms

ACE	*Agencia de Calidad de la Educación* – Agency for Quality Education
AEP	*Asignación Excelencia Pedagógica* – Programme for the Accreditation of Pedagogical Excellence Allowance
ATE	*Asesorías Técnicas Educativas* – Technical-Educational Advisory Services (Private Pedagogical-Technical Support)
ATP	*Asesores Técnico-Pedagógicos* – Technical-Pedagogical Advisors (Public Pedagogical-Technical Support)
AVDI	*Asignación Variable por Desempeño Individual* – Variable Individual Performance Allowance Programme
CBR	Country Background Report
CPEIP	*Centro de Perfeccionamiento, Experimentación e Investigaciones Pedagógicas* – Centre for Pedagogical Training, Experimentation and Research
DAEM	*Departamentos de Administración de Educación Municipal* – Municipal Education Administration Departments
DEM	*Departamentos de Educación Municipal* – Municipal Education Departments
DEPROV	*Departamentos Provinciales de Educación* – Education Provincial Departments
DIPRES	*Dirección de Presupuestos* – Chilean Ministry of Finance Budget Division
ESCS	Economic, Social and Cultural Status
GDP	Gross Domestic Product
JUNAEB	*Junta Nacional de Auxilio Escolar y Becas* – National Board of School Assistance and Scholarships
JUNJI	*Junta Nacional de Jardines Infantiles* – National Board of Kindergartens
MBE	*Marco para la Buena Enseñanza* – Good Teaching Framework
OECD	Organisation for Economic Co-operation and Development
PEI	*Proyecto Educativo Institucional* – School Educational Project
PEIB	*Programa de Educación Intercultural Bilingüe* – Programme for Intercultural Bilingual Education
PIE	*Programa de Integración Escolar* – School Integration Programme
PISA	OECD Programme for International Student Assessment
PME	*Plan de Mejoramiento Educativo* – School Improvement Plan
RBMN	*Remuneración Básica Mínima Nacional* – National Minimum Basic Salary
SEP	*Subvención Escolar Preferencial* – Preferential School Subsidy
SERCE	*Segundo Estudio Regional Comparativo y Explicativo* – Second Regional Comparative and Explanatory Study
SEREMI	*Secretarías Regionales Ministeriales* – Education Regional Secretariats
SIMCE	*Sistema de Medición de Calidad de la Educación* – System to Measure the Quality of Education

SLI	*Subsector de Lengua Indígena* – Indigenous Language Subjects
TALIS	OECD Teaching and Learning International Survey
UNESCO	United Nations Organization for Education, Science and Culture

Executive summary

The education system in Chile has expanded considerably in recent years. Enrolment in pre-primary education has increased considerably and universal access has been virtually reached in lower secondary education. There has also been good progress in retaining students within the school system. However, in upper secondary education, improvements in completion and retention rates have not been sustained in the recent past and about 20% of a cohort does not reach the final year of upper secondary education. In addition, student achievement in international assessments, while at the top within Latin America, remains below the OECD average. However, trend analyses of PISA results have shown some statistical significant improvement in reading literacy while performance in mathematics and science has remained fairly stable. A major concern is the significant proportion of students underperforming in secondary education.

The increasing recognition of equity challenges in education has led Chile to introduce a range of initiatives to channel extra resources to schools serving vulnerable groups. However, there remain marked educational inequities based on students' socio-economic status. Chile had the fifth strongest association between socio-economic status and student performance among all PISA (OECD Programme for International Student Assessment) 2015 participating countries. There are large differences in students' achievement, depending on school type, school location and school resources. These inequities are reflected in students' educational attainment. For example, the average number of years in education differs considerably according to the individual's socio-economic background and area of residence.

The following policy priorities were identified to improve the effectiveness of resource use in the Chilean school system.

Consolidate the financing of school education and secure resources for reform implementation

Chile is a country highly committed to education. Both government and families demonstrate that commitment by investing significant resources in education. The new tax reform approved in 2014 will allow further growth in public spending for education. However, there are some fiscal challenges the school system will be facing in the future. The high level of ambition and complexity of the ongoing education reforms raises concerns about its long-term fiscal sustainability. Also, the 2015 Inclusion Law brings important improvements to the regulation of the public funding of private providers to ensure the exercise of free school choice is more effective. Additionally, Chile's system of formula-driven school grants provides a transparent and predictable basis for public and private school providers. It facilitated the growth of a diverse network of service providers and enabled a high degree of choice among households. Moreover, the introduction of the

Preferential School Subsidy (*Subvención Escolar Preferencial*, SEP) has resulted in much better endowed schools, particularly those serving vulnerable children. Nevertheless, the school grants system experiences a number of challenges that affect the capacity of schools and their providers to make an effective use of resources. Besides, there are areas in which inefficiencies in the use of resources are visible. There is excess employment in the education sector in many municipalities. In addition, the monitoring and planning of the school network is limited in Chile, leading to an overextended school network. There are quite a number of very small schools with small classes which do not offer a rich learning experience to students.

In this context, it is imperative that Chile elaborates a multi-year financing plan for the implementation of the entire package of education reforms that transparently determines the speed at which different components will be introduced. The plan ought to be consistent with overall fiscal projections and be communicated in a clear and transparent way to ensure that all stakeholders in the education system are fully aware of the implications of those decisions. Chile should also seek to maintain the principle of capitation grants both for public and private-subsidised schools, but with some adjustments such as eliminating the earmarking of funds for specific purposes, mandating providers to allocate funding across their schools according to the funding formula, and simplifying the overall grants system. Moreover, excess employment (of teachers and other personnel) at the municipal level needs to be tackled before Local Education Services start operating while the transfer of pension rights of those transferring from municipalities to the new services will require addressing related municipal debts. Finally, a strategic vision is required at the national level on how best to deliver education in rural and remote areas. It is important to make progress in setting a more propitious framework to advance with the required consolidation of school networks.

Advance equity objectives through improved targeting of resources for vulnerable student groups

There is a clear effort to target resources to vulnerable students – e.g. socio-economically disadvantaged, Indigenous students, students in rural and remote areas, students with special needs – in order to facilitate school attendance and improve teaching and learning for these students. The Chilean government set as an explicit aim to have an "equality of opportunity floor" so that all students have access to quality schools. This is clearly seen in practice both through direct grants, in-kind subsidies and services to vulnerable student groups, as well as programmes such as the SEP, the School Integration Programme (*Programa de Integración Escolar*, PIE), rural micro-centres and the Bilingual Intercultural Education Programme (*Programa de Educación Intercultural Bilingüe*, PEIB). However, there are a number of challenges regarding the use and monitoring of resources targeted at vulnerable student groups. There is limited guidance on effective ways to use the extra resources. There is also no system in place for monitoring the learning outcomes and achievement of vulnerable student groups. Moreover, addressing the learning needs of Indigenous students and reflecting Indigenous cultures remain a challenge. Chile also does not have a comprehensive approach to education in rural and remote areas. Additionally, educational provision for children with permanent disabilities seems to be in short supply and, if available, schools for children with special needs have a low level of integration. Also, the diagnosis of special needs requires improvements.

It would be of great value to establish a systematic approach to monitor the educational progress of vulnerable student groups against educational standards that are common to all students. This would shift attention from the average learning outcomes at the school level to the average learning outcomes of those most in need. The approach to Indigenous education can be strengthened in a number of ways. First, Chile should strengthen the pedagogical training of traditional teachers. Second, if the intercultural component of the PEIB is to be implemented successfully, all teachers need further tools and competencies to develop the intercultural competencies of their students. Third, Chile should consider giving Indigenous communities more autonomy to develop and implement their own pedagogical projects. There is also a clear need to undertake a strategic reflection on education in rural areas. This includes providing high-quality professional development to teachers in rural areas, embracing multigrade methodologies in the curriculum of initial teacher education, supporting rural micro-centres so they focus on pedagogical practice, and ensuring rural schools have the materials they need. Finally, there is a need to develop a more structured and integrated approach to the diagnosis of special needs; and incentives need to be established for mainstream schools to serve children with permanent disabilities.

Sustain efforts to strengthen school leadership and ensure school evaluation focuses on school improvement

Chile has implemented various measures for strengthening the school leadership profession throughout the last decade. Past initiatives have sought to improve school leadership through the promotion of a common vision of leadership, through changes to recruitment, training and development, and through greater autonomy and accountability of school leaders. Policy has also emphasised the pedagogical leadership role of school principals in all schools. However, there are persistent concerns about the attractiveness of the profession and challenges to fill all vacant school leadership positions. Also, school principals still have limited autonomy in managing their human resources, particularly in public schools. Moreover, the Agency for Quality Education is emphasising school development as a function of its external school evaluation model. As currently conceived, school evaluations should bring a qualitative dimension to the assessment of schools and the education system, which used to be exclusively based on performance in standardised assessments. However, there is some tension with accountability demands as school evaluations pay significant attention to results and school classifications. There are also open questions about the ways in which the new school evaluations are aligned with other processes, such as public and private pedagogical-technical support (*Asesores Técnico-Pedagógicos,* ATP and *Asesorías Técnicas Educativas,* ATE).

It is essential to continue building a strong school leadership profession. This can be achieved through the establishment of a distinct career structure that is separate from teaching (including system leadership roles), improvements to the preparation of school leaders, greater capacity of school providers to support school leaders, and greater autonomy for schools to manage their human resources. It is also important to ensure school evaluations contribute to school improvement. The Agency should continue to focus on the formative dimension of school evaluations that leads to lasting changes to practice and raise the profile of school self-evaluation. Finally, the Ministry of Education should reflect further on how the different elements of the National Quality Assurance System in Education work together to provide coherent feedback to schools on how they

can improve, and to avoid an overload of external interventions which require time and effort of school staff. There should also be strong links with ATPs and the ATEs.

Secure the reform of teacher policy is closely linked to the improvement of teaching practice

The ongoing reform of teacher policy, with the implementation of the System for Teacher Professional Development (*Sistema de Desarrollo Profesional Docente*), is bringing a number of improvements to the teaching profession in Chile. A multistage career structure based on the acquisition of competencies is being introduced, a positive move to get away from the previous single stage career structure with no promotion opportunities within teaching. The proportion of non-teaching hours within the regulated working hours is being increased, which should foster teacher engagement at the school and improve collaboration among teachers. Also, a range of measures such as mandatory accreditation processes, new requirements to enter programmes and external student assessment, are likely to improve the quality of graduates from initial teacher education. This is in addition to the experience accumulated with teacher evaluation. However, the identification of underperformance, particularly in the early stages of the career, remains limited. Also, initial teacher education is not attracting the best candidates from school education. Finally, the formative function of teacher evaluation remains limited; and there is overlap between teacher evaluation for certification (associated with the new career structure) and the teacher performance evaluation system.

The System for Teacher Professional Development holds great promise, so priority should go to its effective implementation. However, some adjustments might prove useful. To overcome its limited focus on formative teacher evaluation, it is proposed that a component predominantly dedicated to developmental evaluation, fully internal to the school, be created. This developmental teacher evaluation would have as its main purpose the preparation of individual professional development plans. Also, in order to reduce duplication in the teacher evaluation framework, the teacher performance evaluation system could become the certification process for career progression with some adjustment to its instruments. Finally, both a probationary period and periodic re-certification should be introduced.

Assessment and recommendations

Education system context

There has been significant quantitative growth but challenges with educational attainment remain

The education system in Chile has expanded considerably in recent years. Enrolment in pre-primary education has increased considerably. In 2014, the enrolment rates were 54%, 84% and 94% at ages 3, 4 and 5 against OECD averages of 71%, 86% and 95% respectively. There has also been good progress in retaining students within the school system but a good share of students still leave the education system too early with low skills. Universal access has been virtually reached in lower secondary education. The proportion of adults who have attained at least upper secondary education grew from 41% for the generation aged 55-64 in 2015 to 80% for the generation aged 25-34 in the same year. However, in upper secondary education, improvements in completion and retention rates have not been sustained in the recent past and about 20% of a cohort does not reach the final year of upper secondary education. Rates of completion within the nominal time (4 years) only reached 59% in 2014. Chile also has high repetition rates in international comparison even if they have decreased in recent years. In addition, student achievement in international assessments, while at the top within Latin America, remains below the OECD average. However, trend analyses of PISA results have shown some statistical significant improvement in reading literacy while performance in mathematics and science has remained fairly stable. A major concern is the significant proportion of students underperforming in secondary education. In PISA 2015, 34.5% of students demonstrated low levels of science proficiency compared to 21.2% on average in the OECD.

Equity concerns remain prominent in the education system

The increasing recognition of equity challenges in education has led Chile to introduce the Preferential School Subsidy (SEP), a programme channelling extra resources to schools serving vulnerable students, to review regulations to the public funding of private providers and to develop programmes targeted at specific student groups. However, there remain marked educational inequities based on students' socio-economic status. Chile had the fifth strongest association between socio-economic status and student performance among all PISA 2015 participating countries. There are large differences in students' achievement, depending on school type, school location and school resources. These inequities are reflected in students' educational attainment. For example, the average number of years in education differs considerably according to the individual's socio-economic background and area of residence. In 2013, in urban areas, for people aged 15 or more, the average number of years in education was 9.2, 10.0, 10.6, 11.5 and 14.2 from the lowest income quintile to the highest income quintile. The equivalent figures for people living in rural areas across income quintiles were 7.3, 8.1, 8.4, 9.4 and 11.6.

This report analyses the use of resources in the Chilean school system, with a particular focus on the funding of school education, resourcing policies targeted at specific groups of students in view of improving equity, school organisation and operation, and the teaching workforce. It identifies policy areas with potential efficiency gains or requiring further public investment. The following policy priorities were identified to improve the effectiveness of resource use in the Chilean school system.

Strengths and challenges

There is a strong commitment to invest in education but the school system might face fiscal challenges

Chile is a country highly committed to education. Both government and families demonstrate that commitment by investing significant resources in education. The share of the national budget allocated to education almost doubled between 1994 and 2013. Chilean families allocate the equivalent of 3% of the gross domestic product (GDP) to financing investments in education, a higher share than any other country in Latin America. But the level of expenditure on education remains relatively low as indicated by the amount spent per student as a percentage of GDP per capita, which remains considerable below the OECD average for primary and secondary education. The new tax reform approved in 2014 will allow further growth in public spending for education. However, in spite of the strong political commitment to financing education, there are some fiscal challenges the school system will be facing in the future. The high level of ambition and complexity of the ongoing education reforms raises concerns about its long-term fiscal sustainability. The new Inclusion Law, the System for Teacher Professional Development, the new System of Public Education, the expansion of pre-primary education, and the plans to make higher education gradually free of charge require very significant public investments. The Government of Chile is conscious of the difficulty of financing all these changes at once, and is thus wisely pursuing a principle of gradualism in implementation that will spread costs out over a multi-year period. Nonetheless, the absence of multi-annual budgets does not facilitate the integrated financial planning of the implementation of the reform.

The financing of schools is based on a transparent grants system but faces some challenges

Chile's system of formula-driven school grants provides a transparent and predictable basis for school providers. School financing is based on objective criteria (number of students being the most important one, but with adjustments for other factors which affect schools' per-student costs) and not the result of negotiations between the government and school providers. Moreover, the existence of a clearly defined and objectively measured formula as the basis for allocating resources imposes a hard budget constraint to providers and creates the conditions for basic spending discipline. Also, by using the same formula-driven grants to finance public and private schools, the system facilitated the growth of a diverse network of service providers and enabled a high degree of choice among households. The grants system also benefits from solid information systems, including the Student General Information System. Finally, the introduction of the Preferential School Subsidy (SEP) has resulted in much better endowed schools, particularly those serving poor children contributing to a reduction in inequality in the availability of education resources at the school level.

However, Chile's system of school grants experiences a number of challenges that affect the capacity of schools and their providers to make an effective use of resources for educational purposes. First, the use of daily student attendance as the basis for the grant penalises school providers, especially those serving vulnerable populations. Second, over time, the system has become complex with many components. There are more than ten different grants or financial incentives exclusively destined to personnel, in addition to other grants only assigned for specific populations, and all of them have specific regulations attached. Third, school providers have great autonomy to allocate school basic grants across their schools. As a result, the funding of individual schools might not be formula driven. This creates the opportunity for sharp differences in per-student spending within municipalities, as well as a lack of transparency that may benefit schools with well-connected principals. Fourth, a significant share of the grants is earmarked for specific uses, which might limit the ability of schools to target its specific needs. Fifth, the per-student grant allocation mechanism does not fully acknowledge the existence of some costs that are not proportional to the number of students, including administration costs (e.g. salaries for staff in municipalities' education administration departments).

Budgetary procedures are credible and the monitoring of resource use is increasingly linked to the quality of education

School financing operates within an environment of strong and credible budgetary institutions. Chile is well known for the quality of its budgeting processes and public financial management systems. Budget planning seems to be well organised and reasonably well linked to policy priorities. Budgetary resources have tracked policy decisions to, for instance, increase teachers' salaries; create full-day schools and expand the supply of pre-primary education. However, the integration of annual budgeting with strategic planning at the local and school levels remains weak. Indeed both school improvement plans and annual development plans of municipal education have little association with the use of available resources. Financial audits by the Education Superintendence (*Superintendencia de Educación*) are comprehensive, benefit from considerable resources and adequately compel school providers to maintain an adequate use of public resources for schooling. The Education Superintendence is also integrated within the National System for Quality Assurance (*Sistema Nacional de Aseguramiento de la Calidad*, SAC), which provides the potential to link the monitoring of resource use to the quality of education. The SAC provides a very useful institutional framework to promote a more effective use of resources. It is a relatively new system that complements other mechanisms for institutional accountability Chile has developed over time, including a system of teacher evaluation, evaluations by the Ministry of Finance (*Dirección de Presupuestos*, DIPRES), detailed data and information distributed to the public, among others. As it grows and develops more fully over time, the SAC's effects will be more fully felt. This is particularly true in the case of the Agency for Quality Education, which is building up an assessment and feedback mechanism on school effectiveness that should allow schools to make a more effective use of resources.

The 2015 Inclusion Law improves the regulation of the public funding of private providers

The new Inclusion Law, adopted in 2015, addresses three eligibility requirements to access public funding – selective admission, for-profit ownership and co-payments – with

the aim to facilitate the exercise of free school choice. It forbids private-subsidised schools to select their students on the basis of economic, social and academic criteria. This is likely to put an end to a longstanding practice which has been considered one of the reasons for the high level of socio-economic segregation in the Chilean school system. The new Inclusion Law also mandates private-subsidised schools to be operated by non-profit organisations. This seeks to respond to the strong public belief that education should be a non-commercial part of the public realm as well as the concern that for-profit providers might cut costs at the expense of educational quality. The impact of the new regulation, however, depends on the way different types of commercial providers will respond to and adapt their services under the new regulations, which remains uncertain. Finally, the elimination of co-payments in publicly-subsidised schools reduces financial barriers for low-income families to benefit from the voucher system.

The funding of infrastructure requires rethinking

The funding of infrastructure is difficult to handle in the existing system. The grants include an allocation for maintenance support but, while those funds can cover the costs of minor repairs, they are not sufficient (nor meant to) for larger investments that involve construction. Moreover, SEP explicitly forbids the use of resources for infrastructure investments. The Ministry is pursuing a new approach whereby needs are identified at the regional level and public funds are allocated on a project basis. While it is too early to evaluate the effects of this new approach, there are concerns on whether it may end up discriminating against low capacity municipalities that cannot compete as easily for those funds. The approach certainly discriminates against private-subsidised schools that do not qualify. This factor may become a serious issue in the future, as those schools will not be able to resort to co-payments or to profits to recover the costs of such investments. The Inclusion Law contemplates the possibility of funding existing debts but only during a transitional period.

Sources of inefficiency in the use of school resources are visible

There are a number of areas in which inefficiencies in the use of resources are visible. First, there is excess employment in the education sector in many municipalities. Even though there is no official estimate of the magnitude of the problem, there is consensus among officials and experts that in many municipalities there is excess employment in the education sector among teachers, teaching assistants and administrators. There are also some signs of over-employment in the administration functions at the municipal level. One important factor that has contributed to this trend is the migration of students to private-subsidised schools, which is leaving too many extremely small public schools with high per-student costs. The other contributing factor is a demographic trend of falling school-age population that creates further pressures. Second, the monitoring and planning of the school network is limited in Chile, leading to an overextended school network. There are quite a number of very small schools with small classes which do not offer a rich learning experience to students. There has not been a review of the school network to assess the need for some reorganisation of local educational supply and no major school transportation strategies have been developed. School consolidation has been politically difficult for local governments that often prefer to muddle through rather than adopt politically costly decisions. Third, the management of educational programmes has shortcomings. The presence of a large number of programmes and activities and budgetary

lines makes difficult the regular review of priorities and allocations. There is a strong sense among budget officials both in the Ministry of Education and in the Ministry of Finance (DIPRES) that there exist instances of multiple programmes serving similar goals and that efficiencies could be gained by either consolidating them or through better co-ordination. Fourth, regional and provincial services of the Ministry (Education Regional Secretariats, *Secretarías Regionales Ministeriales*, SEREMI; Education Provincial Departments, *Departamentos Provinciales de Educación*, DEPROV) appear to be large and more focused on ensuring compliance with the instructions and priorities of the Ministry than in helping schools and school providers in managing their schools.

Targeted resources attend socio-economic disadvantage but challenges remain on their use

There is a clear effort to target resources to socio-economically disadvantaged students in order to facilitate school attendance and improve teaching and learning for these students. The Chilean government set as an explicit aim to have an "equality of opportunity floor" so that all students have access to quality schools. This is clearly seen in practice both through direct grants and services to socio-economically disadvantaged children and youth, as well as the introduction of the preferential school funding scheme (SEP). The government makes special efforts to incentivise school attendance of vulnerable students through the conditional cash transfer component of the Ethical Family Income and scholarships such as the Scholarship of the President of the Republic. These students also receive a series of in-kind subsidies aimed at increasing enrolment and attendance such as school meals, school transportation, school supplies, basic health services and textbooks (which are universal). The system also provides specific programmes aimed at preventing drop-out through the development of socio-emotional skills (Programme to Support School Retention and the Skills for Life Programme). This is particularly important as previous evidence shows that programmes that develop life skills are effective at preventing school drop-out, especially among vulnerable children and youth. There is evidence showing that the provision of significant resources to vulnerable populations has been highly beneficial.

However, there are a number of challenges regarding the use and monitoring of resources targeted at socio-economically disadvantaged students. First, guidance on effective ways to use additional resources for meeting the needs of disadvantaged students is limited. For example, while SEP has served as a mechanism to provide disadvantaged students with additional school resources and services, there is heterogeneity in the quality of these services. There is no clear policy to guide schools and school providers on effective ways to improve learning of the most vulnerable students or to meet the needs that are most prevalent among this population. And, in fact, schools receiving the SEP are not required to necessarily invest the extra funds in programmes or initiatives that target directly the learning needs of vulnerable children. Second, there is no system in place for monitoring the learning outcomes and achievement of socio-economically disadvantaged students. As a result, there is no clear diagnosis or knowledge at the national, regional, provincial or local level of the most pressing needs of schools that serve students from vulnerable communities. Third, there might be instances where the targeting of resources to those most in need could be improved. For instance, cash transfers provided directly to families are not necessarily targeted to the most vulnerable families. 60.6% of the families that receive the Ethical Family Income belong to the poorest 30%, but only 8.8% of the families in the poorest decile benefit from this cash transfer.

While progress is visible, addressing the needs of Indigenous students and reflecting Indigenous cultures remains a challenge

Indigenous communities are increasingly benefitting from dedicated initiatives in the Chilean education system. While there remain challenges in providing equitable learning outcomes for children and young people from Indigenous communities and improving attainment at higher levels of the education system, Chile has achieved equity in access to basic education. Furthermore, there are no significant differences in primary completion between Indigenous and non-Indigenous children. Targeted initiatives such as a specific scholarship (*Beca Indígena Básica* and *Beca Indígena Media*) have had a significant impact on increasing attendance and reducing drop-out among beneficiaries. In addition, the recognition and promotion of Indigenous languages and cultures in the education system benefits from the implementation of the Bilingual Intercultural Education Programme (PEIB) targeted at schools that serve Indigenous students. In particular, the component of Indigenous language education (*Subsector de Lengua Indígena*, SLI) in schools has been gradually incorporated in schools offering basic education. This is an important first step into recuperating and promoting Indigenous languages and cultures in the education system, particularly in areas with a significant proportion of Indigenous population. The pedagogical team teaching scheme designed for the SLI delivery has a great potential as teaching methodology for both Indigenous and non-Indigenous students. Traditional teachers bring the cultural values and vision of their Indigenous community to the classroom, and mentor teachers support traditional teachers in course planning and development of pedagogical strategies. This combination represents an opportunity for both Indigenous and non-Indigenous students to become familiar with Indigenous traditions and at the same time encourages a mutual learning process among teachers. Although incipient, there is also an effort to increase the level of awareness about interculturalism among the general population. While the PEIB programme exists since 1996, it was not until 2009 that the Chilean government explicitly established the principle of interculturalism and protection of Indigenous language and culture through the General Education Law, and incorporated Indigenous language into the curriculum.

However, addressing the learning needs of Indigenous students and reflecting Indigenous cultures in the Chilean education system remain a challenge. First, the PEIB constitutes an important first step, but it does not sufficiently address the special needs or traditions of Indigenous communities. For example, pedagogical methodologies do not adequately reflect Indigenous cultures or traditions. Moreover, pedagogical tools such as teacher guides and textbooks are designed for the general population and do not necessarily take into account the context or learning needs of Indigenous students. Drawing even further on Indigenous traditions and ways of learning than is currently the case through the PEIB presents an opportunity to enable Indigenous students to learn better. There are channels of communication between Indigenous communities and the national government, but there is a large room for improving this dialogue. Some communities claim the need for developing their own pedagogical techniques and teaching their knowledge (*saberes*). As they perceive it, this has not been taken sufficiently into account in the design of programmes at the national level. Second, Indigenous language education has room for improvement both in coverage and in quality. Evaluations of the implementation and perceptions of the PEIB show challenges in several areas: teaching materials, human resources and programme coverage. Although traditional and mentor teachers have a positive perception of the available teaching guides, they lament a

lack of sufficient teaching materials or online resources to teach Indigenous languages. There are also concerns about the appropriateness of teaching guides in terms of their use of Indigenous languages. Traditional teachers have low educational attainment and have no previous pedagogical training. Programme coverage is also low. In 2015, only 61% of all eligible schools had implemented the SLI as part of PEIB. Third, interculturalism is not included in the curriculum across the board. Fourth, the coverage of Indigenous scholarship programmes is low.

Rural and remote schools benefit from dedicated resources but there is a need for a rural education strategy

The school funding system includes various supplementary grants to address the needs of schools in rural and remote areas, which has brought significant resources to these schools. Also, Chile provides resources for the implementation of programmes that promote school enrolment and attendance in rural and remote areas. In particular, scholarships (*Becas de integración territorial*) are offered to students finishing their basic education so they can continue into upper secondary education. Housing and transportation programmes are also in place so that rural students have access to schooling despite living in remote areas. There is also a monetary incentive to attract teachers and school leaders to remote areas. Furthermore, the creation and operation of rural micro-centres represents an opportunity to share best practices and challenges rural teachers face. This is important as close to half of rural schools have three teachers or less, meaning that there are few opportunities to do collaborative work and engage in peer learning. These resources and initiatives are important steps for providing the conditions for reducing educational inequality between rural and urban areas as they encourage school enrolment and attendance, minimise the deterrent effect of distance as a barrier for school attendance and attempt to improve learning conditions by compensating for the difficulty of recruiting high-quality teachers and facilitating teacher learning and collaboration.

However, Chile does not have a comprehensive approach to education in rural and remote areas. There is no national strategy or clear vision on rural education. Some initiatives at the national level aimed at improving education quality in Chilean schools in general, such as the introduction of performance standards for the evaluation of schools or the introduction of performance agreements for school leaders do not sufficiently consider the needs and particular circumstances of multigrade schools. Also, both initial teacher education and professional development do not adequately prepare teachers for their work in rural areas. Although the majority of rural schools offer education in the form of multigrade teaching, there is no specific teacher training on teaching multigrade classrooms. There is, furthermore, scope for improving existing opportunities for teacher development in rural areas.

Inclusive education for students with special needs is improving but further progress is needed

The Chilean government has invested significant resources in improving special needs education, in particular through the School Integration Programme (PIE). The PIE has an explicit emphasis on the inclusion of students with special needs in mainstream schools and the instructional work needed to guarantee an effective inclusion and learning progress of beneficiary students. A special feature of PIE's design is that schools that receive a PIE grant must have a rigorous investment plan and make sure that funds are

invested in resources that benefit directly students with special needs: teachers or specialists, teacher training, teaching materials, diagnostics, co-ordination or collaborative work between specialists and teachers. PIE has an "integration" focus. This is clearly reflected in a more flexible curriculum for students with special needs and more intensive work of a special education teacher inside the regular classroom instead of taking the student outside of the classroom. Moreover, specialised professionals work directly with students and collaborate with classroom teachers so that they acquire teaching skills that respond to students' specific special needs. Altogether, these efforts can better facilitate effective integration of students with special needs into mainstream schools. Also, Chile has an initial teacher education programme for learning disabilities in place. This is a particular strength as schools can have access to qualified teachers that respond to students' needs.

However, educational provision for children with permanent disabilities seems to be in short supply and, if available, schools for children with special needs have a low level of integration. Qualitative evidence suggests that schools select the type of special educational need they respond to depending on their resources for both diagnosing the educational needs of students and attending to the students' special needs. As a result, mainstream schools tend not to work with students with permanent disabilities as these imply more specialised resources, greater teaching materials and additional investments in infrastructure. Also, the diagnosis of special needs requires improvements. A clear diagnosis is needed for socio-economically vulnerable students. Students from disadvantaged backgrounds are significantly more likely to be diagnosed with a permanent special need than students from advantaged backgrounds. The size of the difference suggests either a structural problem in poor children's development that needs urgent attention or a bias towards over-diagnosing disadvantaged students with permanent special needs. In addition, there are indications that schools are not systematically applying the required procedures for diagnosing special needs, creating a risk for the misdiagnosis of certain special needs.

There is a longstanding commitment to school leadership but making the profession attractive remains challenging

Chile has recognised the importance of school leadership for teaching and learning. The Ministry of Education has established a dedicated unit to work on the development of the profession and Chile has implemented various measures for strengthening the school leadership profession throughout the last decade. Chile has promoted a common vision of school leadership that focuses on school leaders' pedagogical leadership role through the development of professional standards. In addition, with the implementation of the Quality and Equality of Education Law in 2009, Chile introduced a new standardised recruitment process for school principals in the public sector which gives municipal school providers mechanisms to match the recruitment to local needs and ensures some level of objectivity through the involvement of the High Public Service. However, there are some concerns such as the capacity of municipal school providers to define local competency profiles, discrepancies in the quality of the external providers responsible for the pre-selection of qualified candidates, and a lack of clarity in the final selection of school principals by the mayor. Moreover, school principal positions were open for teachers with less experience and the levels of remuneration of school principals were increased. Finally, the Ministry of Education has been investing in the development of the profession

throughout the last years. In 2011, it launched a professional development programme for current and aspiring school leaders (*Plan de Formación de Directores*) – but there are some concerns about the quality of the training on offer. It has also introduced an induction process for school leaders recruited through the new standardised recruitment process for public schools. The creation of two national school leadership centres promises to support the development of the school leadership profession further.

However, despite these changes, there are persistent concerns about the attractiveness of the profession and challenges to fill all vacant school leadership positions. The lack of sufficient career differentiation between teachers and school leaders may be one aspect contributing to the low status of school leadership. School leaders in Chile are part of the teaching profession and do not benefit from a separate career ladder and salary scale. This employment structure fails to communicate the important role of school leaders and does not provide school leaders with opportunities for career progression. Considering that the school leadership profession is ageing and the lack of a stable supply of candidates for school leadership positions, the need to adopt new measures to raise the status of the profession may become more pressing in the future. However, more information is needed to understand the status of the profession and to evaluate the impact of recent measures on the perception of school leadership.

School leaders have large scope for pedagogical leadership but have limited autonomy in managing human resources

Policy emphasises the pedagogical leadership role of school principals in all public and private-subsidised schools. As stipulated in the Teacher's Statute, school principals' main role is to oversee and lead the schools' educational project, which includes setting and monitoring school goals, study programmes and implementation strategies; organising and guiding the technical-pedagogical work and professional development of teachers; and ensuring adequate reporting to parents about their children's progress. The General Education Law emphasises school leaders' responsibility for promoting the quality of their institution and for promoting the professional development of their teachers to achieve pedagogical goals. In addition, school providers typically hold responsibility for many administrative and managerial processes, thus freeing school principals and other school leaders for pedagogical leadership. Within schools the possibility to distribute tasks within a school leadership team also creates favourable conditions for the development of pedagogical leadership practices. Distributed school leadership is encouraged and valued. Also, the legal framework introduced with the Quality and Equality of Education Law has given school principals some more autonomy for the management of their staff. School principals recruited under the new recruitment process can appoint and dismiss the members of their school leadership team and propose the dismissal of up to 5% of teachers in their school who have been poorly evaluated in the national teacher evaluation system. At the same time, this new framework has established a greater degree of accountability for school principals. Under the new recruitment process, all school principals are appointed for a period of five years only after which they need to reapply. This provides an opportunity to periodically reassess, recognise and acknowledge well-performing principals, and to provide incentives for continuous development and improvement. When taking on a new post under the new recruitment system, school principals now also have to sign individual performance agreements with their municipal school provider on the basis of which they are evaluated at the end of each year.

However, school principals still have limited autonomy in managing their human resources, particularly in public schools. In the public school sector, municipalities are responsible for the operation of schools (including their financial management), administer their teaching workforce (including the appointment, dismissal and professional development of teachers) and manage the relations to the education community and the general public. This still rather limited involvement of schools in human resource management reduces school leaders' scope to select teachers to shape their school's profile, to encourage improvement and to respond to underperformance among their teachers. Also, the quality of the management of school principals depends on the school provider. Within the public sector, a substantial proportion of municipalities do not have the technical expertise and human resources to support schools and to manage school principals. The lack of capacity of school providers is also of concern considering municipalities' power over their school principals through individual performance agreements.

School development planning is encouraged but there are some concerns about its effectiveness

Legislation requires all school providers and schools to develop their own school educational project (*Proyecto Educativo Institucional*, PEI). In addition, Chile has encouraged schools to develop school improvement planning and self-evaluation with a number of different initiatives, namely the preferential school subsidy (SEP). School providers and schools receiving additional resources through this subsidy are required to develop school improvement plans (PME). To support schools in their school development and improvement planning, the Chilean education system provides schools and school providers with external technical-pedagogical support. Schools and school providers can call on public technical-pedagogical consultants (*Asesores Técnico-Pedagógicos*, ATP) or private advisory services (*Asesorías Técnicas Educativas*, ATE) to receive advice on a range of issues, such as improvement strategies and the implementation of their school improvement plan. With the introduction of the National Quality Assurance System in Education, the Ministry of Education has introduced a new school improvement support framework. This new support system for school improvement seeks to build the capacity of schools and school providers for self-improvement and to make better use of PEI and PME. To this end, it also seeks to establish PME as a tool that is more independent of the SEP and related accountability requirements. Another positive development is that thanks to targeted funding programmes in the form of the SEP and the programme of school integration (PIE), schools have additional resources to hire learning support staff that support teachers in their work and provide support for students within schools.

However, both the effectiveness of school improvement plans and the functioning of public and private external technical-pedagogical support services for schools raise concerns. There is some evidence that the use of school improvement plans could be further developed. School improvement plans as part of Chile's overall standards-based accountability framework do not always help schools and school leaders to engage in professional reflection and to improve their practices. They predominantly still function as an accountability tool to justify additional resources through the SEP and are often strongly geared towards the achievement of targets in national standardised student assessments. School improvement planning focused on accountability tends to turn into a bureaucratic process that is based on gathering information and documenting processes and achievements to meet external accountability demands rather than as a process that

contributes to the improvement of school-internal processes. External technical-pedagogical support services (ATP and ATE) may reinforce the accountability function of school improvement planning, create additional pressures on schools, and steer schools to focus on narrow areas of their operation, such as SIMCE (*Sistema de Medición de Calidad de la Educación* – System to Measure the Quality of Education) results and curriculum coverage, rather than lasting changes in school processes and the capacity of teachers and school leaders. Also, it is not totally clear how these services fit within the broader National Quality Assurance System in Education.

School evaluation is increasingly focused on development but implementation challenges remain

The new attention to the developmental function of school evaluation by the Agency for Quality Education is promising. It benefits from the distribution of responsibilities between the Agency (which evaluates pedagogical processes and the quality of education in schools) and the Education Superintendence (which evaluates the compliance with legal requirements of schools and school providers). As currently conceived, school evaluations should bring a qualitative dimension to the assessment of schools and the education system, which used to be exclusively based on performance in standardised assessments. To support school improvement, the Agency has been developing a wide range of tools, guidance materials and a variety of school visit types, such as school visits to strengthen self-evaluation practices. Two promising elements should be highlighted. First, school evaluations follow a proportional approach focussing on low-performing schools. Second, school evaluations promise to create a greater understanding of school processes and contexts. School evaluations should result in an evaluation report that takes into account the school educational project, context, and results. And they should provide guidance for schools to develop voluntary school improvement plans, possibly with the support of external technical-pedagogical support.

However, further improvements are needed. First, the creation of two different institutions (the Agency and the Superintendence) and evaluation processes enables the Agency to focus on pedagogical processes, but it also entails the risk of overloading schools with further external processes, pressures and expectations in an already complex environment of multiple accountabilities. Since the Education Superintendence evaluates the use of resources by schools and school providers, it may also be difficult to connect resource use decisions with pedagogical considerations, even if there are some links between the two processes. There are also open questions about the ways in which the new school evaluations are aligned with other processes, such as public and private pedagogical-technical support (ATP and ATE) and the teacher performance evaluation system. Second, it will be important to ensure that school evaluations contribute to real improvements in school processes. There is some evidence that other elements of the quality assurance system, such as school improvement plans and technical-pedagogical support services have failed to instil long-term changes to institutional practices and processes. School evaluations are intended to focus on processes and to provide formative feedback to schools, but there is some tension with accountability demands as evaluations pay significant attention to results and school classifications. Third, the proportional approach to school evaluation concentrates resources on low-performing schools, but it entails the risk that high-performing schools do not receive the support they need to improve even further.

The Good Teaching Framework provides a solid reference for teacher policy

The establishment of teaching standards (Good Teaching Framework, *Marco para la Buena Enseñanza,* MBE) that provide a clear and concise profile of what teachers are expected to know and be able to do is a major source of strength. Teaching standards are essential mechanisms for clarifying expectations of what systems of teacher education and professional development should aim to achieve, offering the credible reference for making judgements about teacher competence, guiding teacher professional development, and providing the basis for career advancement. Clear, well-structured and widely supported teaching standards are a powerful mechanism for aligning the various elements involved in developing teachers' knowledge and skills. A positive development is the ongoing revision to the MBE. The revised MBE updates the criteria and performance levels to ensure they reflect the most recent research regarding good teaching practice.

A new competency-based career structure is being introduced but underperformance is not adequately addressed

A multistage career structure based on the acquisition of competencies is being introduced. This is a positive move to get away from the previous single stage career structure with no promotion opportunities within teaching. The new competency-based career structure presents a range of advantages. First, it accomplishes the important function of recognising experience and advanced teaching skills with a formal position and additional compensation. Second, the new career structure provides greater potential to better match teachers' skills to the roles and responsibilities needed in schools. Third, progression in the career structure involves an evaluation of the teacher through a certification process, the System for the Recognition of Teacher Professional Development. It is a competency-based process, i.e. it directly assesses whether a teacher has acquired the competencies needed to perform at the different stages of the career. It is less clear, however, why certifying a teacher as fit to perform at a given career stage should be valid for the rest of the teacher's career. As currently planned, there is no need for re-certification to stay in a given career stage. Fourth, induction into the profession becomes an integral part of teacher development. Fifth, the new career structure simplifies teacher compensation.

However, the identification of teacher underperformance, particularly in the early stages of the career, remains limited. The introduction of an induction process upon entry into teaching is a positive development but it is not associated with a probationary period. This considerably reduces the scope for beginning teachers and their employers to assess whether teaching is the right career for them. In addition, once they have reached the *Early* or *Advanced* stages of the new career structure, teachers no longer need to go through an evaluation to confirm their certification at these stages of the career. While it is a strength of the system that processes exist to move ineffective teachers either out of the school system or into non-teaching roles, there remain opportunities for underperforming teachers to remain in the system for long periods of time.

Further recognition is given to activities other than teaching but teacher workloads remain heavy

In Chile, teacher employment is conceived on the basis of a workload system, whereby compensation is associated with a teacher's working load. Employment under a workload system recognises that teachers need time for engaging in a range of activities other than

teaching, in light of school priorities, including through the requirement to stay at the school outside teaching hours (and within working hours). This also fosters teacher engagement at the school and provides greater opportunities for collaboration among teachers. This is particularly relevant in the context of Chile which is characterised by high working loads and a considerable proportion of teaching hours. The 2016 Law that creates the System for Teacher Professional Development improves teachers' working conditions and gives further recognition to activities other than teaching. It increases the proportion of non-teaching hours within the regulated working hours.

In spite of significant policy measures there are some challenges to the preparation of teachers

There is a clear awareness among stakeholders of the need to improve the quality of initial teacher education. It is recognised that a key objective for teacher policy is attracting talent to initial teacher education and offering student teachers a preparation of high quality so they fulfil their potential as future teachers. In this context, it is commendable that the 2016 Law that creates the System for Teacher Professional Development includes a range of initiatives to improve the quality of initial teacher education graduates. First, it establishes new requirements to enter initial teacher education programmes – only secondary graduates reaching a given threshold level in entrance tests will be given access. Second, institutions of teacher education can no longer provide qualifications for teaching if their teacher education programmes are not formally accredited. Third, the introduction of the external assessment of student teachers before their graduation will provide useful information to monitor the quality of initial teacher education programmes and devise improvement plans for the delivery of the programmes. In addition, a number of initiatives such as the Teacher Vocation Scholarship are likely to stimulate the decision to engage in initial teacher preparation. However, initial teacher education raises some concerns. First, there is evidence indicating that initial teacher education is not attracting the best candidates from school education. Second, there are indications that teachers in mainstream schools are not adequately prepared to instruct students with special educational needs. Also teachers seem to receive little preparation for multigrade teaching and teaching in rural schools.

Teacher evaluation is well-established but its formative function remains limited

In Chile, teacher evaluation is recognised as an important policy lever to improve student learning and is central in the overall school policy framework. This is reflected in the substantial work on teaching standards, the very comprehensive approach to teacher evaluation in municipal schools and the multitude of reward programmes in the subsidised school sector. Over ten years of experience with formal teacher evaluation have produced a conviction among most teachers about the need for teachers to be evaluated, receive professional feedback, improve their practice and have their achievements recognised. A significant experience has been accumulated in the use of a variety of instruments and sources of information. However, two major concerns remain as both the new career structure and the new System for the Recognition of Teacher Professional Development are being introduced. First, the formative function of teacher evaluation remains limited. While the new 2016 Law that creates the System for Teacher Professional Development places considerable emphasis on teacher professional development, including in terms of its links to teacher evaluation and the importance of professional

development plans for individual teachers, it does not propose a component of teacher evaluation predominantly with formative purposes. It is not clear from the strategy it proposes what teacher evaluation processes will inform the future professional development plans for teachers. As a result, there are risks that teacher evaluation remains perceived as an instrument for accountability and control leading to little professional dialogue. Second, there is considerable overlap between teacher evaluation for certification (associated with the new career structure) and the teacher performance evaluation system.

There are opportunities for professional development but also some concerns about its operation

There is a range of in-service professional development activities to which teachers have access. Teachers also have facilitated access to information on professional development through the National Public Training Registry, an Internet-based platform managed by the Ministry's Centre for Pedagogical Training, Experimentation and Research (*Centro de Perfeccionamiento, Experimentación e Investigaciones Pedagógicas,* CPEIP). However, there are a number of concerns about the operation of professional development. First, there is little tradition of professional development among Chilean teachers as reflected in their relatively low participation rates. The low levels of engagement in professional development have a variety of reasons. The heavy workload and lack of an entitlement for free professional development in Chile do not facilitate the engagement in teacher professional development. Also, free professional development is guaranteed mostly in the context of the Professional Development Plans which are mandatory when the teacher's performance is evaluated as *Basic* or *Unsatisfactory* by the teacher performance evaluation system. In addition, there is no budget for professional development at the school level. However, the 2016 Law that creates the System for Teacher Professional Development is addressing these concerns. It intends to guarantee the availability of free and pertinent professional development activities for teachers as identified by individual teachers and their schools. Also, the increase of the proportion of non-teaching hours within the regulated working hours will facilitate the participation of teachers in professional development activities. Second, some important aspects to the organisation of professional development are problematic: the use of results from school-based teacher evaluation to inform the teacher's professional development plan seems limited; and there might be no systematic alignment to school development plans. However, the 2016 Law that creates the System for Teacher Professional Development requires school principals: to define professional development plans for their teaching bodies on the basis of information provided by school self-evaluation and teacher evaluation; and to create teacher professional development plans in the context of school development plans.

Policy recommendations

Maintain the school grants system with some adjustments

Chile should seek to maintain the principle of capitation grants both for public and private-subsidised schools, but with some adjustments to address the existing challenges. First, the current practice of linking monthly school grants to actual school attendance imposes an undue financial burden on school providers. It would be important to replace this mechanism with one based on school enrolment at the start of the year, with an adjustment (possibly mid-way through the year) to reflect drop-outs and transfers between schools. Second, considering the complexity of the existing system of school grants, there

would be great value in efforts to simplify the grants system by either reducing the number of grants or unifying them altogether into one grant that uses a single formula that adjusts the per-student amount with a small number of indicators that reflect differences in costs depending on level of schooling and school and student body characteristics. Third, Chile should consider replacing the linear formula by one which tapers-off the per capita allocation more gradually rather than at a fixed level of 45 students per classroom as is currently done. A non-linear formula could duly recognise the existence of costs that are either fixed (e.g. the cost of a school director) or not proportional to the number of students (e.g. the maintenance of the school library) and thus allow for a better approximation to the actual costs of providing a quality education. More generally, the current school grant formula would benefit from a careful review of unit costs. Fourth, in order to give school providers more flexibility in the use of resources within schools, Chile could reduce or even eliminate the earmarking of funds for specific purposes (as is the case with SEP and PIE) while making allocation across schools mandatory. The latter would involve school providers allocating individual schools the amount dictated by the formula, eliminating their discretion in the distribution to individual schools, perhaps allowing a margin of flexibility, e.g. 5%-10%, to ensure horizontal equity. In other words, school providers would have very limited flexibility to shift resources across schools but great flexibility in deciding how to spend resources in each school, which could serve as the platform for giving schools more autonomy.

Establish a transparent mechanism to finance large infrastructure projects

Financing of large infrastructure projects (i.e. those that require construction) has been identified as a challenging area both for public- and private-subsidised schools. A transparent mechanism to which all public schools in need of support have access is imperative. This would involve publicly disclosing the criteria used to prioritise the requests for infrastructure interventions. More rapid intervention mechanisms for emergency situations might also be needed. These would be made more geographically-equitable if future Local Education Services could manage a budget for addressing infrastructure emergencies in their territory and make the decisions on the needed interventions. Rapid and well-informed interventions need more local co-ordination and better knowledge of needs, placing Local Education Services in a good position to play a key role in the management of education infrastructure. In the context of the new legal framework that does not allow private-subsidised schools to charge co-payments or to obtain profits from the school operation, there is a need to provide access to the financing mechanism suggested above in similar terms for both public and private providers. Incorporating private schools in the infrastructure cadastre established by the Ministry of Education appears to be a first logical step.

Adjust levels of employment at the municipal level and review the organisation of the school network

Regarding the observed level of excess employment (of teachers and other personnel) at the municipal level, it is critically important that an adjustment takes place before de-municipalisation in order to avoid transferring this lingering source of inefficiency to the new Local Education Services. Addressing this will require affecting not only teachers with fixed-term contracts but also those with open-ended employment contracts, including through the use of early retirement schemes, which are already in place. Also,

personnel transferred to the new Local Education Services should have their pension and other contributions up-to-date. This will require a mechanism to eliminate related municipal debts. Even though municipal governments originally contracted the debt, enabling a clean process of de-municipalisation will likely require national resources. In addition, a strategic vision is required at the national level on how best to deliver education in rural and remote areas. Smaller schools often have higher operating costs, but also may serve more isolated or remote communities and their existence and quality need to be seen in the context of wider regional development policies. It is important to keep in mind that the organisation of the school network must be about ensuring quality education for all children. Students' access to high-quality education should not be affected adversely by their place of residence. In some cases, closing the school may not be the best solution – the distance to travel may simply not be practicable. However, in others consolidating educational provision on fewer sites will present wider opportunities for both students and teachers (e.g. closing small schools, sharing of resources between nearby schools, clustering of schools under the same school leadership). It is important to make progress in setting a more propitious framework to advance with the required consolidation of school networks. Considering how politically difficult it is for individual school providers to undertake school closings and/or consolidations, it would be useful to establish legal parameters that trigger mandatory actions that providers need to abide with. The creation of new Local Education Services under the proposed de-municipalisation reforms may present a unique opportunity to carry out these consolidation efforts. Finally, the Ministry should also advance with its ongoing review of national education programmes with a view to possible consolidation or better co-ordination in the context of the 2018 budget. This is an important initiative to ensure that national resources are allocated to the most effective uses and that duplications are avoided.

Develop a multi-year financing plan for reform implementation and build on previous established capacity

Considering the level of ambition and complexity of the ongoing education reforms, it is imperative that Chile elaborates a multi-year financing plan for the implementation of the entire package of education reforms that transparently determines the speed at which different components will be introduced. The plan ought to be consistent with overall fiscal projections and be communicated in a clear and transparent way to ensure that all stakeholders in the education system are fully aware of the implications of those decisions. In the transition towards full implementation, it is imperative that the plan prioritises the allocation of funds to those aspects that benefit the most disadvantaged students and delays those that would benefit less vulnerable ones. Also, it is imperative that the implementation of the System of Public Education makes good use of the capacity built over time at the municipal level on the administration of education services. One option, already part of the plans to implement the reform, is to give preference to staff of municipal education administration departments or corporations when recruiting the personnel for Local Education Services. Another option, possibly as a transition arrangement, would be to allow some municipalities, especially those with greater capacity and educational performance, to remain as school providers. In any event, it is very important that the establishment of the new Local Education Services does not involve an unnecessary growth in employment. For that, duplications should be avoided at all costs. In that sense, as the new bodies are established it makes sense, as currently

planned, to absorb some of the services currently provided by the SEREMIs and DEPROVs, namely the provision of technical-pedagogical support to public schools as Local Education Services will take responsibility for school improvement within the public school sector. Moreover, acknowledging the critical functions that the new Local Education Services would play, a funding mechanism should be established to allow them to exercise their administrative and support functions in an effective way. For that purpose, a block grant would be more appropriate than a per-student one.

Further develop the monitoring of educational outcomes for specific student groups

Chile is investing a significant amount of resources to improve access and quality for vulnerable students. At the same time, the government has a sophisticated evaluation system that measures educational outcomes regularly. However, most of these measures are implemented at the school or regional level which makes it impossible to follow progress of specific groups of students over time. It would be of great value to establish a systematic approach to monitor the educational progress of specific groups of students against educational standards that are common to all students. This would shift attention from the average learning outcomes at the school level to the average learning outcomes of those most in need (e.g. socio-economically disadvantaged, Indigenous students, students in rural and remote areas, students with special needs). Information for specific groups of students would facilitate the analysis of the particular learning needs of these groups and the pedagogical needs of the schools serving these students.

Strengthen the approach to Indigenous education

The approach to Indigenous education can be strengthened in a number of ways. First, Chile should strengthen the pedagogical training of traditional teachers. Most traditional teachers do not have access to formal training since they do not fulfil the relevant prerequisites and hold the necessary qualifications. Traditional teachers, therefore, require a tailor-made training programme that addresses their pedagogical needs. Also, it would be important to adequately prepare regular teachers to work with traditional teachers in a team. Second, if the intercultural component of the Bilingual Intercultural Education Programme (PEIB) is to be implemented successfully, all teachers need further tools and competencies to develop the intercultural competencies of their students. It would be important to develop a larger strategy and to incorporate and strengthen the intercultural component in both initial teacher education and professional development for in-service teachers. Third, Chile should consider giving Indigenous communities more autonomy to develop and implement their own pedagogical projects. Many Indigenous communities lament the fact that the education system does not adequately reflect their ways of thinking, learning and teaching, both in the form of learning goals and in the pedagogical methods used to achieve them. Fourth, implementing steps to increase the participation of Indigenous communities in local school governance should be another important element of a strategy to better meet the needs of Indigenous communities.

Design a national education strategy for rural areas

There is a clear need to undertake a strategic reflection on education in rural areas. This includes providing high-quality professional development to teachers in rural areas. The online training programme designed by the CPEIP is a good opportunity to make this happen. The programme diagnoses teachers' pedagogical needs and, based on this

information, provides a portfolio of online courses. In addition, if multigrade schools continue as a strategy in rural areas, it would be beneficial to include multigrade methodologies in the curriculum of both initial teacher education and teacher professional development. Rural micro-centres should be monitored more closely and supported to make sure that they focus sufficiently on pedagogical innovation and less on administrative issues. There is also a need to guarantee that teachers and students have the materials they need in rural schools. In addition, there are strong arguments for reorganising small schools so they better serve their students. This reorganisation, however, needs to be implemented so it does not put at risk students' continuation in the education system. The government may consider expanding or revising remedial programmes that are in place for students who are in the transition to upper secondary education and make sure that students coming from rural areas receive special attention.

Improve the diagnosis and provision of special needs education

The School Integration Programme (PIE) has been successful at serving a significant number of students with special needs. However, it is not clear if all students with special educational needs are benefitting from the programme and there are some special needs that might be over-diagnosed. Failure in the diagnosis of children with special needs has high costs, both for individual students and for the education system as a whole. Resources may not be used for those in need. And students may be wrongly labelled and not receive the motivation and challenge they need, if misdiagnosed. Chile should, therefore, develop a more structured and integrated approach to the diagnosis of special needs. This will entail the more systematic implementation of the law stipulating procedures to undertake the diagnostic and the development of more detailed standardised protocols for diagnosis and treatment. In addition, to boost the provision of services for children with permanent disabilities and to improve the quality of education for these students, authorities should make sure that mainstream schools have the resources as well as incentives in place to serve these students. Chile could consider introducing monetary incentives to those mainstream schools that enrol and retain students with permanent disabilities and make sure they are not penalised in the accountability system. Adjusting funding through the PIE to the severity or type of disability would be another option. A more refined funding approach (with funding associated with type of disability) could recognise financially the additional investments that are needed to provide a quality service to students with permanent disabilities in terms of infrastructure, educational materials and human resources. Furthermore, special schools could take on a support function to aid regular schools in the integration of students with permanent disabilities while remaining in place for students with severe disabilities.

Sustain efforts to strengthen school leadership and consider extending school autonomy

It is essential to continue building a strong school leadership profession, which is a highly cost-effective measure for improving education considering the potential impact of a relatively small, but central, group of actors in the education system. A number of key policy areas should receive priority. First, it is important to attract high-quality candidates to the profession and to ensure that the best school leaders work in the most disadvantaged schools. Chile needs to improve the profile of school leadership. One step that could help increase the status of the profession is the development of a distinct career

structure that is separate from teaching. A distinct career structure with its own salary scale could ensure adequate levels of remuneration that are significantly above those of teachers and similar to other professionals in the public sector with similar levels of responsibility. The introduction of a school leadership career structure would also provide an opportunity for introducing more system leadership roles that allow school leaders to contribute to the improvement of the wider education system. There is also scope for creating further teacher leadership roles in addition to the already existing roles of heads of technical-pedagogical units and general inspectors. The further distribution of school leadership would strengthen the school leadership capacity overall and also help build a sustainable supply of candidates for principal positions. Second, school leadership development requires improvements. Chile should ensure that recent changes to the professional development programme for school leaders and the creation of an induction process meet the needs of school leaders with different levels of experience and working in different contexts. Also, to improve the quality of training on offer, education authorities should ensure that providers and courses meet high-quality standards. School leadership training should also pay adequate attention to human resource management, school self-evaluation and improvement planning. Third, school providers should take more responsibility and acquire more capacity for the ongoing management of school principals, from recruitment to performance appraisal and professional support and development. Fourth, Chile should assess the need to provide public schools with greater autonomy, in particular for the management human resources. This could provide better conditions to align resource management decisions with the pedagogical needs of schools. Schools could, for instance, be more systematically involved in the selection of their staff and in planning the professional development of their staff.

Strengthen school development planning

External support for school development should pay greater attention to building teacher professionalism and schools' capacity for reflection and self-improvement. This could, for example, involve supporting schools to establish roles among teachers within schools with responsibilities for self-evaluation and assessment, providing support for these professionals, and establishing professional learning communities in schools that discuss complex challenges that are hard to solve individually, share and critique practice and foster a sense of common direction. In addition, following the introduction of formative school evaluations through the Agency for Quality Education as well as the current reform plans for reforming the local governance of public schools, Chile should rethink its current approach to providing public pedagogical-technical support for schools. External support should have strong links to the Agency's work and the different methodologies and tools that are used should work together to support internal school improvement.

Ensure school evaluations contribute to school improvement

The school evaluation activities of the Agency for Quality Education have considerable potential to support schools to improve their teaching and learning and should be reinforced. A number of areas for potential improvement exist. First, the Ministry of Education should reflect further on how the different elements of the National Quality Assurance System in Education and other school accountability and improvement initiatives work together to improve teaching and learning processes and outcomes in

schools, to provide coherent feedback to schools on how they can improve, and to avoid an overload of external interventions which require time and effort of school staff. Splitting responsibilities between the Agency for Quality Education and the Education Superintendence enables the Agency to focus on pedagogical aspects, but it also means that these may not be looked at together with resource management issues which are the focus of the Superintendence. There should also be strong links with the public technical-pedagogical support services (ATP) and their new school improvement framework as well as private technical-pedagogical consultancies (ATE). Second, concerning the school evaluation process itself, the Agency should continue to focus on the formative dimension of school evaluations that leads to lasting changes to practice. School evaluation that is meaningful should involve: an accurate assessment of the effectiveness of schools; an assessment of strengths and areas for development, followed by feedback, coaching, support and opportunities for development; an opportunity to celebrate, recognise and reward the work of schools and to identify best practice; and an opportunity to identify underperforming schools. Third, school self-evaluation should be central in any national approach to school improvement and as school systems mature schools should take on a greater role for driving their own improvement. The Agency's formative approach to school evaluation has made it an explicit goal to foster school's capacity for self-evaluation and the Agency should further pursue this direction.

Ensure the successful implementation of the System for Teacher Professional Development

The implementation of the System for Teacher Professional Development holds great promise. To begin with, it is an opportunity to raise quality expectations in initial teacher education. Accreditation processes will need to send clear signals about the quality standards initial teacher education programmes need to reach. This will require a rigorous application of the accreditation standards to be achieved in terms of academic staff, quality of teacher education programmes, links to school practice, research orientation of programmes and mechanisms for the continuous improvement of programmes. In practice, this should lead accreditation processes to remove the range of low quality initial teacher education programmes that are deemed to be currently offered. It would also be beneficial to align the accreditation of initial teacher education programmes to Graduating Teacher Standards. In addition, initial teacher education providers should be required to establish internal quality assurance processes to ensure their programmes are continuously improving in light of evaluation exercises and new research relevant for teacher education.

Also, the effective establishment of the new career structure requires the further definition and implementation of a number of elements. First, the operational features of the National Induction System need to be further defined as it is systematically applied across the system. Second, the certification process to determine progression in the career structure, needs to be fully designed and established. As the new career structure is implemented, it will be crucial for the established certification process to send clear signals of rigour in identifying both good performance at the different stages of the career and underperformance as a teacher. An important issue will be to resolve the current duplication between the certification process associated with the career structure and the teacher performance evaluation system. Given the similar functions both processes seek to achieve, a possibility would be for the teacher performance evaluation system to become

the certification process for career progression with some adjustment to its instruments. To take advantage of the continuous character of the teacher performance evaluation system and to address the need for teachers to continuously show they are fit for the profession at the different levels of the career structure, it could be considered introducing the requirement for re-certification at a given career stage. Third, there is a need to reflect on the linkages between the different career stages of the new career structure and the teaching standards.

Achieve the improvement function of teacher evaluation predominantly through school-based teacher evaluation

The new System for Teacher Professional Development is limited in its emphasis on formative teacher evaluation. At the same time, it reinforces the high stakes of teacher evaluation as it becomes associated with the progression in the teaching career. In Chile, there are clear risks that the developmental function of teacher evaluation is hampered by high-stakes teacher evaluation. Since the System for Teacher Professional Development indeed seeks to develop a professional learning culture among teachers, it is all the more important to give a prominent role to formative teacher evaluation. Hence, it is proposed that a component predominantly dedicated to developmental evaluation, fully internal to the school, be created. This developmental teacher evaluation would have as its main purpose the continuous improvement of teaching practices in the school. It would be an internal process carried out by line managers, senior peers, and the school leadership. The reference standards would be the Good Teaching Framework but with evaluation rubrics developed at the school level to better account for the school objectives and context. The main outcome would be feedback on teaching performance and the whole contribution of the teacher to school development which would lead to a plan for professional development. In order to guarantee the systematic and coherent application of developmental evaluation across Chilean schools, it would be important to undertake the external validation of the respective school processes for developmental teacher evaluation. An option is that the Agency for Quality Education, in its monitoring of the quality of teaching and learning in individual schools, includes the audit of the processes in place to organise developmental teacher evaluation, holding the school director accountable as necessary.

Consider the introduction of a probationary period

A formal probationary process for new teachers should be introduced as part of the new career structure. There is considerable evidence that some beginning teachers, no matter how well prepared and supported, struggle to perform well on the job or find that it does not meet their expectations. A formal probationary process can provide an opportunity for both new teachers and their employers to assess whether teaching is the right career for them. The satisfactory completion of a probationary period of one to two years teaching should be mandatory before moving into the *Initial* stage of the new career structure. At the same time, beginning teachers should be given every opportunity to work in a stable and well-supported school environment, and the probation decision should be taken by a panel which is well trained and resourced for assessing new teachers.

Improve the provision of initial teacher education

The provision of initial teacher education can be improved in a number of ways. First, initial teacher education can be made more selective as no teacher shortage exists. If

salaries are increased, as currently planned, and better candidates are attracted to initial teacher education, it is clear that entry into preparation programmes can be much more selective. Potentially useful initiatives include: providing more information and counselling to prospective student teachers so that better informed enrolment decisions are made; procedures that try to assess whether the individuals wanting to become teachers have the necessary motivation, skills, knowledge and personal qualities; incentive schemes to recruit candidates with high-level competencies; and flexible programme structures that provide students with school experience early in the course, and opportunities to move into other courses if their motivation towards teaching changes. This should go alongside continuous efforts to improve the quality of initial teacher education programmes, as monitored by accreditation processes. Second, there is a clear need to strengthen the preparation of teachers to instruct students with special educational needs. Third, initial teacher education programmes should include in their curriculum specific aspects targeted at teaching in remote and rural schools such as strategies for teaching in multigrade classes, forming high expectations of student performance in rural contexts, and effective approaches to interact with the school community.

Strengthen the framework for professional development provision

A range of initiatives can improve the provision of professional development. First, there is a clear need for professional development to become a more regular practice among teachers in Chile, with an adequate time entitlement, greater diversity of activities, led by school development plans, informed by teacher evaluation and with a supply which reflects teachers' developmental needs. There must be an explicitly stated expectation that every teacher engages in a career-long quest of improved practice through professional development activities. Professional development should be understood by teachers as the main instrument to acquire the new competencies necessary for professional growth and career advancement as part of the new career structure. This approach requires providing teachers with more dedicated release time and financial support for professional development than is currently the case. Also, the focus for teacher professional development should not be those teachers identified as underperforming – it should benefit all teachers. Second, teacher professional development needs to be associated with school development if the improvement of teaching practices is to meet the school's needs. Third, there is a need to improve linkages between teacher evaluation and professional development. Fourth, there is a need to improve the relevance of professional development programmes. Suppliers of professional development programmes need to better connect to the professional development of teachers.

Chapter 1

School education in Chile

The market-oriented education reforms of the 1980s entailed the decentralisation of public school management responsibilities to municipalities and the introduction of a nationwide voucher programme. This is completed by the Ministry of Education's role as the co-ordinator and regulator of the education system. The Ministry designs policies, develops programmes and quality standards (including the curriculum), officially recognises education providers, and offers technical and pedagogical support to schools. It shares responsibilities for the National System of Quality Assurance with three other institutions: the National Education Council, the Agency for Quality Education and the Education Superintendence. As of late 2015, the government initiated a reform of the administration of public education, which intends to remove the administration and management of public schools from municipalities and create a system of public education, in a process called New Public Education. It involves the creation of Local Education Services, the new providers of public education, which are co-ordinated by a body within the Ministry of Education. The majority of children attend publicly-subsidised private education. Educational attainment in Chile has considerably improved in recent years. Lower secondary education is now virtually universal and there has been progress in retaining students in upper secondary education even if about 20% of a cohort does not reach the final year of upper secondary education. Student learning outcomes in Chile are considerably below the OECD average but there has been considerable progress in the last decade. Finally, students' and schools' socio-economic status have a strong impact on student performance.

This chapter provides political, demographic and economic background information for the subsequent analysis. It also includes a detailed description of the Chilean school system, including its governance. In addition, it provides an account of recent developments and main trends within the education system of Chile.

Context

Situated on the Pacific coast of South America, Chile spans a territory of about 756 000 square kilometres and, in 2014, had a population of about 17.8 million (United Nations, 2015). Chile shares a border with Argentina to the east, Bolivia to the northeast and Peru to the north. The country's capital and largest city is Santiago (metropolitan area with 7.3 million inhabitants, INE, 2015).

Governance and administration

Chile is a presidential, representative democracy whose Constitution establishes the separation of powers among three branches: the legislative (the National Congress [*Congreso Nacional de Chile*], a bicameral Parliament comprised of a Chamber of Deputies [*Cámara de Diputados*] and a Senate Chamber [*Cámara de Senadores*]), the executive (the President, who is both head of government and head of state; a Cabinet of Ministers), and the judiciary (the Supreme Court, Courts of Appeals, Oral Criminal Tribunals and Guarantee Judges, Local Police Courts, among others). The Constitutional Court, the Electoral Court and the Court of Auditors (*Contraloría General de la República*) function as additional supervisory bodies (MINEDUC, ACE and ES, 2016). Elections for the Presidency and for the Chamber of Deputies are held every four years while senators are elected for eight years.

Chile is a unitary state with political powers concentrated in the capital city. It is administratively divided in 15 regions (including the Metropolitan Region where the national capital Santiago is located), 54 provinces and 346 municipalities (*comunas*). The most populated regions in 2015 were the Metropolitan Region (estimated 7.3 million inhabitants), Bío bío (2.1 million), Valparaíso (1.8 million), Maule (1.0 million), La Araucanía (1.0 million), O'Higgins (0.9 million) and Los Lagos (0.8 million) (INE, 2015) (see Table 1.1).

The 15 regions are governed by intendents (*intendentes*), nominated by the President, who are supported by Regional Ministerial Secretaries (representatives of ministries in regions) and elected regional councils. Provinces are led by governors (*gobernadores*) also nominated by the President. Both regional and provincial executive authorities implement national laws and policies dictated by the central government. Municipalities are led by mayors (*alcaldes*) and a municipal council, both elected by the respective populations every four years. Municipalities take responsibility for a range of public services such as education and health care.

Table 1.1. **Regions of Chile**

Region (region number)	Capital	Provinces	Municipalities	Population (thousands, 2015)	Share of population (%)	Area (km^2)	Population density (inhabitants per km^2, 2015)
Arica and Parinacota (15)	Arica	2	4	239.1	1.3	16 873.3	14.2
Tarapacá (1)	Iquique	2	7	336.8	1.9	42 225.8	8.0
Antofagasta (2)	Antofagasta	3	9	622.6	3.5	126 049.1	4.9
Atacama (3)	Copiapó	3	9	312.5	1.7	75 176.2	4.2
Coquimbo (4)	La Serena	3	15	771.1	4.3	40 579.9	19.0
Valparaíso (5)	Valparaíso	8	38	1 825.8	10.1	16 396.1	111.4
Santiago Metropolitan area (13)	Santiago	6	52	7 314.2	40.6	15 403.2	474.8
O'Higgins (6)	Rancagua	3	33	918.8	5.1	16 387.0	56.1
Maule (7)	Talca	4	30	1 043.0	5.8	30 296.1	34.4
Bio bío (8)	Concepción	4	54	2 114.3	11.7	37 068.7	57.0
La Araucanía (9)	Temuco	2	32	989.8	5.5	31 842.3	31.1
Los Ríos (14)	Valdivia	2	12	404.4	2.2	18 429.5	21.9
Los Lagos (10)	Puerto Montt	4	30	841.1	4.7	48 583.6	17.3
Aysén (11)	Coyhaique	4	10	108.3	0.6	108 494.4	1.0
Magallanes (12)	Punta Arenas	4	11	164.7	0.9	1 382 291.1	0.1
Chile	**Santiago**	**54**	**346**	**18 006.4**	**100**	**2 006 096.3**	**9.0**

Source: INE (2015), *Compendio Estadístico 2015* [*Statistical Compendium 2015*], *www.ine.cl/docs/default-source/publicaciones/2015/compendio_estadistico_ine_2015.pdf?sfvrsn=4*.

Demographic characteristics

Population

The majority of Chile's regions are sparsely populated resulting in a low overall population density of 9 inhabitants per square kilometre. The Santiago Metropolitan area and Valparaíso region are the main exceptions with 475 and 111 inhabitants/km^2 respectively (see Table 1.1). In 2015, 41% of Chile's population lived in the Santiago Metropolitan Area. In 2015, about 87% of Chile's population lived in urban areas dominated by the agglomerations of Greater Santiago, Greater Concepción and Greater Valparaíso (INE, 2015).

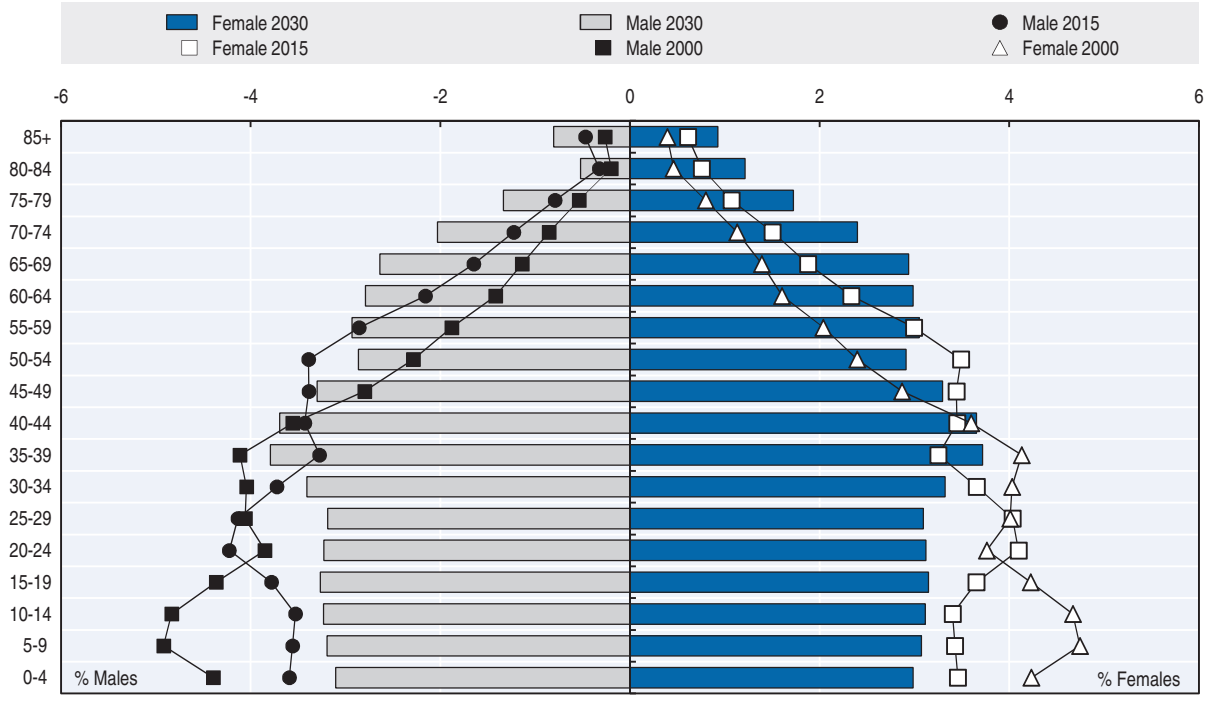
Chile's population is expected to continue growing, reaching 19.1 million by 2025 and 20.1 million by 2040 (INE, 2015). Chile is also confronted with a rapidly ageing population – a trend which will continue in the coming years, as can be seen in Figure 1.1. Fertility rates have dropped over the past two decades and the proportion of over 65-year-olds has increased from 5.0% in 1970 to 10.3% in 2015 (OECD, 2016a).

The evolution of the school-age population in Chile is slightly different from that of the average OECD country. As can be seen in Figure 1.2, following a significant increase for all age cohorts from 1990, the school-age population declined and reached low points in 2005 for 0-4 year-olds, 2010 for 5-9 year-olds and 2015 for 10-14 year-olds. Except for the further decrease expected in the 15-19 year-olds bracket to 2020, the student age population is expected to stabilise in the next ten years.

Cultural diversity

There is considerable cultural diversity in the country. According to the 2002 census, Indigenous people constituted approximately 4.6% of the population. Of these, about 87%

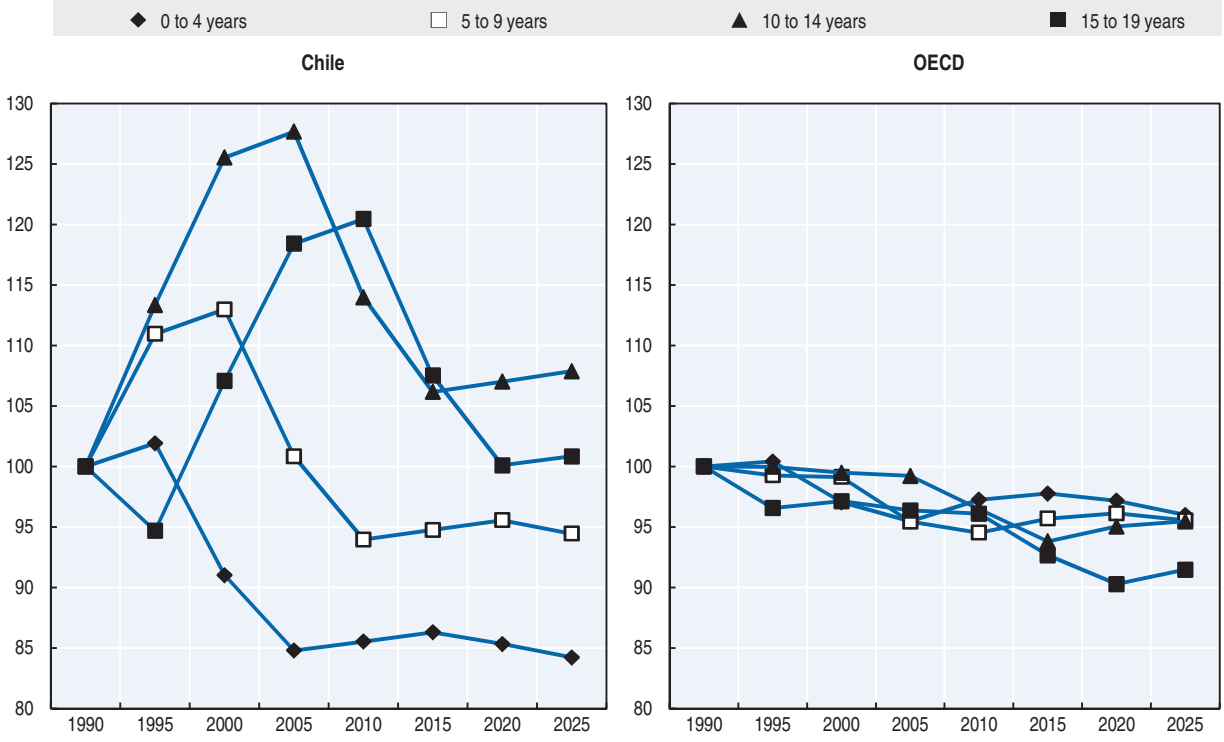
Figure 1.1. **Chilean population pyramids in 2000, 2015 and 2030**



Source: OECD (2016a), Historical Population Data and Projections (1950-2050), *http://dotstat.oecd.org/Index.aspx* (accessed on 31 August 2016).

Figure 1.2. **Variation in Chile's school-age population compared to the OECD**

1990 = 100



Source: OECD (2016a), Historical Population Data and Projections (1950-2050), *http://dotstat.oecd.org/Index.aspx* (accessed on 31 August 2016).

belonged to the main ethnic group of the Mapuche (INE, 2003). The 2015 national socio-economic household characterisation survey (*Encuesta de Caracterización Socioeconómica Nacional*, CASEN) estimates the Indigenous population to constitute 9.0% of the population in continental Chile. Ethnic groups represented are Mapuche (83.8%), Aymara (6.8%), Diaguita (4.0%), Quechua (1.7%), Atacameño (Licanantai) (2.0%), Coya (1.0%), Kawésqar (0.3%), Rapa Nui (0.3%), Yagán (0.01%). In certain regions, the proportion of Indigenous people is significant: La Araucanía (31.7%), Arina and Parinacota (25.9%), Aysén (25.8%), Los Lagos (24.1%), Los Ríos (20.6%), Magallanes (17.5%), Atacama (17.2%) and Tarapacá (15.3%) (Ministry of Social Development, 2017).

The immigrant population is small but increasing. It grew from about 1.0% of the population in 2006 to 2.7% of the population in 2015. Over 85% of immigrants come from Latin America (Ministry of Social Development, 2016a).

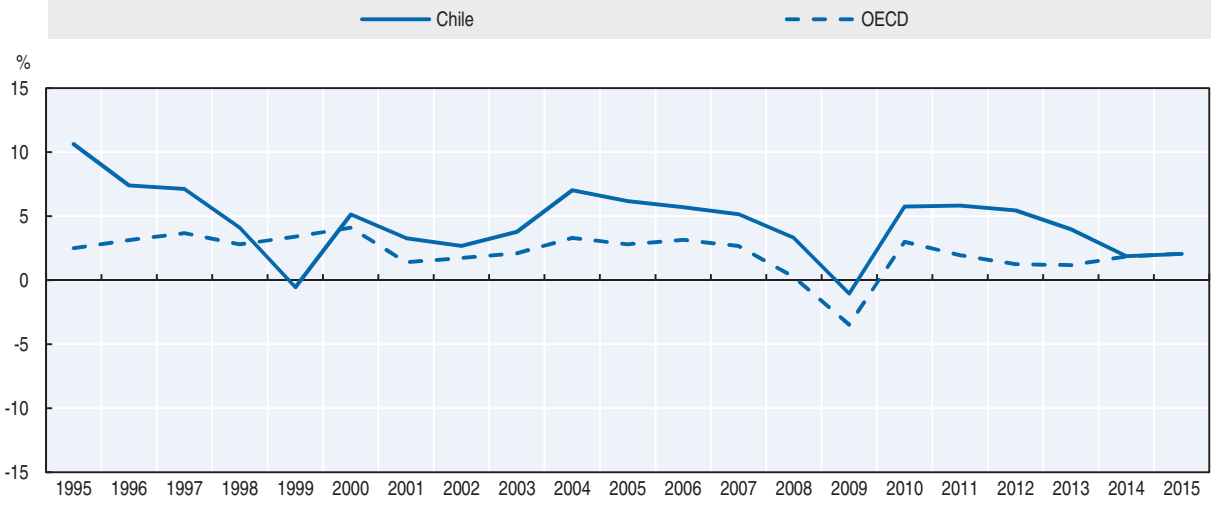
Economy

Economic growth

Chile is a high income economy (World Bank, 2015) and is ranked "very high" on the Human Development Index – 30th among the 34 OECD countries and second among all Latin American and Caribbean states, behind Argentina (UNDP, 2015, Table 1).

Chile's economy has quickly expanded in the last two decades (see Figure 1.3). From 2000 to 2008 gross domestic product (GDP) growth stood at an average of around 5% a year before the 2009 recession caused by the financial crisis. Chile swiftly recovered from the crisis with GDP annual growth rates above 5% between 2010 and 2012 before the economy slowed down to growth rates around 2% in 2014-15 (see Figure 1.3). The GDP per capita based on purchasing power parity reached USD 22 995 by 2014, which is the highest value among Latin American countries (IMF, 2015).

Figure 1.3. **Evolution of GDP growth in Chile and the OECD, 1995-2015**



Source: OECD (2016b), *National Accounts, Gross Domestic Products*, *http://dotstat.oecd.org/Index.aspx* (accessed on 31 August 2016).

Labour market

Chile faces unemployment rates below the OECD average, mainly affecting young people. In 2015, the unemployment rate reached 6.2%, below the OECD average of 6.8%. For the same year, unemployment rates among females and individuals aged 15-24 stood at 6.8% and 15.5% respectively (OECD, 2016c). The unemployment rate is expected to rise to about 7% by the end of 2017 (OECD, 2015a). Employment rates show a significant difference between males (72.6% in 2015) and females (52.4% in 2015) for individuals aged 15-64, more marked than in the OECD area (74.3% for males against 58.9% for females) (OECD, 2016c). For individuals aged 25-64 employment rates increase with education attainment: in 2013, these were 85%, 72%, 66% and 55% for individuals having attained a bachelor's degree, upper secondary education, lower secondary education and primary education respectively (OECD, 2015b).

Inequality

Chile continues to be one of the most unequal OECD countries. Inequality as measured by the Gini index after taxes and transfers remains the highest in the OECD (OECD, 2015a). Households at the top of the income distribution get a large share of national income: the top 10% earns 26.5 times the average income of the bottom 10%, compared to an OECD average of 9.6 times (OECD, 2015a). In 2015, the proportion of individuals considered as living in poverty (including extreme poverty) and extreme poverty in Chile was 11.7% and 3.5% respectively (Ministry of Social Development, 2016b). These rates have been considerably reduced in recent years – in 2006 they stood at 29.1% and 12.6% respectively (Ministry of Social Development, 2016b).

The governance of the school system

The legislative framework

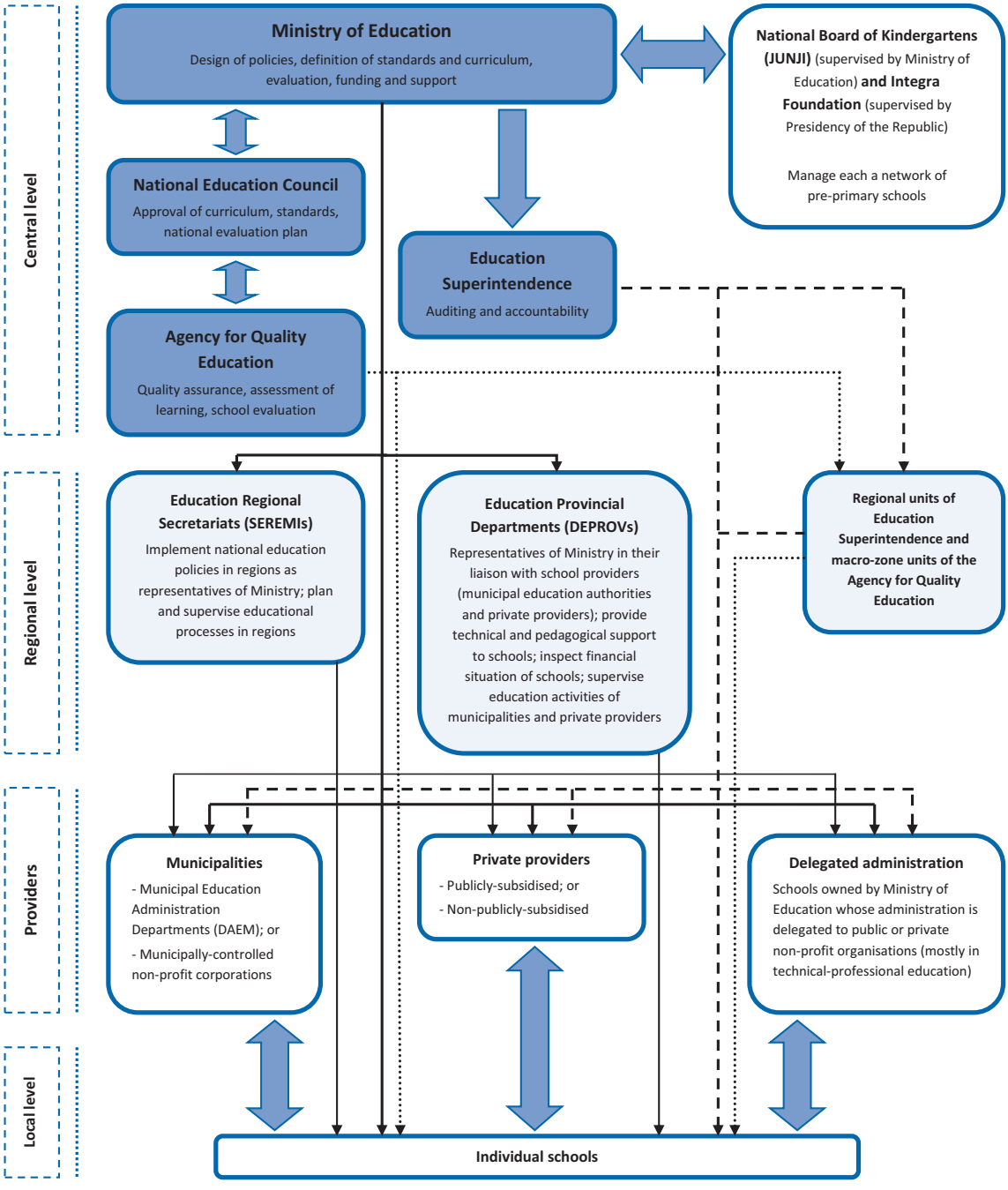
The Constitution of the Republic of Chile and the General Education Law (*Ley General de Educación*, LGE), established in 2009, provide the framework for education governance in Chile. The LGE defines the goals of school education, regulates the rights and duties of the members of the education community, establishes minimum requirements for completion of each of the education levels and institutes a process for the recognition of education providers. The education system is based on the following main principles: the right for all citizens to access quality education (as dictated in the LGE), the freedom for parents to select the school for their children (as dictated in the Constitution) as well as the right to any natural or legal person to set up, organise and maintain a school (as dictated in the Constitution).

Distribution of responsibilities

The administration of the Chilean education system takes place at different levels, as illustrated in Figure 1.4. At the central level, the LGE together with the National System for Quality Assurance of Education Law defines the National System for Quality Assurance (*Sistema Nacional de Aseguramiento de la Calidad*, SAC), formed by four institutions: the Ministry of Education, the National Education Council, the Agency for Quality Education and the Education Superintendence (*Superintendencia de Educación*). These institutions, with the exception of the National Education Council, are represented by specific units at the regional level (Education Regional Secretariats as "deconcentrated" units of the Ministry in all 15 regions; regional units of the Education Superintendence covering all regions; and

units of the Agency for Quality Education in 5 macro-zones each comprising several regions) and at the provincial level (Education Provincial Departments as "deconcentrated" units of the Ministry in all provinces). A further level of administration consists of the providers – municipalities, private providers and delegated administration. Finally, individual schools constitute the local administration level.

Figure 1.4. **The governance of the school system in Chile**



The Ministry of Education

The Ministry of Education is responsible for the co-ordination and regulation of the education system – from pre-primary education to tertiary education – with the objective of ensuring quality and equity in education. Additionally, the Ministry is responsible for designing policies, developing programmes and quality standards (including the curriculum), officially recognising education providers, and offering technical and pedagogical support to schools. The Ministry is also in charge of evaluating education policies and programmes (alongside the Ministry of Finance and the Ministry of Social Development), providing the resources necessary for the implementation of education activities, regulating the teaching profession and school leadership and providing information to the general public about the state of education in Chile (MINEDUC, ACE and ES, 2016).

The organisation of the Ministry includes the following units/divisions: Curriculum and Assessment (*Unidad de Curriculum y Evaluación*, UCE), General Education (*Educación General*), Subsidies (*Coordinación Nacional de Pago de Subvenciones*), Planning and Budget (*Planificación y Presupuesto*), General Administration (*Administración General*), Higher Education (*Educación Superior*) and the Centre for Pedagogical Training, Experimentation and Research (*Centro de Perfeccionamiento, Experimentación e Investigaciones Pedagógicas*, CPEIP). The CPEIP's work focuses on promoting the professional development of Chilean teachers and school leaders. It takes responsibility for the design and implementation of policies concerning the support for beginning teachers, continuous teacher training, and the evaluation of teachers (as elaborated later in the report).

As of 2015, the Under-secretariat for Pre-primary Education (*Subsecretaría de Educación Parvularia*) was created within the Ministry to elaborate, co-ordinate and evaluate policies and programmes within pre-primary education (this is in addition to the other Under-secretariat for School Education). At the same time, the Intendence for pre-primary education (*Intendencia de Educación Parvularia*) was established within the Education Superintendence to supervise the proper provision of pre-primary education in the country.

Three autonomous entities which work closely with the Ministry of Education are: the National Board of School Assistance and Scholarships (*Junta Nacional de Auxilio Escolar y Becas*, JUNAEB); the National Board of Kindergartens (*Junta Nacional de Jardines Infantiles*, JUNJI) and the Integra Foundation. As explained below, JUNJI and the Integra Foundation are state-funded autonomous institutions supervised respectively, by the Ministry of Education and the Socio-Cultural Department of the Presidency of the Republic. They both administer pre-primary education institutions targeted at disadvantaged families.

Education central agencies

A significant player at the national level is the National Education Council (*Consejo Nacional de Educación*, CNED). It was created in 2009 by the General Education Law (succeeding the then Higher Education Council, *Consejo Superior de Educación*) as an autonomous body to contribute to policy development in both school and tertiary education. In particular, within school education, the council is responsible for: approving the curricula for pre-primary, primary and secondary education; approving the relevant plans and programmes of study; approving the plan for evaluating learning objectives (national evaluation plan); and providing information about quality standards and the

requirements for obtaining qualifications and being promoted to the next school year. The CNED also provides advice to the Ministry of Education (on specific instances at the request of the Ministry) and promotes research in education. The CNED has ten members: a prestigious academic appointed as President of the Council by the President of the Republic; two teachers or education professionals appointed as counsellors by the President; four academics or professionals proposed as counsellors by the President for confirmation by the Senate; and three university representatives (representing the Council of Rectors of Chilean universities, the accredited autonomous private universities, and the accredited professional institutes and technical training centres).

The 2009 LGE also created two new entities which complete the National System for Quality Assurance. The Agency for Quality Education (*Agencia de Calidad de la Educación*) takes responsibility for evaluating the quality of learning provided by Chilean schools in view of improving the quality and equality of education. It has own legal status and own assets. Its functions include: i) evaluating student learning achievement against the national curriculum on the basis of external standardised assessments; ii) evaluating individual schools and their owners against standards it develops; iii) categorising schools according to their performance; iv) validating mechanisms for the evaluation of teachers and school leaders developed by individual schools and their owners; and v) making publicly available information about the performance of individual schools. The Agency has regional representation in five macro-zones (north, centre-north, centre-south, south, and austral). In 2015, its priorities included reinforcing its role in supporting school improvement through guidance and orientation; rethinking the implementation and use of summative external standardised assessment; broadening instruments for school evaluation (with new processes and support services); and developing mechanisms for formative assessment.

The Education Superintendence (*Superintendencia de Educación*) plays the complementary role of ensuring essential conditions for the provision of quality education and the safeguarding of rights of all actors in educational communities, through the control of educational regulations, the use of resources, attention to complaints and the delivery of information to schools and their owners. Its functions include: i) inspecting the compliance with educational regulations, legality in the use of resources and accountability of subsidised establishments; ii) attending complaints from the educational community; iii) promoting the knowledge, exercise and protection of educational rights; and iv) reporting on educational regulations and the rights of educational communities.

The role of municipalities

The management of public schools is the responsibility of municipalities through Municipal Education Administration Departments (*Departamentos de Administración de Educación Municipal*, DAEM) (for about 85% of municipalities), which can also be called Municipal Education Departments (*Departamentos de Educación Municipal*, DEM), or municipally controlled non-profit corporations (for about 15% of municipalities). The DAEMs (or DEMs) answer directly to the mayor and are subject to more rigid rules regarding personnel management than municipal organisations/corporations. Municipal education authorities take responsibility for the operation of public schools (including their financial management), administer their teaching workforce (including the appointment, dismissal and professional development of teachers) and manage the relations to the education

community and the general public. Each municipality prepares an Annual Development Plan of Municipal Education (*Plan Anual de Desarrollo Educativo Municipal*, PADEM), covering areas such as the objectives for education within the municipality, the demand and supply of education, and teaching and non-teaching staff needs. The PADEM includes an action plan for the municipality and each of its schools together with the budget for its implementation.

Municipalities are represented by two associations. Since 1993, they are organised in a private non-profit corporation, the Chilean Association of Municipalities (*Asociación Chilena de Municipalidades*, AChM). The AChM is the main association of municipalities and one of the most important social and political pressure groups in Chile. In addition, the Association of Municipalities of Chile (*Asociación de Municipalidades de Chile*, AMUCH) brings together 66 municipalities in its membership.

The reform of the administration of public education

As of late 2015, the government initiated a reform of the administration of public education, which intends to remove the administration and management of public schools from municipalities and create a system of public education, in a process called *New Public Education*. It establishes and defines three levels: i) national, through the creation of a body within the Ministry of Education, the Directorate for Public Education (*Dirección de Educación Pública*, DEP); ii) territorial or intermediate, through the creation of Local Education Services (*Servicios Locales de Educación*), the new providers of public education, which are co-ordinated by the DEP; and iii) local, with the network of public schools. The draft law intends to transfer public schools from the existing 346 municipal providers to around 70 local education services. Each local education service will administer a group of schools according to their geographical location and/or cultural characteristics (MINEDUC, ACE and ES, 2016).

Regional and provincial education authorities

Regional and provincial education authorities function as supervision structures for the central Ministry of Education. The governance structure is centralised and vertical in nature. The Ministry of Education develops national education policies and organises their implementation in the country's regions through the Education Regional Secretariats (*Secretarías Regionales Ministeriales*, SEREMI), one per region. SEREMIs plan and supervise educational processes in the respective jurisdiction and ensure their adequacy to specific regional needs. The SEREMI is the institution which grants the official recognition for an education provider to operate within the respective region and has also the authority to revoke such official recognition if the education provider fails to meet the necessary requirements to operate. The SEREMI also determines the school calendar within the region. Organisational components of the SEREMI include the unit for the official recognition of schools, the unit to manage subsidies for schools at the regional level, the planning department, the education department, the administration department and an internal audit.

In turn, SEREMIs are represented at the province level through 42 Education Provincial Departments (*Departamentos Provinciales de Educación*, DEPROV). DEPROVs act as representatives of the Ministry of Education in their liaison with municipal education authorities, schools and school providers in the concerned provinces (for both municipal and publicly-subsidised private sectors). DEPROVs are mainly responsible for technical and pedagogical support for schools, inspect the administrative and financial situation of

schools under their jurisdiction, and supervise the education activities of their municipalities (including the validation of PADEMs). Organisational components of the DEPROVs include the technical-pedagogical supervision unit, the unit to manage subsidies for schools at the provincial level, the administration department and a unit dedicated to liaise with the local education community.

Also, the Education Superintendence has representations in all regions and the Agency for Quality Education has representations in five macro-zones, each including several regions.

Private school providers

Private school providers are private non-profit or for-profit organisations/corporations which might manage a single school or a group of schools. They employ their own teachers under labour legislation applicable to the private sector and are free to adopt the Teacher's Code (but some articles of the Code apply to private school providers). Most private school providers are part of associations which defend their interests. Two prominent such associations are the Federation of Institutions of Private Education (*Federación de Instituciones de Educación Particular*, FIDE) and Private Schools of Chile (*Colegios Particulares de Chile*, CONACEP). Both associations defend the principles of freedom of education and autonomy of school governance.

Teacher representatives

The Teachers' Association (*Colegio de Profesores*) is a teacher union created in 1974 with over 100 000 members (most of whom work or are retired from municipal schools) and actively involved as teacher representatives in the development of policies concerning the teaching profession. It is affiliated with the Central Workers' Union (*Central Unitaria de Trabajadores*, CUT), the most important labour union in Chile. Since 1991, the Teachers' Association regularly negotiates teachers' salaries and working conditions with the government and the Ministry of Education, even if teachers' employers are the municipalities and the private school providers. Having a nationwide coverage, the Teachers' Association is organised in councils at the municipal, provincial and regional levels which report to the National Board. There are also trade organisations representing teachers working in private schools at primary and secondary levels. These organisations are governed by the labour legislation applicable to the private sector. They have the right to collective bargaining and calling a strike.

Student participation

Student organised participation at the secondary level within schools occurs through student councils which are represented in school councils (see below). At the national level, secondary students are also very active in expressing their views and conveying those formally to the government. Since the early 2010s, there have been massive student demonstrations at the national level led by secondary and tertiary education students in the country. Students' demands have included a more equitable access to quality education; a reduction in the levels of debt students must incur to obtain a tertiary education degree; a more active role of the state in education; and revoking the authorisation for for-profit organisations to be education publicly-subsidised providers. These movements have led to the creation of organisations at the national level which represent secondary students in the negotiations with the government. These include the National Co-ordinator of

Secondary Students (*Coordinadora Nacional de Estudiantes Secundarios*, CONES) and the Chilean Co-ordinating Assembly of Secondary Students (*Asamblea Coordinadora de Estudiantes Secundarios de Chile*, ACES).

Policy co-ordination and development

The development of education policy is the responsibility of the Ministry of Education. There is a tradition of informing policy development with views of experts through ad hoc advisory groups. Examples include the Task Group for the Revision of the National System for the Assessment of Learning (2014) and the Presidential Advisory Council for the Quality of Education (2006). Individual experts are also invited to advice the Ministry in specific instances. More formally, the National Education Council (CNED) provides advice on a range of issues at the request of the Ministry.

In addition, there is a considerable effort to use evidence to inform education policy development. The Ministry, through its research and analysis unit (*Centro de Estudios*), undertakes or externally commissions studies to inform policy development. It also administers since 2006 the Fund for Research and Development in Education (*Fondo de Investigación y Desarrollo en Educación*, FONIDE) to financially support research in education within academic institutions. Non-governmental organisations such as *Educación 2020*, *Elige Educar*, *Enseña Chile*, *El Plan Maestro* are also very active in forming positions on the basis of analytical studies they conduct.

Moreover, the development of educational policies involves a range of consultations with stakeholder representatives. These include the Chilean Association of Municipalities, teachers' professional organisations and students' organisations. In the last few years there has been greater emphasis on a more complex and interactive model of policy development in which several perspectives and views are taken into account (Martinic and Elacqua, 2010). In 2015, in the context of the education reform, the government launched the National Plan for Citizens' Participation which provides opportunities for parents, students, teachers, school leaders, and the general public to express their views on the educational reform.

Finally, there is considerable emphasis on the evaluation of education policies and programmes. The Ministry of Finance and its budget department (*Dirección de Presupuestos*, DIPRES), through its Programme for the Evaluation of Programmes and Institutions, evaluates the design, management and results of public programmes whose conclusions may have budgetary consequences for the concerned programmes. The Ministry of Education also conducts evaluations of educational programmes.

Supply of educational services

The decentralisation of provision and the voucher system

The market-oriented education reforms of the 1980s entailed the decentralisation of public school management responsibilities to municipalities and the introduction of a nationwide voucher programme (see, for example, Cox, 2005, for a detailed description). The former involved the transfer of the administration and infrastructure of all the country's public primary and secondary schools to municipalities, including the management of the respective teaching workforce. The latter is characterised by a flat per-student public subsidy for schools (with differentiation by location) which are part of the voucher system (municipal and private schools) and parents' free choice of schools.

School choice goes alongside the provision of vast information on the performance of individual schools to the general public. Results of national standardised students assessments are made public at the school level as well as the results of external school evaluation both by the Agency for Quality Education and the Education Superintendence (see below). Schools are also classified in performance categories, which are made public. In addition, schools which receive public subsidies are required to publish financial information.

Education providers

There are four types of school providers:

- *Municipal schools*: public schools administered by the respective municipalities. These are administered by either a municipal education administration department (DAEM or DEM) or a municipal corporation.
- *Private-subsidised schools*: schools administered by private organisations that receive a public subsidy per student of the same amount as municipal schools.
- *Private non-subsidised schools*: schools administered by private organisations that do not receive public subsidies.
- *Schools with delegated administration*: schools owned by the Ministry of Education and mostly offering technical-professional education whose administration is delegated to public or private non-profit organisations (typically associated to the industry, commerce and construction industries).

As illustrated in Table 1.2, in 2015, there were a total of 5 729 education providers, including 347 municipal providers. In 2015, the large majority of providers administered a single school (4 754 providers, 83.0% of total) while 8.4% administered 2 schools, 1.7% administered 3 schools and 6.9% administered 4 schools or more (Ministry of Education, 2017). The average number of schools per municipal provider was 15.2 in 2015 (Ministry of Education, 2016). In 2015, among publicly-subsidised private providers, only about 12% of them administered more than one school (Ministry of Education, 2017).

In 2015, 12 001 schools were registered in Chile: 5 279 municipal schools (44.0%); 6 060 private-subsidised schools (50.5%); 592 private non-subsidised schools (4.9%); and 70 schools with delegated administration (0.6%) (Ministry of Education, 2016). Table 1.3 displays student enrolment in 2015 by type of provider across education levels and strands of education. Enrolment in private-subsidised schools is dominant at all levels (except for technical-professional studies in upper secondary education) even if a significant proportion of students attend municipal schools (between 34% and 39% across school levels). A significant trend is that the attendance of municipal schools has steadily decreased in the last years relative to that of private-subsidised schools. While the proportion of students enrolled in municipal schools was about 50% in 2004, it stood at about 36% in 2015 (Ministry of Education, 2016).

Attendance of different school types greatly depends on family income levels. Students from the most disadvantaged families attend municipal schools in largest numbers even if they are increasingly attending subsidised private schools. In 2015, the proportion of 6-13 year-olds enrolled in basic education attending municipal schools according to income quintile was: 54.1%, 45.9%, 37.5%, 26.0% and 11.9% from quintile I to quintile V. Private-subsidised schools receive students from a wider range of backgrounds. By contrast, private non-subsidised schools are mostly attended by students from

Table 1.2. **Number of education providers according to legal status, 2015**

Legal status	Number of providers	Proportion (%)
Municipal Education Administration Department	294	5.1
Municipal corporation	53	0.9
Publicly-subsidised private provider	4 956	85.2
Non-publicly-subsidised private provider	499	8.6
Delegated administration corporation	17	0.3
Total	**5 819**	**100**

Note: The sum of education providers across their legal status (5 819) does not equal the total number of education providers which operated in 2015 (5 729) because some education providers either administer both private-subsidised schools and schools with delegated administration or both private-subsidised schools and private non-subsidised schools. The total number of education providers administering private schools and schools with delegated administration is 5 382. The total number of municipal education administration departments (DAEMs or DEMs) and municipal corporations equals 347, one more than the number of municipalities. This is because one single municipality (*Quinta Normal*) has both a DAEM and a municipal corporation.
Source: Ministry of Education (2017), Database of the Studies' Centre (Centro de Estudios), *http://datosabiertos.mineduc.cl/* (accessed on 15 April 2017).

Table 1.3. **Student enrolment by education level, strand and type of provider, 2015**

Level/Strand	Total enrolment	Enrolment by type of provider (%)			
		Municipal	Private-subsidised	Private non-subsidised	Delegated administration
Total school system	**4 312 004**	**35.9**	**53.9**	**8.0**	**2.1**
Mainstream pre-primary education	381 945	33.7	54.5	11.8	0.0
Special pre-primary education	142 307	2.2	97.8	0.0	0.0
Mainstream basic education	1 937 397	38.9	53.2	7.9	0.0
Mainstream special basic education	39 867	34.0	65.8	0.1	0.0
Upper secondary education	905 244	35.9	50.8	8.2	5.0
Scientific-humanistic studies	619 940	31.1	54.1	12.0	2.8
Technical-professional studies	285 304	46.3	43.8	0.0	9.9

Note: Data for pre-primary education do not include enrolment in JUNJI and Integra Foundation centres. Data for basic and upper secondary education do not include provision for adults.
Source: Ministry of Education (2016), *Estadísticas de la Educación 2015* [*Education Statistics 2015*], *http://centroestudios.mineduc.cl* (accessed on 15 April 2017).

high-income families (41.0% of 6-13 year-olds in basic education from families in quintile V attended private non-subsidised schools in 2015) (Ministry of Social Development, 2016c).

School operation

In order to offer educational services, a school must be granted "official recognition" by the Ministry of Education. SEREMIs provide the official recognition for an education provider to operate. Education providers have the main responsibility to open, merge and shut schools provided these have official recognition. Education providers are responsible for meeting the requirements for the official recognition of each of their schools; managing their teacher resources, infrastructure and equipment; and meeting accountability obligations in terms of educational results and the use of public resources. They have the right to implement their own educational project and can use own study plans and programmes for their schools. Requirements to obtain official recognition include minimum professional qualifications for the education provider, an educational project, rules for the assessment and promotion of students, internal regulations, adequate

staffing, and suitable infrastructure. These requirements are periodically inspected by the Education Superintendence and, if they are not met, lead to the official recognition to operate to be revoked (a decision then executed by the SEREMI).

Full-day schooling

In 1996, the government decided to extend school hours, moving away from two shifts of six pedagogical periods to a full school day, consisting of eight 45-minute pedagogical periods. This change involved an increase in students' time available for curricular subjects, as well as extracurricular activities, and the possibility of students and teachers taking advantage of facilities outside of regular classroom time. This change in the length of the school day required a considerable investment in school infrastructure and more resources for hiring teachers and was undertaken through the full-day schools programme (*Jornada Escolar Completa*, JEC) (OECD, 2004). Bellei (2009) finds strong evidence that JEC had a positive effect on student achievement in both language and mathematics and that the impact was larger for rural students, students who attended public schools, and students situated in the upper part of the achievement distribution.

The Inclusion Law

As of 2015, the Inclusion Law (*Ley de Inclusión*) seeks to improve the conditions for families to exercise their free school choice ensuring choice is not contingent on families' ability to pay, student achievement or other potential discriminatory factors. The Law focuses on three main aspects: i) regulates student admission by forbidding the use of economic, social, ethnical, religious and academic criteria; ii) eliminates shared funding (*financiamiento compartido*, the existence of tuition fees in parallel with public subsidies in a single school); and iii) forbids publicly-subsidised schools to make a profit.

The Law will be gradually implemented to allow schools to adjust to the new funding arrangements and student selection rules. According to the Ministry of Education and the Ministry of Finance, in 2014 there were 977 520 students attending schools with shared funding, a figure that is expected to be reduced to 249 643 in 2018 and 108 893 in 2025 (MINEDUC, ACE and ES, 2016). Voluntary monetary contribution by parents for extracurricular activities will still be allowed. Publicly-subsidised schools will be required to use public resources only for educational purposes. It is expected that as of 2018, all schools receiving public subsidies will be administered by non-profit organisations. The implementation of the Inclusion Law will benefit from greater financial resources.

When the Law is fully implemented, if a school has more applications than available places, it is required to select students on the basis of a lottery. The only exceptions are the preference for children with siblings at the school and children of employees of the school. The Ministry of Education has established a Web platform to co-ordinate school admissions (*www.sistemadeadmisionescolar.cl/index.html*) – schools inform the Ministry of Education of the available places at the school and the web-based system assigns students to schools on the basis of the preferences expressed by the parents. Publicly-subsidised schools will no longer be able to select students on the basis of criteria such as academic ability, socio-economic background, ethnicity and religious affiliation. The Inclusion Law also limits the ability of publicly-subsidised schools to transfer or expel a student on the basis of academic achievement – students may repeat a year in basic education and a year in upper secondary education before a transfer can be considered.

Educational goals

Policy objectives

The government which took office in 2014 launched an ambitious education reform. Policy objectives for school education are organised in three major areas:

- Granting equal access to quality education.

  The objective is to ensure public resources are used for educational purposes and guarantee fair access to quality education. It is being implemented through the *Inclusion Law* (see above) which regulates student selection, forbids profit for publicly-subsidised schools and eliminates shared funding.

- Strengthening public education.

  This objective involves the reform of the administration of public education by establishing the System of Public Education (*New Public Education*, see above) with Local Education Services taking the administration of public schools from municipalities; the development of a model to fund Local Education Services; and further support in areas such as infrastructure, pedagogical innovation and teacher professional development.

- Improving the professionalism of teachers.

  The objective is to modernise and professionalise teaching and it is being implemented through the New Teaching Career (*Nueva Carrera Docente*) Law (see Chapter 5). The objective is to attract better individuals to teaching, improve teacher preparation, establish a multistage career and improve teacher remuneration.

Student learning objectives

In Chile, there is a single national curriculum defined by the Ministry of Education, which is binding for schools wishing to receive official recognition. The national curriculum needs to be approved by the National Education Council (*Consejo Nacional de Educación*, CNED). The 2009 General Education Law involved revisions to the curriculum and, in 2016, the implementation of the new curriculum was ongoing. The LGE defines General Objectives (*Objetivos Generales*) for each level of education (pre-primary education, basic education, upper secondary education). To achieve the General Objectives, the Ministry of Education's Curriculum and Assessment Unit (*Unidad de Currículum y Evaluación*, UCE) defines Curricular Bases (*Bases Curriculares*) specific to each education level and each subject area. As of mid-2016, the Curricular Bases had been established in pre-primary education and Year 1 to Year 6 in basic education. For Years 7 and 8 of basic education and upper secondary education, the pre-2009 curricular framework was still being used.

The curricular bases (as well as the pre-2009 curricular framework) define learning objectives, which include abilities, knowledge and attitudes. Two types of learning objectives are distinguished: i) vertical objectives associated with subject-related learning for each year level; and ii) transversal objectives, general and comprehensive objectives targeted at personal development and conduct (and embedded in all curricular areas).

The curricular bases (and the pre-2009 curricular framework) constitute the reference for establishing more detailed curriculum instruments for each learning field and subject:

- *The plans of study*: define the schedule for each school level and year (curricular areas to be covered and associated weekly time).

- *The programmes of study*: define the didactical organisation for each school year (expected learning for each semester or unit); and provide both examples of learning activities and methodological orientations.
- *The textbooks*: provide material for the teachers to deliver the curriculum.

The Ministry develops plans and programmes of study for each subject and year level in basic and upper secondary education, which are approved by the National Education Council (CNED). In order to obtain official recognition, each school needs to respect the curricular bases (or the pre-2009 curricular framework). These set out minimum requirements to which individual schools can make additions thereby developing their own plans and programmes of study (to be approved by the respective DEPROV). However, according to data from the Ministry, only about 8.5% of schools have their own plans and programmes of study in at least one subject in Year 1 to Year 8 of basic education (MINEDUC, ACE and ES, 2016).

Learning standards

Chile has also developed student learning standards. Learning standards aim to describe the core expected learning at key stages of the students' learning process, i.e. what students are supposed to know and be able to do at the end of each year level in every subject area. They are based on the national curriculum and constitute the reference to assess student achievement. Three levels of achievement are defined: insufficient, basic and adequate. Student learning standards are used as the reference for the external monitoring of the education system through the national standardised assessment of student performance (*Sistema de Medición de Calidad de la Educación*, SIMCE, see below). The learning standards are elaborated by the Ministry of Education, approved by the National Education Council (CNED) and monitored by the Agency for Quality Education.

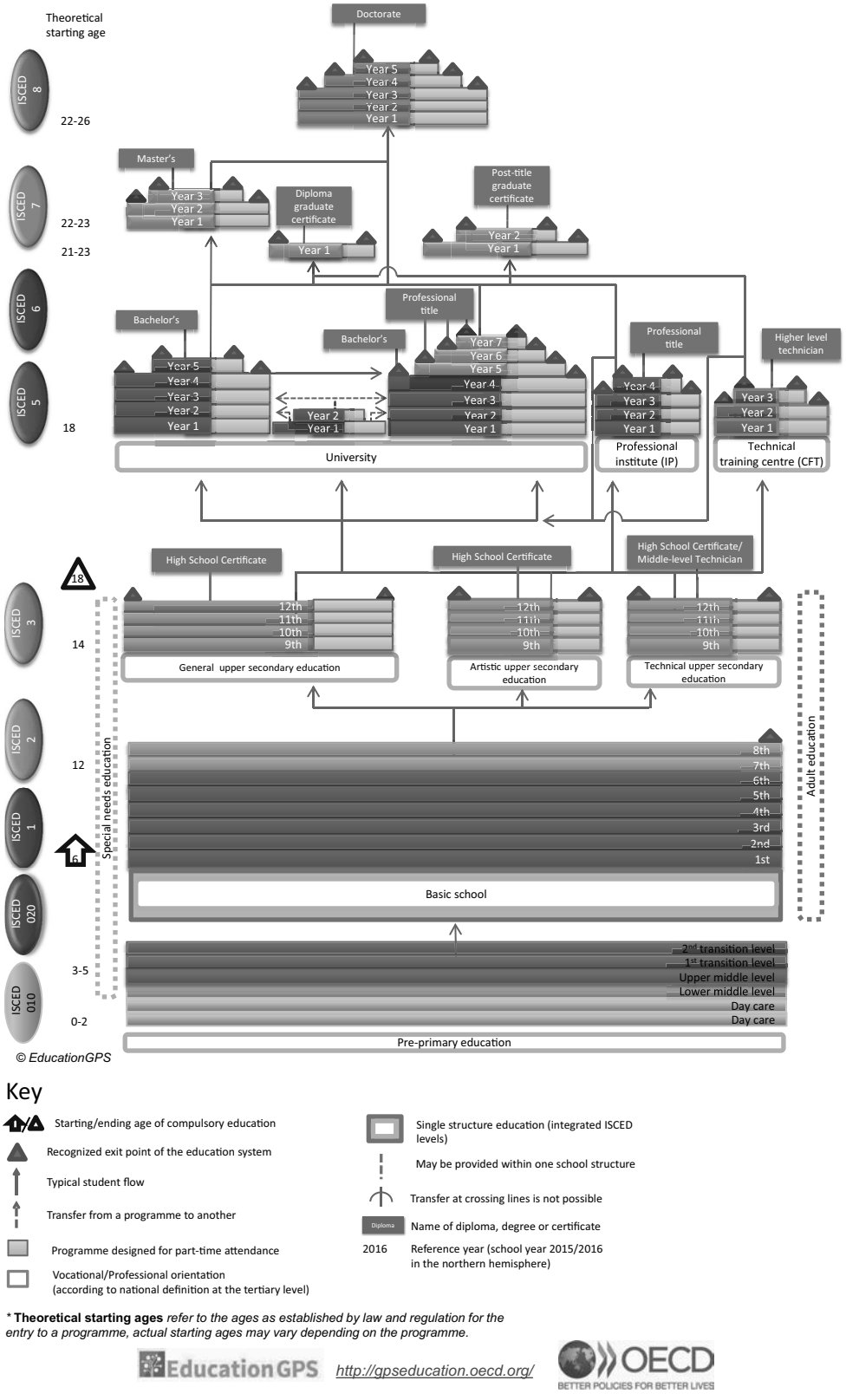
The organisation of the school system

Overview

The school system in Chile is organised in three sequential levels: pre-primary education (*educación parvularia* or *preescolar*, ISCED [International Standard Classification of Education] 0, children up to 6 years old), basic education (*educación básica*, ISCED 1 and 2, divided in 8 years with typical ages 6 to 13) and upper secondary education (*educación media*, ISCED 3, divided in 4 years with typical ages 14 to 17) (see Figure 1.5). Basic education is organised according to two stages: primary education (ISCED 1, Years 1-6); and lower secondary education (ISCED 2, Years 7-8) (see Figure 1.5). Since 2003 both basic and upper secondary education are mandatory for children up to 18 years old (twelve years of compulsory schooling). As of 2027, the structure of the education system will be adjusted to provide for 6 years in each primary and secondary education (originally planned for 2017 but implementation was postponed due to infrastructure limitations and shortage of teachers).

Upper secondary education (Years 9-12) is organised in two stages, the second of which offers two differentiated strands. The first stage (Years 9-10) offers general subjects and a common set of courses for all students. The second stage (for Years 11-12) involves the choice of one of these two strands: scientific-humanistic studies geared towards further study at higher education level; and technical-professional/artistic studies with

Figure 1.5. **The Chilean Education System**



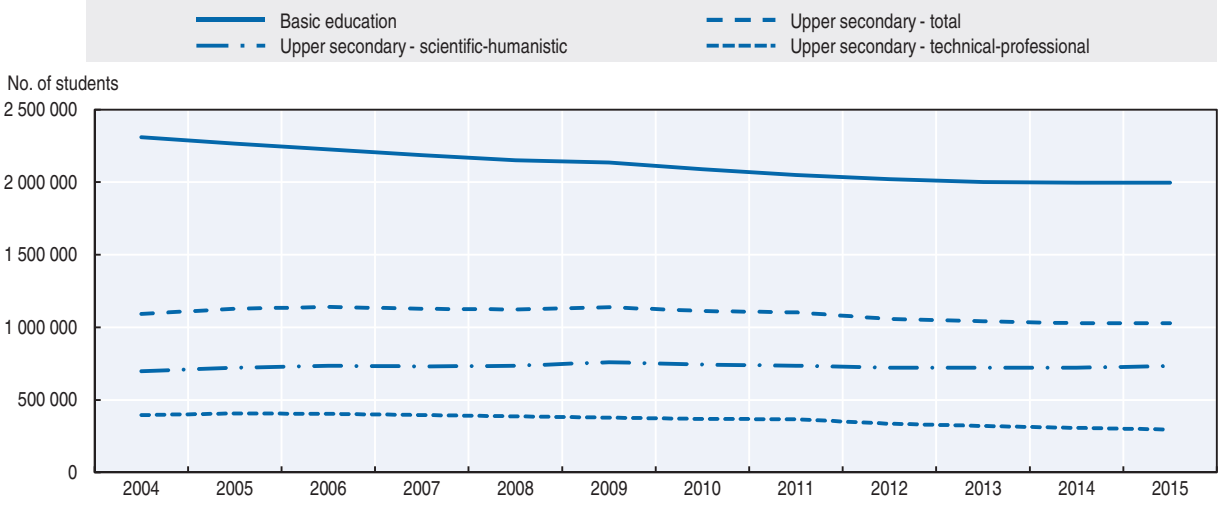
Source: OECD (n.d.), *Education GPS*, *http://gpseducation.oecd.org*.

courses that are either mainly geared to working life or the continuation of technical studies at higher education level.

Two other education modalities offered are: special education (see below), available in pre-primary and basic education; and adult education for completion of both basic and upper secondary education.

As shown in Figure 1.6, enrolment has been declining between 2004 and 2015 both in basic education (13.6%) and in upper secondary education (5.8%). However, during this period, trends within upper secondary education are markedly different across strands: while enrolment actually grew 5.1% in general programmes (scientific-humanistic), it significantly dropped 25.0% in technical-professional programmes (Ministry of Education, 2016).

Figure 1.6. **Enrolment by level of education, 2004-15**



Note: Data include provision for adults and special education.
Source: Ministry of Education (2016), *Estadísticas de la Educación 2015* [*Education Statistics 2015*], *http://centroestudios.mineduc.cl* (accessed on 15 April 2017).

Individual schools can offer one or several levels of education. In 2015, about 25% of the schools offered both pre-primary education and all years of basic education, 16% of the schools all compulsory years (Year 1 to Year 12), 17% of the schools pre-primary education only, 5% of the schools upper secondary education only, and 7% of the schools Year 1 to Year 6 (MINEDUC, ACE and ES, 2016).

Pre-primary education

Pre-primary education is organised in six levels according to the age of children (see Table 1.4). Provision is free of charge after age 2 (middle-low level). Attendance of the 2nd transition level (children aged between 5 and 6) was made mandatory in 2014 but implementation is yet to start, As a result, completion of this level is not a requirement to enter primary education. In this report, analysis of pre-primary education will be limited to both the 1st and the 2nd transition levels.

Three institutions take responsibility for pre-primary education policies: the Ministry of Education, the National Board of Kindergartens (*Junta Nacional de Jardines Infantiles*, JUNJI)

Table 1.4. **Levels in pre-primary education**

Age of child	Level
0-1	Nursery-low (*Sala cuna menor*)
1-2	Nursery-high (*Sala cuna mayor*)
2-3	Middle-low (*Medio menor*)
3-4	Middle-high (*Medio mayor*)
4-5	1st transition level (*Primer nivel de transición,* NT1)
5-6	2nd transition level (*Segundo nivel de transición,* NT2)

Source: MINEDUC, ACE and ES (2016), *OECD Review of Policies to Improve the Effectiveness of Resource Use in Schools (School Resources Review): Country Background Report for Chile*, *www.oecd.org/education/schoolresourcesreview.htm*.

and the Integra Foundation. JUNJI is an autonomous state-funded public corporation supervised by the Ministry of Education; the Integra Foundation is a state-funded non-profit private foundation under the supervision of the Socio-cultural Department of the Presidency of the Republic. Both institutions provide pre-primary education services for children under six years of age from disadvantaged families (typically families belonging to the first and second income quintiles). The Ministry of Education designs curricula and study programmes. JUNJI oversees pre-primary education in a network of public pre-primary schools, as does the Integra Foundation. JUNJI also plays a role as an accreditation and supervisory agency of private pre-primary schools.

There are a variety of providers of pre-primary education: municipalities, private-subsidised schools, private non-subsidised schools, JUNJI and the Integra Foundation. As illustrated in Table 1.5, the respective share of students in 2015 was 17.0%, 44.8%, 5.8%, 22.8% and 9.6%. JUNJI and the Integra Foundation administer institutions that provide pre-primary education exclusively and the large majority of their students are four years or younger (i.e. they mostly offer all but NT1 and NT2 levels). As shown in Table 1.6, in 2015, JUNJI and Integra Foundation together had 95.2% of the students enrolled in levels below NT1. By contrast, pre-primary education offered by the other providers concentrates on the NT1 and NT2 levels, which are typically part of an institution offering other levels of education above pre-primary education. At NT1 and NT2 levels, in 2015, JUNJI and Integra Foundation only enrolled 5.2% of the students (see Table 1.6).

Enrolment in pre-primary education grew 34.9% between 2004 and 2015 (excluding JUNJI and Integra Foundation, see Figure 1.7). While for the same period enrolment in pre-primary education actually decreased 8.3% in the municipal sector, it increased drastically in the private-subsidised sector (97.1%) and more moderately in the private non-subsidised sector (21.5%) (see Figure 1.7). Enrolment in pre-primary education remains below the OECD average. In 2014, the enrolment rates were 54%, 84% and 94% at ages 3, 4 and 5 against OECD averages of 71%, 86% and 95% respectively (OECD, 2016d).

Basic education

Basic education in Chile lasts eight years (Year 1 to Year 8) and is delivered in the following modalities: mainstream, special education and adult education. Schools may combine classes within Years 1 to 4 and they may also combine Years 5 and 6 (rural primary schools may combine Years 1 to 6). As of 2027, basic education will be reduced to 6 years with Year 7 and Year 8 integrated into secondary education. In 2015, the greatest share of students attended private-subsidised schools (53.4%) while 38.8% of students

Table 1.5. **Enrolment in pre-primary education by type of provider, 2015**

Type of offer	Mainstream education	Special education	Total	Share of students (%)
JUNJI	**..**	**..**	**177 301**	**22.8**
Urban	..	..	152 627	
Rural	..	..	24 674	
Integra Foundation	**..**	**..**	**74 485**	**9.6**
Urban	..	..	67 857	
Rural	..	..	6 628	
Municipalities	**128 884**	**3 123**	**132 007**	**17.0**
Urban	102 655	3 058	105 713	
Rural	26 229	65	26 294	
Private-subsidised sector	**208 109**	**139 175**	**347 284**	**44.8**
Urban	201 115	137 094	338 209	
Rural	6 994	2 081	9 075	
Private non-subsidised sector	**44 952**	**9**	**44 961**	**5.8**
Urban	44 746	9	44 755	
Rural	206	0	206	
Total	**..**	**..**	**776 038**	**100 .0**
Urban	..	..	709 161	
Rural	..	..	66 877	

.. : not available.
Note: While special education is offered in JUNJI and Integra centres, separate data are not available.
Source: Ministry of Education (2016), *Estadísticas de la Educación 2015* [*Education Statistics 2015*], *http://centroestudios.mineduc.cl* (accessed on 15 April 2017).

Table 1.6. **Enrolment in pre-primary education by type of provider and level, 2015**

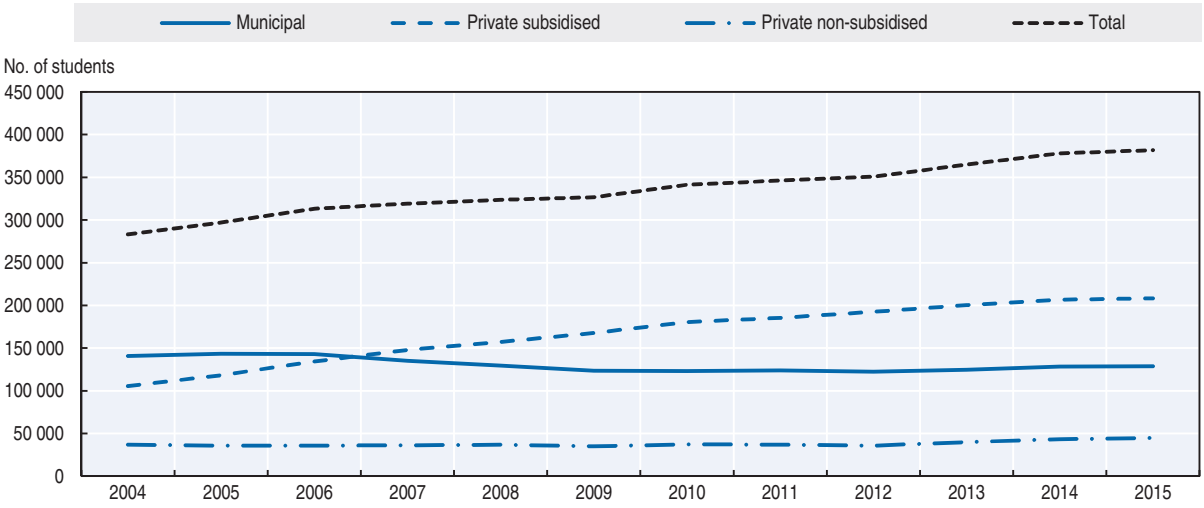
Type of offer	JUNJI	Integra Foundation	Municipalities	Private-subsidised sector	Private non-subsidised sector	**Total**
Nursery-low (*Sala cuna menor*)	19 064	5 609	0	19	50	**24 742**
Nursery-high (*Sala cuna mayor*)	41 342	14 122	0	85	361	**55 910**
Middle-low (*Medio menor*)	48 117	21 600	0	618	2 387	**72 722**
Middle-high (*Medio mayor*)	56 702	24 850	0	1 399	6 872	**89 823**
1st transition level (*Primer nivel de transición*, NT1)	10 427	7 579	55 316	88 395	16 563	**178 280**
2nd transition level (*Segundo nivel de transición*, NT2)	1 649	725	73 568	117 593	18 719	**212 254**
Total	**177 301**	**74 485**	**128 884**	**208 109**	**44 952**	**633 731**

Note: Data refer to mainstream education for municipalities, private-subsidised sector and private non-subsidised sector.
Source: Ministry of Education (2016), *Estadísticas de la Educación 2015* [*Education Statistics 2015*], *http://centroestudios.mineduc.cl* (accessed on 15 April 2017).

attended municipal schools and 7.7% attended private non-subsidised schools (see Table 1.7). This share is even more favourable to the private-subsidised sector in special education (66% against 34% of students in municipal schools) (see Table 1.7).

As displayed in Figure 1.8, between 2004 and 2015, total enrolment in basic education declined about 14% (excluding special basic education and basic education for adults). The decline was pronounced in the municipal sector (about 36%), more modest in the private non-subsidised sector (about 6%) while enrolment in the private-subsidised sector grew about 13% during this period.

Figure 1.7. **Enrolment in pre-primary education by type of provider, 2004-15**



Note: Data exclude provision by JUNJI, Integra Foundation and private providers with no official recognition. Data do not include special education.
Source: Ministry of Education (2016), *Estadísticas de la Educación 2015* [*Education Statistics 2015*], *http://centroestudios.mineduc.cl* (accessed on 15 April 2017).

Table 1.7. **Enrolment in basic education by type of provider, 2015**

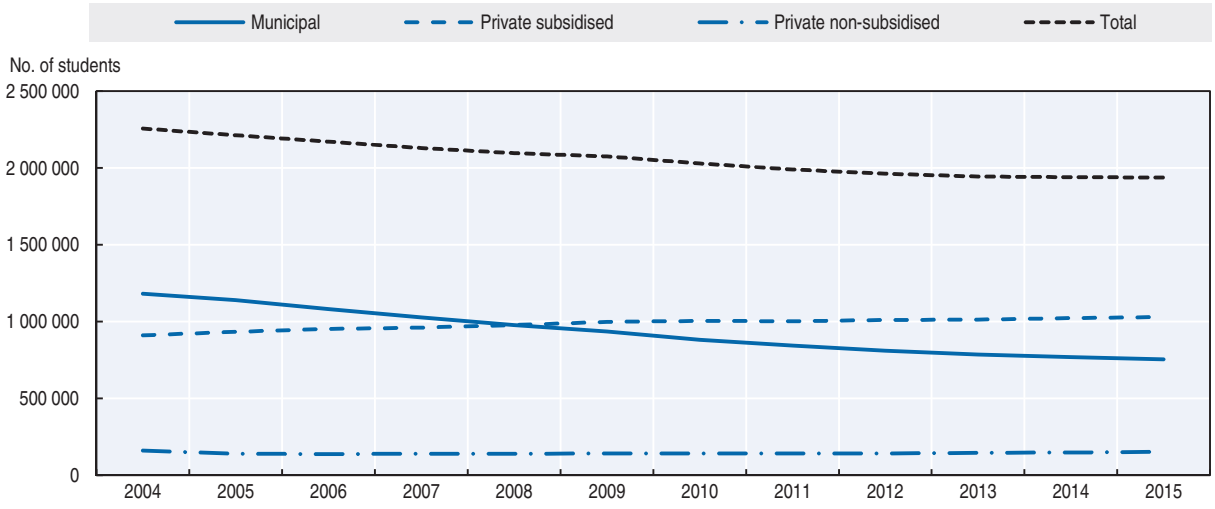
Type of offer	Mainstream education	Special education	Total	Share of students (%)
Municipalities	**754 588**	**13 566**	**768 154**	**38.8**
Urban	604 171	12 631	616 802	
Rural	150 417	935	151 352	
Private-subsidised sector	**1 030 378**	**26 249**	**1 056 627**	**53.4**
Urban	982 251	25 448	1 007 699	
Rural	48 127	801	48 928	
Private non-subsidised sector	**152 172**	**52**	**152 224**	**7.7**
Urban	151 443	52	151 495	
Rural	729	0	729	
Delegated administration	**259**	**0**	**259**	**0.0**
Urban	259	0	259	
Rural	0	0	0	
Total	**1 937 397**	**39 867**	**1 977 264**	**100**
Urban	1 738 124	38 131	1 776 255	
Rural	199 273	1 736	201 009	

Note: Data do not include basic education for adults.
Source: Ministry of Education (2016), *Estadísticas de la Educación 2015* [*Education Statistics 2015*], *http://centroestudios.mineduc.cl* (accessed on 15 April 2017).

Upper secondary education

Upper secondary education spans Years 9 to 12 (as of 2027, Year 7 and Year 8 will be integrated into secondary education). In 2015, students were distributed as follows: 68.5% in scientific-humanistic programmes and 31.5% in technical-professional programmes (see Table 1.8). For the same year, in general programmes, most students attended private-subsidised schools (54.1%). The remaining students attended municipal schools (31.1%), private non-subsidised schools (12.0%) and schools with delegated administration (2.8%). By contrast, in technical-professional programmes, the greatest share of students attended municipal schools (46.3%) followed by private-subsidised schools (43.8%) and schools with

Figure 1.8. **Enrolment in basic education by type of provider, 2004-15**



Note: Data do not include special basic education and basic education for adults.
Source: Ministry of Education (2016), *Estadísticas de la Educación 2015* [*Education Statistics 2015*], *http://centroestudios.mineduc.cl* (accessed on 15 April 2017).

delegated administration (9.9%) (see Table 1.8). The majority of secondary technical-professional students come from disadvantaged socio-economic backgrounds – about two-thirds of them belong to the two lowest income quintiles (Kis and Field, 2009).

Technical-professional studies are offered in 15 economic sectors with a total of 34 specialisation areas. The fifteen economic sectors and the respective areas of specialisation are (Ministry of Education, 2013):

- *Wood*: forests and furniture.
- *Agricultural*: agriculture.
- *Food*: industrial preparation of food; gastronomy.
- *Construction*: construction; refrigeration and air-conditioning; sanitation; industrial assembly.
- *Metal mechanics*: automotive mechanic; industrial mechanic; metallic constructions.
- *Electricity*: electricity; electronics.
- *Maritime*: aquaculture; fishing; crew of merchant and special ships; port operations.
- *Mining*: mining exploitation; extractive metallurgy; geology assistance.
- *Graphics*: graphics; technical drawing.
- *Textile*: clothing and textile apparel.
- *Administration*: administration; accounting.
- *Health and education*: early childhood care; nursing care.
- *Chemistry and industry*: industrial chemistry.
- *Technology and communications*: connectivity and networks; telecommunications; programming.
- *Hospitality and tourism*: hospitality services; tourism services.

As displayed in Figure 1.9, enrolment in upper secondary education has declined about 8% between 2004 and 2015. Enrolment in the municipal sector declined more

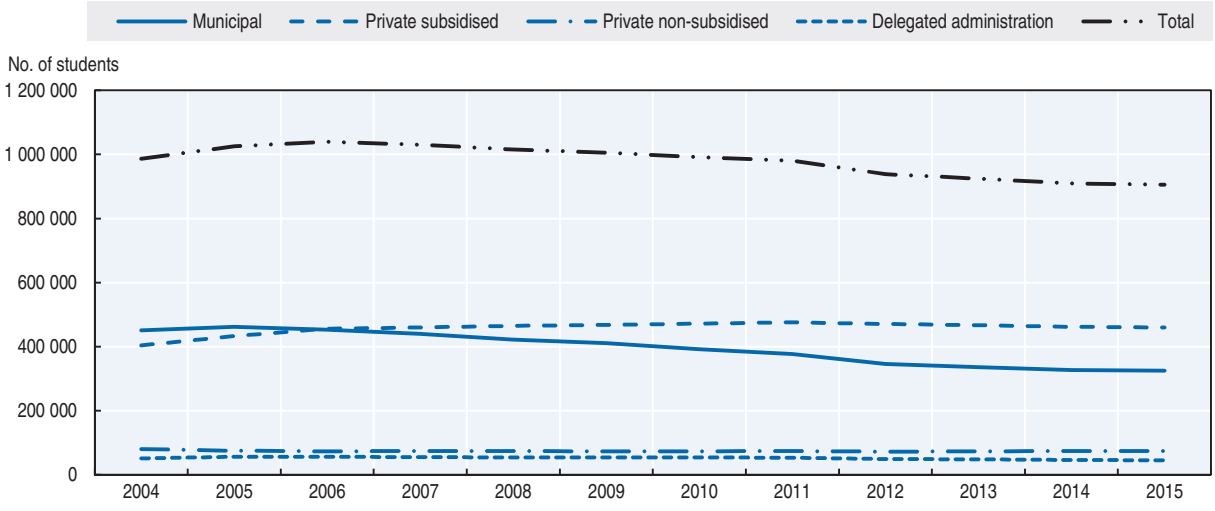
significantly (about 28%) and less so in the private non-subsidised sector (about 7%) and the delegated administration sector (about 11%). By contrast, enrolment in the private-subsidised sector increased about 14% during the same period. Also, as displayed in Figure 1.6, while enrolment grew 5.1% in scientific-humanistic programmes, it significantly dropped 25.0% in technical-professional programmes.

Table 1.8. **Enrolment in upper secondary education by type of provider, 2015**

Type of offer	General programmes	Share of students (%)	Technical-professional programmes	Share of students (%)	Total	Share of students (%)
Municipalities	**192 808**	**31.1**	**132 128**	**46.3**	**324 936**	**35.9**
Urban	185 499		128 255		313 754	
Rural	7 309		3 873		11 182	
Private-subsidised sector	**335 243**	**54.1**	**124 823**	**43.8**	**460 066**	**50.8**
Urban	330 606		112 615		443 221	
Rural	4 637		12 208		16 845	
Private non-subsidised sector	**74 644**	**12.0**	**5**	**0.0**	**74 649**	**8.2**
Urban	74 237		5		74 242	
Rural	407		0		407	
Delegated administration	**17 245**	**2.8**	**28 348**	**9.9**	**45 593**	**5.0**
Urban	17 245		28 348		45 593	
Rural	0		0		0	
Total	**619 940**	**100**	**285 304**	**100**	**905 244**	**100**
Urban	607 587		269 223		876 810	
Rural	12 353		16 081		28 434	

Note: Data do not include upper secondary education for adults.
Source: Ministry of Education (2016), *Estadísticas de la Educación 2015* [*Education Statistics 2015*], *http://centroestudios.mineduc.cl* (accessed on 15 April 2017).

Figure 1.9. **Enrolment in upper secondary education by type of provider, 2004-15**



Note: Data do not include upper secondary education for adults.
Source: Ministry of Education (2016), *Estadísticas de la Educación 2015* [*Education Statistics 2015*], *http://centroestudios.mineduc.cl* (accessed on 15 April 2017).

School size

According to statistics from the Ministry of Education, in 2014, the average size of a school was 294. However, this hides major differences in school size: from 1 student in some schools to over 4 000 students in other schools (MINEDUC, ACE and ES, 2016). The average number of students in early childhood education within schools has increased about 17% between 2004 and 2015 while decreases have been observed during the same period in basic education (9% in mainstream education and 23% in special education), scientific-humanistic programmes (26%) and technical-professional programmes (45%) (see Table 1.9).

Table 1.9. **Average number of students per school by level, type of education, location and education provider, 2004-15**

	Early childhood education	Basic education		Upper secondary education	
		Mainstream	Special	Scientific-humanistic	Technical-professional
2004	53	253	61	321	321
2006	56	245	55	313	285
2008	55	238	51	293	253
2010	57	231	51	273	225
2012	58	226	48	247	198
2015	62	230	47	239	175
Location (2015)					
Urban	72	356	49	245	184
Rural	26	56	22	110	97
Education provider (2015)					
Municipal	47	164	37	297	159
Private-subsidised	71	305	54	221	178
Private non-subsidised	98	357	17	195	5
Delegated administration	x	130	x	375	305

x: not applicable

Note: Schools may provide more than one level and type of education. In this table, data are organised according to the education level and type within each school and not for schools as a whole. Data for early childhood education do not include enrolment in JUNJI and Integra Foundation centres.

Source: Ministry of Education (2017), Database of the Studies' Centre (Centro de Estudios), *http://datosabiertos.mineduc.cl/* (accessed on 15 April 2017).

Special education

Students with special education needs (with disabilities and gifted students) attend mainstream schools, or receive their education from special needs schools. Only those mainstream schools which have a School Integration Programme (*Programa de Integración Escolar*) can receive students with special needs. Schools receive a "special education subsidy" for each enrolled student with special needs which is typically higher than the public subsidy associated to a student with no special needs (see Chapter 3 for further details).

Intercultural bilingual education

The main educational intervention for Indigenous students is the Programme for Intercultural Bilingual Education. It was established in 1996 and provides for study programmes and didactic materials in Indigenous languages as a second language, and textbooks contextualised to Indigenous cultures for the first three years of primary education. The 2009 General Education Law established the gradual introduction of

Indigenous languages as a regular educational offering as part of the national curriculum in schools with a high proportion of Indigenous students (see Chapter 3 for further details).

School governance

In Chile, regulatory frameworks do not specify school leadership structures. These are defined by school providers and schools themselves based on the resources available. However, the Good School Leadership Framework (*Marco para la Buena Dirección*, MBD), in place since 2005 to provide reference standards for school leadership, suggests the existence of a leadership team within each school in addition to the figure of the school principal. In Chilean schools, the school principal is the person in charge of the functioning, organisation and management of the school. The functions and attributions of school principals are defined in the Teacher's Code. It states that "The main function of a school principal is to direct and lead the institutional educational project". For municipal schools, it further indicates that "…the school principal shall in addition manage the school administration and finances, and further fulfil all other functions, attributions and responsibilities awarded by law" (see Chapter 4 for further details).

The principal is not necessarily the only person who is expected to undertake a leadership role. Other typical leadership roles in Chilean schools include Deputy Principal, Head of the Technical-Pedagogical Unit (in charge of curricular activities), General Inspector (in charge of a range of organisational aspects such as student admission, staff and class management and school discipline), Educational Cycle Director and Head of Department. Some administrative functions in schools are also undertaken by teachers who do not, however, have formal responsibility for these functions (technical-pedagogical roles such as curriculum development). The Teacher's Code also specifies that each school should organise a teachers' council (*Consejo de Profesores*), constituted by school leaders, teachers and technical-pedagogical staff, to provide advice on pedagogical issues. The leadership team tends to be more elaborate as the size of the school grows (e.g. secondary schools).

The General Education Law promotes the participation of the school community in the operation of all subsidised schools through the establishment of students' councils (*centros de alumnos*), parents' councils (*centros de padres y apoderados*) and school councils (*consejos escolares*). The school council, comprised of the school principal (President of the council), the school owner (or its representative), a teacher elected by the school's teaching body, the President of the parents' council, and the President of the students' council (in secondary education), has an advisory role. The council issues positions at the request of the school leadership and may be asked to take a decision at the discretion of the school owner. The council must be consulted at least about the following aspects: the definition of the School Educational Project; school targets and improvement projects proposed; the report about leadership management at the school; and development and modifications to internal regulations. Also, the council is to be provided with information on student outcomes, the school budget and its implementation, and the recruitment of staff (see Chapter 4 for further details).

Evaluation and assessment

In addition to school leadership appraisal and teacher evaluation, which will be analysed in-depth in Chapters 4 and 5 respectively, the Chilean evaluation and assessment

framework provides for a variety of arrangements for student assessment, school evaluation and system evaluation.

Education system evaluation

A particularly significant development in the area of educational evaluation has been the introduction in 1988 of the System to Measure the Quality of Education (*Sistema de Medición de Calidad de la Educación*, SIMCE), a full-cohort national standardised assessment of student performance across the country administered by the Agency for Quality Education. SIMCE measures achievement of fundamental curricular objectives and minimum compulsory contents. A reform of SIMCE in 2016 led to the reduction of census-based assessments. As of 2016, census-based assessments are organised every year in Year 4 (in 2016, reading; and mathematics) and Year 10 (in 2016, reading; mathematics; and natural sciences) and every two years, in alternate years, in Year 6 (in 2016, reading; writing; mathematics; and history, geography and social sciences) and in Year 8 (assessments to be defined in 2017). There are also sample-based assessments in English in Year 11 (every three years), in reading in Year 2, of citizenship skills in Year 8, and in physical education in Year 8 (2015 and 2018). Finally, there are also plans to introduce in 2020 an assessment of generic competencies for students attending technical-professional programmes in Year 12. Students are rated in three performance levels: elementary, intermediate and advanced. SIMCE results are public at the school level and have become an important tool to give feedback to students, parents, teachers, schools and education authorities.

SIMCE primary objectives are to: i) monitor student performance at the system level, provide information to parents and the educational community at large, and guide policy development; ii) provide feedback on the work of schools, school leaders and teachers; and iii) promote the commitment and responsibility of schools, stakeholders and parents. SIMCE also collects information about teachers, students, parents and guardians through the use of questionnaires. This information is used to contextualise student results.

Education system evaluation also includes a range of statistics on education based on data collected from schools by the Ministry of Education. These are the basis for annual publications with system-level indicators on education such as "Education Statistics" published by the Ministry. The Ministry manages a range of centralised administrative systems to collect student- and school-level data. For example, it administers the Student General Information System (*Sistema Información General de Estudiantes,* SIGE) which registers data about student attendance. Also, international benchmarks of student performance provided by international student surveys have been influential in driving policy development at the system level. In 1997, 2006 and 2013, Chile took part in the First, Second and Third Regional Comparative and Explanatory Studies (PERCE, SERCE and TERCE) carried out by UNESCO (United Nations Organization for Education, Science and Culture) and which cover the Latin America region.[1] Chile also participates since 2000 in the triennial OECD Programme for International Student Assessment (PISA), which measures 15 per capita students' skills in mathematics, reading and science. Chile has also taken part in some international assessments conducted by the International Association for the Evaluation of Educational Achievement (IEA), including the Trends in Mathematics and Science Skills survey (TIMSS for 4th- and 8th-graders), the Progress in International Reading Literacy Study (PIRLS), the International Civic and Citizenship Education Study (ICCS) and the International Computer and Information Literacy Study (ICILS).

School evaluation

Schools are subject to external evaluation processes by both the Agency for Quality Education and the Education Superintendence. The Agency focuses on the evaluation of educational processes in schools. Schools are ranked on the basis of their performance in national standardised assessments (SIMCE) and other indicators of education quality developed by the Agency and are classified in one of four categories: high-performance, average performance, average-low performance and unsatisfactory performance. School evaluations by the Education Superintendence focus on the auditing of the use public resources by schools and school providers and their compliance with legislation, standards and regulations (see Chapter 4 for further details). There is also supervision by DEPROVs in view of providing technical-pedagogical support to individual schools. The results of school evaluation processes are made public.

Schools benefit from a collective incentive programme, the National System for Performance Evaluation (*Sistema Nacional de Evaluación de Desempeño*, SNED). It monetarily rewards the staff of those schools with best performance according to a range of criteria, notably SIMCE results. The SNED is organised every two years and covers the subsidised sector, i.e. municipal schools, private-subsidised schools and schools with delegated administration.

Student assessment

Student performance in Chile is assessed by a wide range of instruments, ranging from national standardised assessments to continuous formative assessment in the classroom. Teachers take the main responsibility for student assessment. All students are assessed in an ongoing manner throughout the school year in each curriculum area or subject. Marks used to report student achievement are on a scale of one to seven. Assessment criteria and methods are defined by each school. No externally-based national final examinations exist at any level. However, in secondary education, schools are required to organise final examinations in language and mathematics in Years 9 to 11. As described above, at the national level, there is also a standardised external student assessment (SIMCE) which is used for diagnostic and improvement purposes but which has "high stakes" for schools. Year repetition is not possible in Years 1 and 3 (as long as the student attends at least 85% of classes). Schools define the processes for communicating student results to students and parents, including their periodicity. Intermediate student results are typically reported to parents in writing either each month, trimester or semester. End year results are provided to parents and students in a formal certificate of studies needed for enrolment at the next year level.

Main trends and concerns

Significant quantitative growth but challenges with educational attainment remain

Chile's school system has experienced an impressive expansion. Enrolment rates in secondary education grew from 14.0% in 1960 to levels above 90% in the early 2000s (Marcel and Tokman, 2005). The proportion of adults who have attained at least upper secondary education grew from 41% for the generation aged 55-64 in 2015 (OECD average: 68%) to 80% for the generation aged 25-34 (OECD average: 84%) in the same year (OECD, 2016d). Lower secondary education is now virtually universal and enrolment rates for 15-19 year-olds grew from 74% in 2005 to 79% in 2013 (still below the OECD average of 84%) (OECD, 2015b).

However, net enrolment rates for 14-17 year-olds in upper secondary education differ across income quintiles: in 2015, net enrolments rates were 68.5%, 73.0%, 75.1%, 78.9% and 80.6% from the lowest to the highest income quintiles (Ministry of Social Development, 2016c).

Tertiary educational attainment remains low by international comparison, although increasing enrolment rates imply the situation is gradually improving. In 2015, the proportion of adults aged 25-64 who had attained tertiary education was 21%, the 4th lowest figure in the OECD area (against an OECD average of 35%). This proportion was 27% for adults aged 25-34 (the 3rd lowest figure against an OECD average of 42%) and 14% for adults aged 55-64 (the 6th lowest figure against an OECD average of 26%) (OECD, 2015b).

There has also been good progress in retaining students within the school system even if a good share of students still leaves the education system too early with low skills. As illustrated in Table 1.10, completion and retention rates have constantly risen in basic education in recent years. However, in upper secondary education, improvements in completion and retention rates have not been sustained in the recent past and about 20% of a cohort does not reach the final year of upper secondary education. At the same time, nominal rates of completion only reached about 59% in 2014.

Table 1.10. **Cohort completion and retention indicators, basic and upper secondary education, 1994, 1995, 2004 and 2014**

Cohort indicators	Basic education			Upper secondary education		
	1994	2004	2014	1995	2004	2014
Nominal rate of completion (%)	40.9	64.6	63.7	43.8	66.9	58.6
Total rate of completion (%)	72.5	87.2	87.7	66.1	82.3	78.9
Time to completion (years)	8.5	8.3	8.3	4.4	4.2	4.3
Retention rate within system (%)	78.6	89.4	92.7	70.0	84.2	80.9

Note: Based on cohort data from the 2013 national socio-economic household characterisation survey (*Encuesta de Caracterización Socioeconómica Nacional*, CASEN). "Nominal rate of completion" refers to the proportion of entering students who complete the respective level of education within the nominal time (eight years in basic education and four years in upper secondary education). "Total rate of completion" refers to the proportion of entering students who complete the respective level of education within a predefined period (eleven years for basic education and six years in upper secondary education). "Time to completion" refers to the average number of years graduates take to complete their studies. "Retention rate" refers to the proportion of entering students who were assessed in the last year of each level of education (Year 8 in basic education and Year 12 in upper secondary education).
Source: MINEDUC, ACE and ES (2016), *OECD Review of Policies to Improve the Effectiveness of Resource Use in Schools (School Resources Review): Country Background Report for Chile*, *www.oecd.org/education/schoolresourcesreview.htm*.

Chile has high repetition rates in international comparison. According to PISA 2015 data, 24.6% of 15-year-olds reported to have repeated a year at least once, the 5th highest figure within the OECD area (OECD average: 11.3%). 14.5% had repeated at least one school year in primary school, and 6.8% one school year in lower secondary school (OECD, 2016e, Table II.5.9). However, repetition rates in Chile are low when compared to those in Latin American countries (above 30% in Brazil, Colombia, Costa Rica, the Dominican Republic and Uruguay) (OECD, 2016e, Table II.5.9).

According to national data, annual rates of repetition have been decreasing both in basic education (6.9%, 3.9% and 3.5% in 1994, 2004 and 2014 respectively) and in upper secondary education (12.3%, 7.8% and 6.7% in 1994, 2004 and 2014 respectively) (MINEDUC, ACE and ES, 2016). The same trend is visible with drop-out rates both in basic education

(1.9%, 1.2% and 1.1% in 1994, 2004 and 2014 respectively) and in upper secondary education (6.2%, 4.5% and 3.7% in 1994, 2004 and 2014 respectively) (MINEDUC, ACE and ES, 2016).

Student learning outcomes are below the OECD average but show considerable progress

Chilean students perform above the regional average at the primary level in reading, mathematics and science

Chilean students in Years 3 and 6 achieved the best mathematics and reading scores among Latin American countries in the 2013 TERCE (Third Regional Comparative and Explanatory Study, *Tercer Estudio Regional Comparativo y Explicativo*) study. Students in Year 6 also achieved the highest results in natural sciences. Across all subjects and year groups, Chile had a higher proportion of students reaching the top achievement level and a lower share of students in the bottom achievement group than the Latin American average (OREALC/UNESCO, 2015).

Chilean students perform below the OECD average at the secondary level in reading, mathematics and science

Student learning outcomes in Chile are considerably below the OECD average but there has been considerable progress in the last decade. In 2015, achievement levels of Chilean students in the OECD Programme for International Student Assessment (PISA) were at the bottom end within the OECD area in the assessed areas of reading literacy, mathematics and science (OECD, 2016f) – only Mexico and Turkey (except in Mathematics) scored significantly below Chile. However, Chile performed above any other Latin American country which took part in PISA (Brazil, Colombia, Costa Rica, the Dominican Republic, Mexico, Peru and Uruguay) in all assessed areas except mathematics (where its performance is similar to that of Uruguay) (OECD, 2016f). A significant challenge in Chile is the high proportion of low-performing students. In PISA 2015, 34.5% of students demonstrated low levels of science proficiency compared to 21.2% on average in the OECD. The equivalent proportions in reading and mathematics were 28.5% and 49.3% respectively (against OECD averages of 20.1% and 23.4% respectively) (OECD, 2016f).

Trend analyses of PISA results have shown some statistical significant improvement in reading literacy while performance in mathematics and science has remained fairly stable. In reading literacy there has been an average 3-year growth of 9.0 score points in reading performance across PISA assessments (since 2000). In science and mathematics, the corresponding 3-year average improvement across PISA assessments is positive (2.4 and 3.5 score points respectively) but not statistically significant (OECD, 2016f). In terms of the proficiency levels, at the lower end of the proficiency scale, the proportion of students who failed to reach Level 2 ("low achievers") declined in reading literacy from 30.6% in PISA 2009 to 28.5% in PISA 2015; in mathematics from 55.1% in PISA 2006 to 49.3% in PISA 2015; and in science from 39.7% in PISA 2006 to 34.9% in PISA 2015 (see Table 1.11). Valenzuela et al. (2010) attributed 70% of the increase in PISA results during 2000-06 to more resources at the individual and school level and 30% to better efficiency in resource use.

Students' and schools' socio-economic status have a strong impact on performance

Regarding the PISA relationship between socio-economic background and performance (i.e. between the PISA index of economic, social and cultural status (ESCS)

and the science performance of 15-year-olds in PISA 2015), the following indications emerge: i) Chile is above the OECD average in terms of the percentage of variance in student performance explained by student socio-economic status (*strength of the socio-economic gradient*) (16.9%, 5th highest value among PISA participating countries, against an OECD average of 12.9%, but decreasing from 20.2% in 2012, see Table 1.11) – i.e. the impact of socio-economic status on learning outcomes is above the OECD average (OECD, 2016f); and ii) Chile is below the OECD average in terms of the science score point difference associated with one unit increase in the PISA index of economic, social and cultural status (*slope of the socio-economic gradient*) (32 against an OECD average of 38) (OECD, 2016f). Hence in Chile, in relative terms, the relationship between performance and socio-economic status is strong, but performance differences related to socio-economic status are small. These conclusions are also valid both for reading literacy and mathematics.

Chile also has a proportion of resilient students (a student in the bottom quarter of the PISA ESCS index in the country of assessment who performs in the top quarter of students among all countries, after accounting for socio-economic status) below the OECD average (in science, 14.6%, the 2nd lowest value among PISA participating countries, against an OECD average of 29.2%, see Table 1.11) (OECD, 2016f).

In PISA 2015, in Chile, between-school variance explained 31.3% of the total variation in science performance, compared to the OECD average of 30.1%. Also, only 50.0% of performance differences were observed within schools, compared to 69.0% across the OECD (see Table 1.11). Chile's index of academic inclusion[2] stood at 61.5, significantly below the OECD average of 69.9. This places Chile's inclusiveness below Colombia's (67.4), Mexico's (70.0), Peru's (63.5) and Uruguay's (64.5) but above Brazil's (60.7) (OECD, 2016f, Table I.6.9).

There are large differences in students' achievement in PISA 2015 depending on school type and school resources. Students in private schools performed on average 46 score points better in science than those attending public schools (OECD, 2016f, Figure II.4.14). However, once differences in the socio-economic status of students attending public and private schools have been taken into account, the performance of students in public schools is not statistically different from that of students in private schools (OECD, 2016f, Table II.4.14).

Chile is also among the countries with greatest performance differences between students attending rural schools and students attending urban schools. In PISA 2012, after accounting for socio-economic status, the mathematics performance of students attending rural schools (locations with fewer than 3 000 people) was 416 points against an average performance of 443 points for students attending urban schools (locations with more than 100 000 people) (OECD, 2013).

National data provide further evidence that student results differ considerably across their socio-economic background and the type of school they attend. Figure 1.10 shows such differences in average 2013 SIMCE reading results for Year 4 and Year 8.

The average number of years in education also differs considerably according to the individual's socio-economic background and area of residence. In 2013, in urban areas, for people aged 15 or more, the average number of years in education was 9.2, 10.0, 10.6, 11.5 and 14.2 from the lowest income quintile to the highest income quintile. The equivalent figures for people living in rural areas across income quintiles were 7.3, 8.1, 8.4, 9.4 and 11.6 (MINEDUC, ACE and ES, 2016).

Table 1.11. **Selected indicators of quality and equity in education in Chile based on PISA 2015**

	OECD average (2015)	Chile (2015)	Chile (previous years)
Percentage of top performers			
Mathematics	10.7	1.4	1.5 (2006)
Reading	8.3	2.3	1.3 (2009)
Science	7.8	1.2	1.9 (2006)
Percentage of low achievers			
Mathematics	23.4	49.3	55.1 (2006)
Reading	20.1	28.5	30.6 (2009)
Science	21.2	34.9	39.7 (2006)
Difference in performance between the 90th and 10th percentiles (in score points)			
Mathematics	232	221	225 (2006)
Reading	249	230	233 (2000)
Science	247	224	237 (2006)
Percentage of variance in performance explained by socio-economic status			
Mathematics	13.0	17.8	23.1 (2012)
Reading	11.9	14.0	20.4 (2012)
Science	12.9	16.9	20.2 (2012)
Percentage of resilient students			
Science	29.2	14.6	15.0 (2006)
Between-school variance in science performance (as percentage of total variation in science performance across OECD countries)	30.1	31.3	..
Within-school variance in science performance (as percentage of total variation in science performance across OECD countries)	69.0	50.0	..

.. : not available

Note: Top performers are those students proficient at Level 5 or 6 of the assessment; Low achievers are those students proficient at or below Level 1 of the assessment. ESCS is the PISA index of economic, social and cultural status. Resilient students are those in the bottom quarter of the PISA ESCS index in the country of assessment who perform in the top quarter of students among all countries, after accounting for socio-economic status.

Source: OECD (2016f), PISA 2015 Results (Volume I): Excellence and Equity in Education, http://dx.doi.org/10.1787/9789264266490-en, Table I.2.1a, p. 320; Table I.4.1a, p. 373; Table I.5.1a, p. 386; Table I.2.3, p. 323; Table I.4.3, p. 376; Table I.5.3, p. 389; Table I.2.2a, p. 321; Table I.4.2a, p. 374; Table I.5.2a, p. 387; Table I.6.3a, p. 402; Table I.6.7, p. 407; Table I.6.9, p. 409; OECD (2013), *PISA 2012 Results: Excellence through Equity (Volume II): Giving Every Student the Chance to Succeed*, *http://dx.doi.org/10.1787/9789264201132-en*, Table II.2.9a, p. 200; OECD (2014), *PISA 2012 Results: What Students Know and Can Do (Volume I, Revised edition, February 2014): Student Performance in Mathematics, Reading and Science*, *http://dx.doi.org/10.1787/9789264208780-en*, Table I.4.3d, p. 386; Table I.2.3d, p. 308; Table I.5.3d, p. 401.

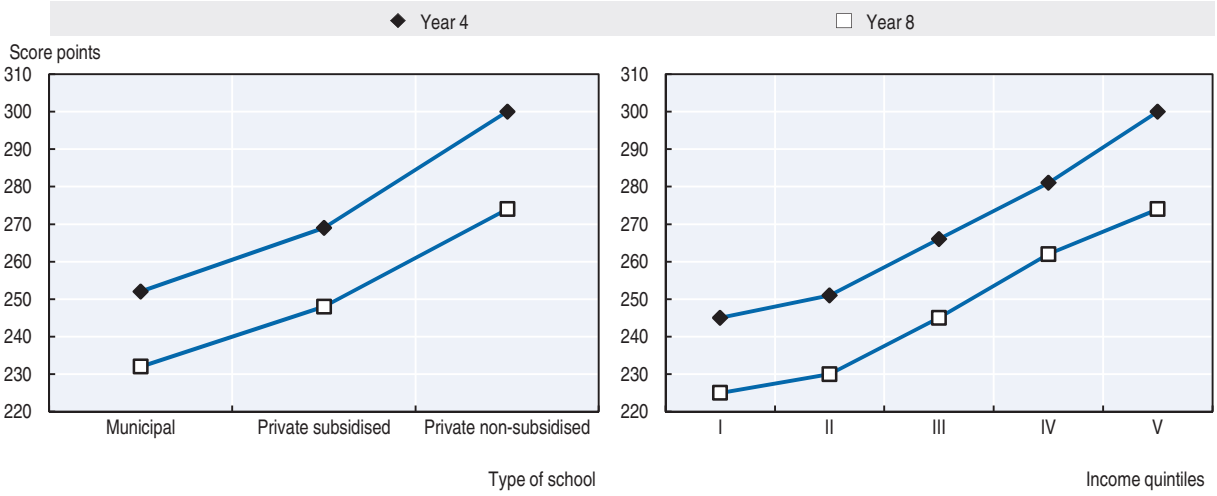
There is evidence of segregation in the school system

Gauri (1998) finds that school choice led to increased social and academic segregation. McEwan et al. (2008) find similar results but show that segregation did not occur across the board but only in areas large enough to sustain school competition. Elacqua (2012) finds that municipal schools are more likely to serve disadvantaged students than subsidised private schools and that disadvantaged students are more segregated among subsidised private schools than among public schools.

There is considerable evidence of sorting within the Chilean system: private schools selecting students on the basis of parents' interviews, entry tests and other tools that help to select students with characteristics that positively influence achievement, such as socio-economic background (before such practices were prohibited); private schools more extensively expelling students who repeat a year than municipal schools; and parents choosing schools attended by children with backgrounds similar to theirs, thus reinforcing the effects of selection (OECD, 2010).

Figure 1.10. **Student achievement in reading by income quintile and type of school attended, 2015**

Average SIMCE results for Year 4 and Year 8



Note: SIMCE is the System to Measure the Quality of Education (*Sistema de Medición de Calidad de la Educación*), a full-cohort national standardised assessment of student performance across the country administered by the Agency for Quality Education.

Source: ACE (2017), SIMCE National Database, *www.agenciaeducacion.cl/evaluaciones/que-es-el-simce/*.

Notes

1. PERCE, SERCE and TERCE are international student assessments carried out by UNESCO Regional Office for Education in Latin America and the Caribbean (OREALC/UNESCO) in 1997, 2006 and 2013 respectively. PERCE assessed Year 3 and Year 4 students in 13 countries in reading and mathematics. SERCE assessed Year 3 and Year 6 students in 16 countries (plus one Mexican state) in reading, writing, mathematics and natural sciences (Year 6 only). TERCE repeated the same assessments as SERCE for 15 countries (plus one Mexican state).
2. Calculated as 100*(1-rho), where rho stands for the intra-class correlation of performance, i.e. the variation in student performance between schools, divided by the sum of the variation in student performance between schools and the variation in student performance within schools (OECD, 2016f).

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Chapter 2

Funding of school education in Chile

This chapter is about the financing of school education. It considers the level and distribution of resources within the education system. It further analyses the operation of the school grants system, incentives for the effective use of school funding, and accountability mechanisms. The chapter places particular emphasis on areas of priority for Chile such as the regulation of the public funding of private providers, the design of the school grants system and sources of inefficiency in the use of school resources. The chapter also reviews the funding for school infrastructure and the monitoring of the use of school resources.

This chapter is about the financing of school education in Chile. It considers the level and distribution of resources within the education system and reviews the main time trends. It analyses the operation of the school grants system and considers both its strengths and challenges. Special attention is paid to incentives for effective use of school funding and the accountability mechanisms in place to achieve it. It also considers the ongoing reform process and its implications for the effective use of resources to improve quality and equity of education results.

Context and features

Chile's system of school financing is based on per-student grants (vouchers) to both public and private school providers that compete for students. The country has made a sustained effort to improve the coverage and quality of education at all levels through growing investments and an increased emphasis on institutional reforms, including through the creation of new agencies and bodies with responsibility for monitoring and supporting quality enhancements (see Chapter 1). School financing has evolved over the years, particularly in response to a deep commitment to improving equity and ensuring opportunities to all children regardless of their background and characteristics.

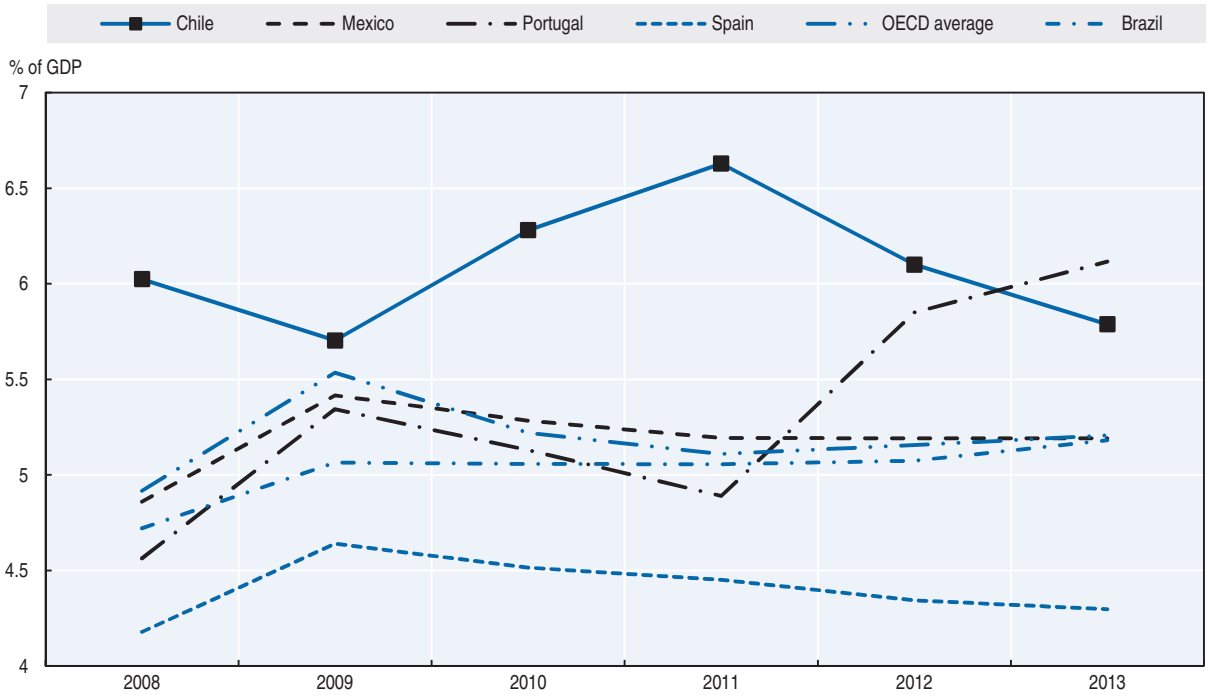
Expenditure on education

Between 2008 and 2013, total expenditure on primary to tertiary educational institutions in Chile decreased from 6.0% to 5.8% of gross domestic product (GDP) (see Figure 2.1). During this period, public expenditure on primary to tertiary education in Chile remained stable at 3.8% of GDP (see Figure 2.2). While total expenditure on primary to tertiary educational institutions is considerably above the OECD average (5.8% of GDP in 2013 against an OECD average of 5.2%) the corresponding public expenditure is below the OECD average (3.8% of GDP in 2013 against an OECD average of 4.8%) (see Figures 2.1 and 2.2).

Considering primary, secondary and post-secondary non-tertiary education, total expenditure on educational institutions actually decreased in Chile from 4.0% in 2008 to 3.4% in 2013, placing it below the OECD average of 3.7% (see Figure 2.3). Also, in 2013, total expenditure on early childhood education in Chile was 1.3% of GDP, above the OECD average of 0.8% (OECD, 2016a).

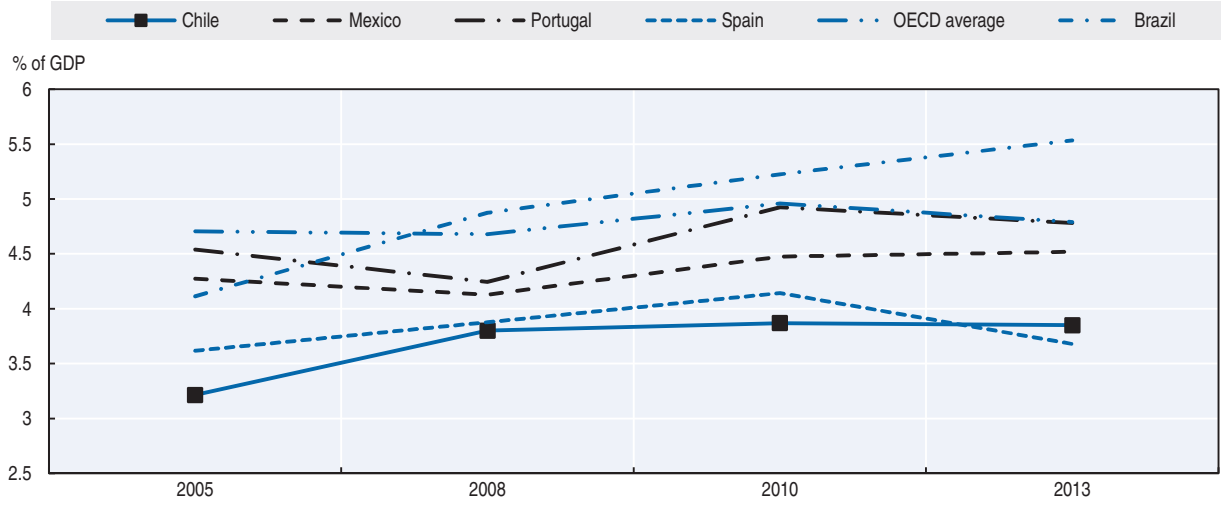
National data which include expenditure on all levels of education (including adult education), direct expenditure on students and expenditure on education administration provides complementary information. As shown in Figure 2.4, the period 2004-13 has seen a significant overall increase in the amount of resources invested in education. Interestingly this was the result of significant growth both in public and private spending. Public resources allocated to education increased by 212% in real terms over this period (growing from 2.6% to 5.7% of GDP). In 2013, Chile invested the equivalent of 8.7% of GDP in education, from initial to tertiary and adult education. Spending on pre-tertiary education represented 62.6% of that investment (MINEDUC, ACE and ES, 2016).

Figure 2.1. **Expenditure on educational institutions as a percentage of GDP, primary to tertiary education, Chile and selected countries, 2008-13**



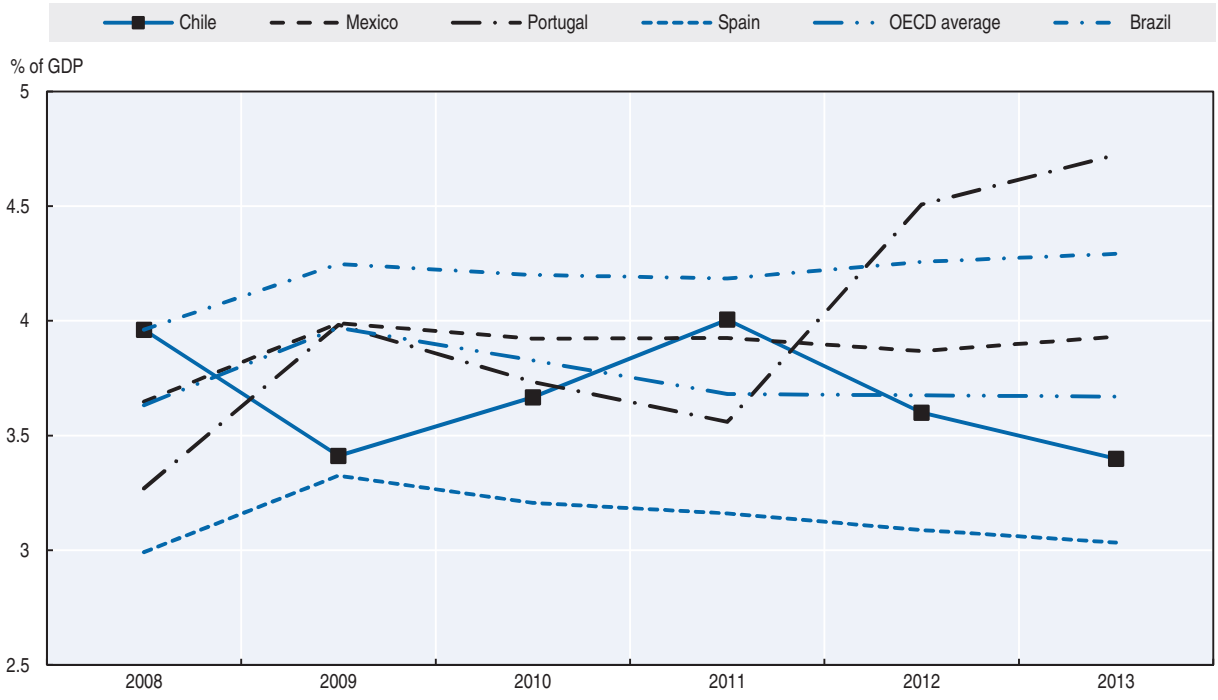
Note: Data refer to expenditure on education from both public and private sources. Data for Brazil refer to public expenditure only.
Source: OECD (2016a), *Education at a Glance 2016: OECD Indicators*, *http://dx.doi.org/10.1787/eag-2016-en*; for 2012 data on Chile, OECD (2015), *Education at a Glance 2015: OECD Indicators*, *http://dx.doi.org/10.1787/eag-2015-en*; for 2009 data, OECD (2014), *Education at a Glance 2014: OECD Indicators*, *http://dx.doi.org/10.1787/eag-2014-en*.

Figure 2.2. **Public expenditure on education as a percentage of GDP, Chile and selected countries, 2005-13**



Note: Public expenditure on education includes primary, secondary and tertiary education. It also includes public subsidies to households for living costs (scholarships and grants to students/households and students loans), which are not spent on educational institutions.
Source: OECD (2016a), *Education at a Glance 2016: OECD Indicators*, *http://dx.doi.org/10.1787/eag-2016-en*.

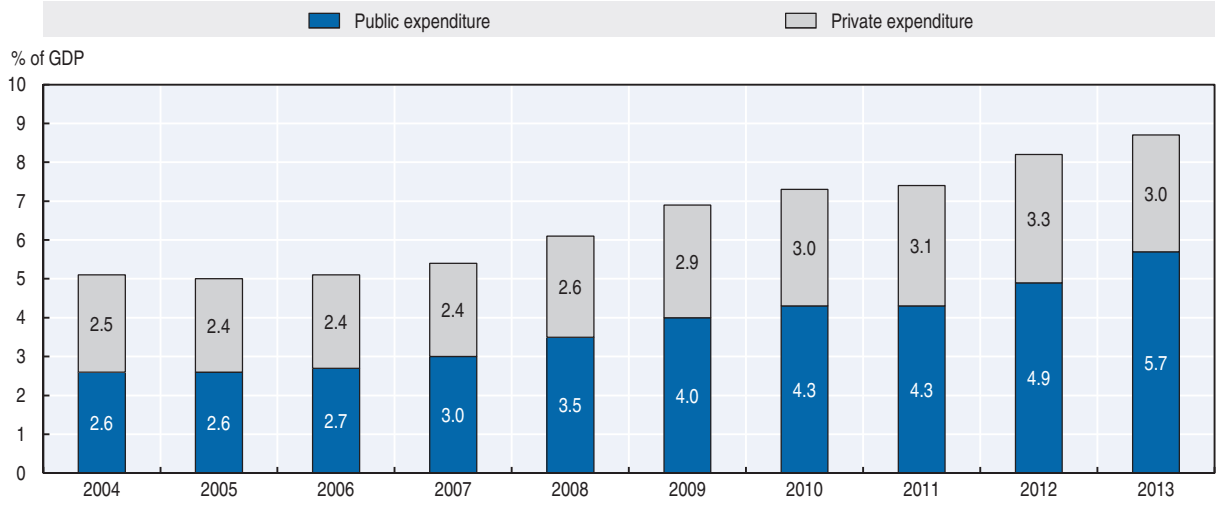
Figure 2.3. **Expenditure on educational institutions as a percentage of GDP, primary, secondary and post-secondary non-tertiary education, Chile and selected countries, 2008-13**



Note: Data refer to expenditure on education from both public and private sources. Data for Brazil refer to public expenditure only.

Source: OECD (2016a), *Education at a Glance 2016: OECD Indicators*, *http://dx.doi.org/10.1787/eag-2016-en*; for 2012 data on Chile, OECD (2015), *Education at a Glance 2015: OECD Indicators*, *http://dx.doi.org/10.1787/eag-2015-en*; for 2009 data, OECD (2014), *Education at a Glance 2014: OECD Indicators*, *http://dx.doi.org/10.1787/eag-2014-en*.

Figure 2.4. **Total public and private expenditure on education as a proportion of GDP, 2004-13**



Note: Expenditure refers to all education levels, including adult education, as well as expenditure on students and educational administration.

Source: MINEDUC, ACE and ES (2016), *OECD Review of Policies to Improve the Effectiveness of Resource Use in Schools (School Resources Review): Country Background Report for Chile*, *www.oecd.org/education/schoolresourcesreview.htm*.

Since 2008, the increase in public expenditure resulted, in part, from the introduction of the Preferential School Subsidy (*Subvención Escolar Preferencial*, SEP), a programme channelling extra resources to schools serving vulnerable students to support improvements in the quality of education. Coincidentally, during this period there also was an expansion in private expenditure on education equivalent to about 0.5% of GDP. Altogether, this resulted in a major expansion in the resources available to the education sector.

The growth in education expenditure resulted in a significant real increase in expenditure per student between 2005 and 2012 – 72% in pre-primary education, 76% in primary education, 74% in lower secondary education and 63% in upper secondary education (MINEDUC, ACE and ES, 2016). In spite of this, Chile remains among the OECD countries with the lowest expenditure per student (see Table 2.1): 12th lowest in pre-primary education, 3rd lowest in primary education, 4th lowest in lower secondary education and 3rd lowest in upper secondary education (OECD, 2016a). Its levels of expenditure per student are, however, higher than those of other Latin American countries such as Brazil, Colombia and Mexico (see Table 2.1).

Table 2.1. **Expenditure per student in Chile and selected countries, 2013**
In equivalent USD converted using Purchasing Power Parities (PPP), based on full-time equivalents

	All early childhood education	Primary education	Secondary education		
			Lower secondary education	Upper secondary education	All secondary education
Chile	**6 530**	**4 021**	**4 099**	**4 141**	**4 127**
Brazil	3 747	3 826	3 802	3 852	3 822
Colombia	1 748	2 074	2 728	3 117	2 835
Mexico	2 575	2 717	2 473	4 126	3 065
Portugal	6 604	7 258	9 667	10 503	10 074
Spain	6 523	6 956	8 303	8 729	8 520
OECD average	**8 618**	**8 477**	**9 980**	**9 990**	**9 811**

Note: Data for Chile, for primary and secondary education, refer to 2014. Data for Brazil include public institutions only.
Source: OECD (2016a), *Education at a Glance 2016: OECD Indicators*, *http://dx.doi.org/10.1787/eag-2016-en*.

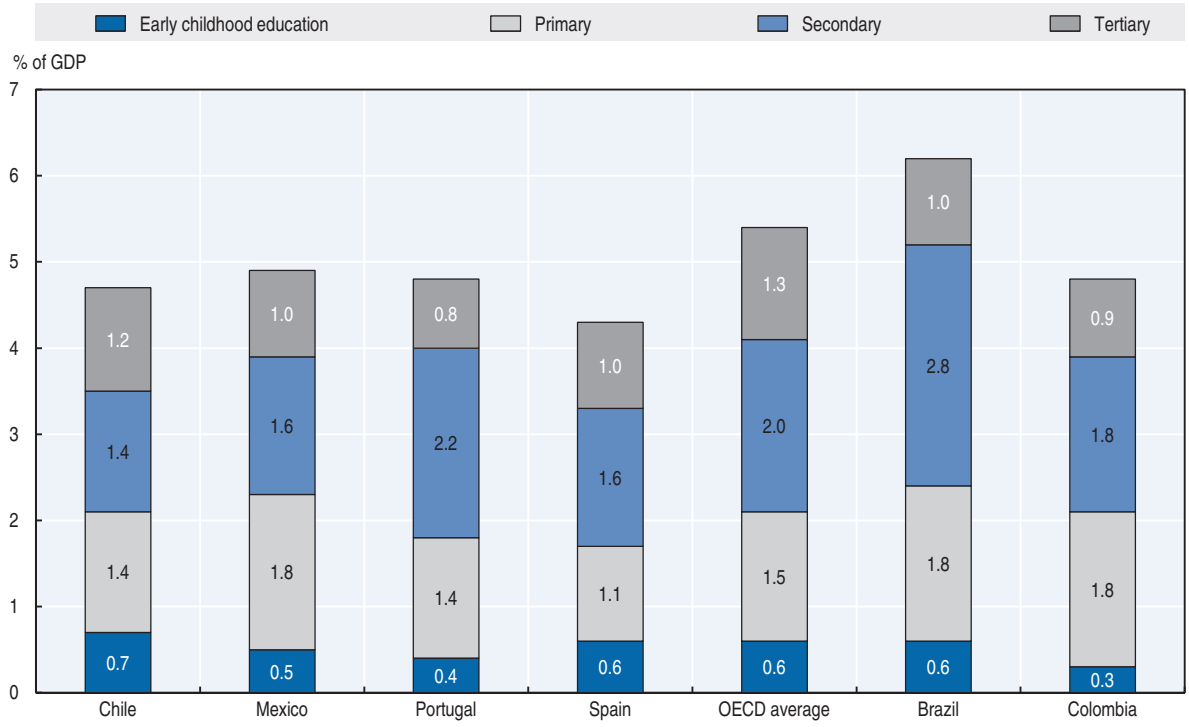
Funding across education levels

Figure 2.5 shows public expenditure on education as a share of GDP by level of education for 2012. It indicates that Chile tends to place greater public resources in early childhood education and tertiary education compared to OECD countries and countries such as Brazil, Colombia, Mexico, Portugal and Spain.

While pre-tertiary education represents the largest share of public expenditure, between 2004 and 2013 the share of public expenditure on tertiary education increased from 14% to 23%. During the same period, the public expenditure on primary education decreased by 10 percentage points (see Figure 2.6). These changes in the distribution of public expenditure are closely linked to the increase in demand for tertiary education and to the decrease in pre-tertiary education enrolment, due to demographic factors (see Chapter 1). In the last decade, enrolment in tertiary education rose from 584 000 students in 2004, to 1.1 million in 2013, i.e. it doubled. A major factor behind the increase in public spending on tertiary education was the growth in public guarantees for student loans

(*Crédito con Aval del Estado*) that grew by over 1 000%. There was also some increase in the share of public expenditure going to pre-primary education, from 8% in 2004 to 11% in 2013 (see Figure 2.6).

Figure 2.5. **Public expenditure by level of education as a share of GDP, Chile and selected countries, 2012**



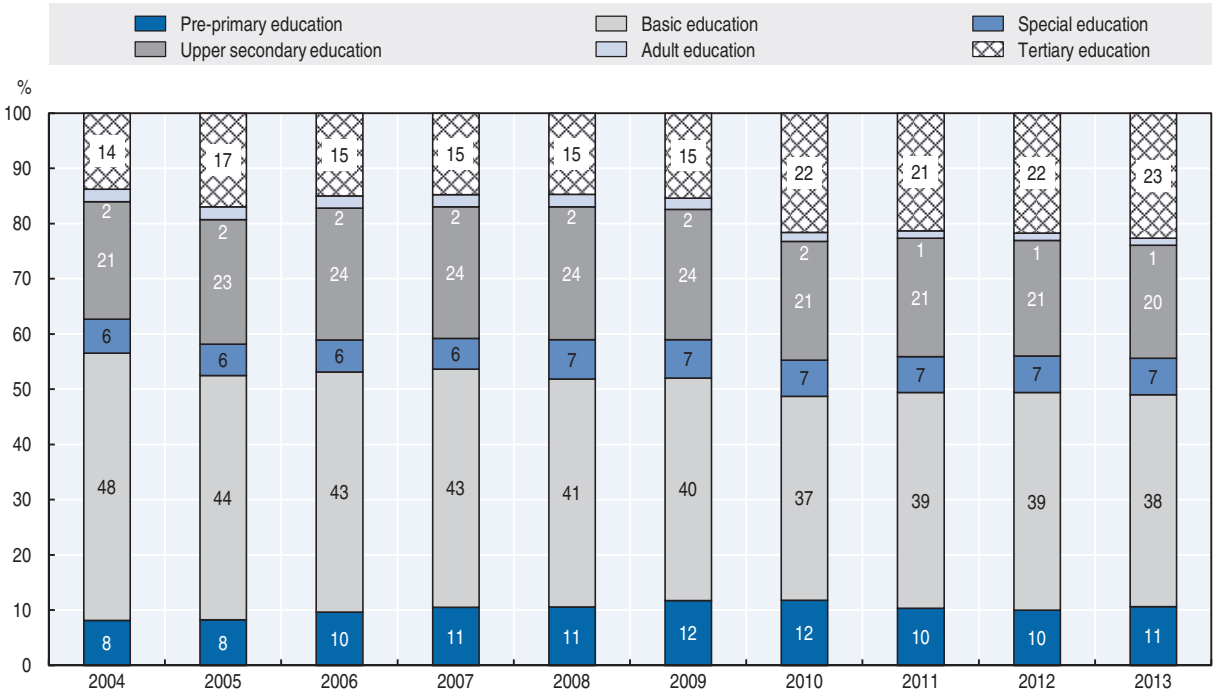
Note: Public expenditure on education includes public subsidies to households for living costs (scholarships and grants to students/households and students loans), which are not spent on educational institutions. For Chile and Colombia, year of reference is 2013 instead of 2012. Data for Portugal on early childhood education refer to pre-primary education (children aged 3 and older) only.
Source: OECD (2015), *Education at a Glance 2015: OECD Indicators*, *http://dx.doi.org/10.1787/eag-2015-en*.

Sources of funding

The vast proportion of funding for school education comes from the public sector – 85% for early childhood education and 79% for primary and secondary education, percentages which are respectively slightly above and considerable below the OECD average, as can be seen from Table 2.2.

Household expenditure on primary and secondary education comes mostly from the attendance of private schools. Private non-subsidised schools charge full fees while a significant proportion of private-subsidised schools, as of 2016, charged modest fees in parallel with the full public subsidies they received – a system called "shared funding" (*financiamiento compartido*). This co-financing system for private-subsidised schools has its origins in 1989, but started working effectively in 1993 (Elacqua et al., 2013). According to estimates for 2012 co-financing represented 11% of the total budget in private-subsidised schools (Paredes et al., 2013). The recently approved Inclusion Law (*Ley de Inclusión*) eliminates shared funding in private-subsidised schools. The implementation of the law will be gradual and schools will be compensated financially through a new grant (see also Chapter 1).

Figure 2.6. **Distribution of public expenditure on education across education levels, 2004-13**



Source: MINEDUC, ACE and ES (2016), *OECD Review of Policies to Improve the Effectiveness of Resource Use in Schools (School Resources Review): Country Background Report for Chile*, *www.oecd.org/education/schoolresourcesreview.htm*.

Table 2.2. **Shares of public and private funding of education in Chile and selected countries, 2013**

	Chile	Colombia	Mexico	Portugal	Spain	**OECD average**
Early childhood educational development						
Public sources	**86**	10	..	..	58	**69**
Pre-primary						
Public sources	**85**	72	..	65	82	**83**
All early childhood education						
Public sources	**85**	..	83	65	75	**81**
Primary, secondary and post secondary non tertiary education						
Public sources	**79**	77	83	88	88	**91**
Private sources	**21**	23	17	12	12	**9**
Household expenditure	**21**	..	17	12	11	**7**
Expenditure of other private entities	**0**	..	0	0	1	**1**

.. : not available

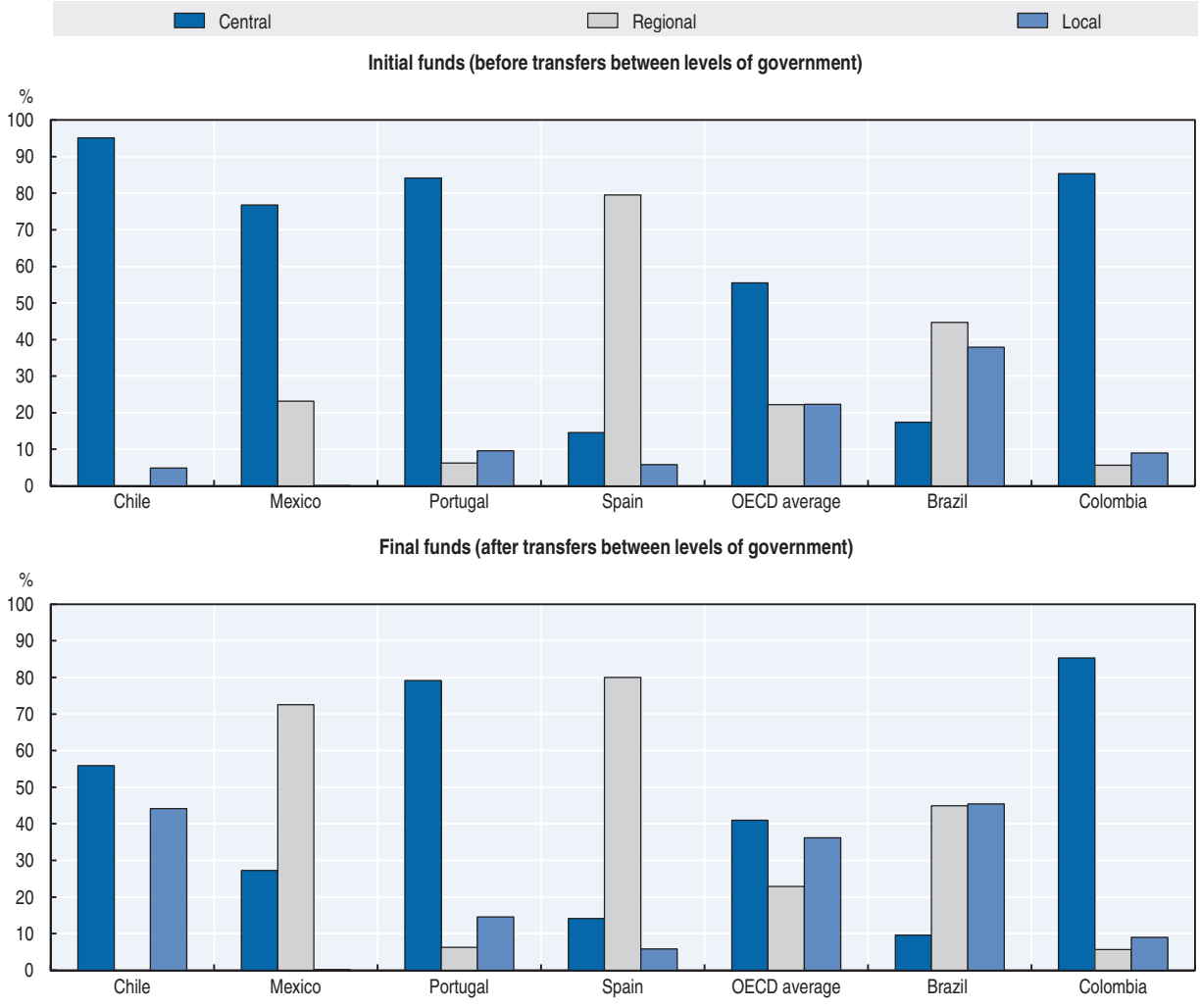
Note: "All private sources" Includes subsidies attributable to payments to educational institutions received from public sources. Year of reference for Chile, for primary, secondary and post-secondary non-tertiary education, is 2014.

Source: OECD (2016a), *Education at a Glance 2016: OECD Indicators*, *http://dx.doi.org/10.1787/eag-2016-en*.

Given the sharp increase in enrolment in private-subsidised schools, that doubled as a share of the total since the system was first established in the 1980s (Elacqua et al., 2008) (see also Chapter 1), in 2013 about half of the budget for school grants (47%) went to private schools, an increase from the 40% of 2005 (MINEDUC, ACE and ES, 2016).

Municipal governments are the maintainers for public schools. They are forbidden from charging fees or co-payments to students, and do not have the authority to raise local revenues for education purposes. They nonetheless allocate resources from their often-limited tax base to supplement the school grants. As shown in Figure 2.7, in Chile, local expenditure on education before transfers between levels of government stands at about 5%, considerably below the OECD average. Following transfers, local expenditure reaches about 43%. In 2012, municipal financing represented on average CLP 11 448 per student, an amount similar to what private-subsidised schools mobilise as co-payments (MINEDUC, ACE and ES, 2016). Behind this average, however, there are significant differences between municipalities with different levels of fiscal capacity, which result in high heterogeneity in terms of actual expenditure per student.

Figure 2.7. **Sources of public funds for primary, secondary and post-secondary non-tertiary education, 2013**



Note: "Regional" values for Chile and "Local" values for Mexico are nil. Year of reference for Chile is 2014.
Source: OECD (2016a), *Education at a Glance 2016: OECD Indicators*, *http://dx.doi.org/10.1787/eag-2016-en*.

Mechanisms for school financing

The main mechanism of public financing is school grants from the state to school providers, public and private-subsidised. School providers are then responsible to administer these financial resources, i.e. they take responsibility for distributing resources across the schools they administer (for the school basic grant, see below). Originally, the system did not differentiate on the basis of population characteristics (adjustments were limited to geographical location and rurality) (Mizala, 2007). Over time, adjustments were made to the system acknowledging that the costs of providing quality education varies depending on the characteristics and needs of students and schools.

The school basic grant (*Subvención de Escolaridad*) received by a school provider results from multiplying the Unit of School Grant (*Unidad de Subvención Educativa,* USE) by the monthly average student attendance and an adjustment factor by level and type of education. The value of the USE is adjusted every year in December (or when the public sector's salaries are adjusted). For 2015, the USE has a value of CLP 22 321.769. The monthly average attendance is the sum of the daily attendance, as recorded by the school, divided by the number of working days in the month. An average of the previous three months is used as the basis to determine the grant. Finally, the adjustment factor considers the education level (pre-primary, basic, upper secondary), the year level (two categories in basic education), the type of programme (scientific-humanistic or technical-professional; and the type of strand within technical-professional programmes) and the type of education (special and adult), as well as whether the school is full-day (*Jornada Escolar Completa*). Table 2.3 shows the relative amounts for the existing categories.

Table 2.3. **School basic grant, relative amounts per student by level and type of education, 2015**

Level and type of education	With no full-day schooling	With full-day schooling
Pre-primary education (1st and 2nd transition levels)	1.131	1.369
Basic education		
Year 1 to Year 6	1	1.369
Year 7 and Year 8	1.085	1.373
Special education		
Permanent needs	3.196	4.028
Transitory needs	2.800	3.523
Upper secondary education		
Scientific-humanistic programmes	1.211	1.634
Technical-professional programmes		
Agriculture and maritime strands	1.794	2.213
Industrial strand	1.399	1.731
Commercial and technical strands	1.255	1.636

Note: This table shows the relative value of the school basic grant by level and type of education for 2015. The reference (=1) is the amount per student for basic education, Year 1 to Year 6, in schools with no full-day schooling, which corresponds to CLP 47 022.59 or a USE factor of 2.10658. The Unit of School Grant (*Unidad de Subvención Educativa*) corresponds to CLP 22 321.769. Adult education is not considered in this table.
Source: MINEDUC, ACE and ES (2016), *OECD Review of Policies to Improve the Effectiveness of Resource Use in Schools (School Resources Review): Country Background Report for Chile*, *www.oecd.org/education/schoolresourcesreview.htm*.

The school basic grant is complemented by a range of other more specific allowances and grants as part of the overall mechanism to fund schools through their providers. These supplementary grants are outlined in Table 2.4. In 2015, about 71% of school grant funds

were distributed through the school basic grant while the remaining 29% were distributed via other grants and allowances (MINEDUC, ACE and ES, 2016).

Among the various grants the one known as Preferential School Subsidy (*Subvención de Educación Preferencial*, SEP) constitutes one of the major corrections to the original system. It recognises that, as the socio-economic vulnerability of students increases, so does the cost of education. In order to receive the SEP, the provider must sign an agreement, known as the Equality of Opportunities and Educational Excellence Agreement (*Convenio de Igualdad de Oportunidades y Excelencia Educativa*), committing to use the additional resources to the accomplishment of an Educational Improvement Plan (*Plan de Mejoramiento Educativo*, PME). The PME must contain technical and pedagogical support to improve academic performance of low-achieving students, with emphasis on priority students. The SEP amounts to about 16% of all grants provided to schools (MINEDUC, ACE and ES, 2016).

Requirements to obtain public funding include:

- Be granted official recognition to operate as an education provider.
- At least 15% of the student body from a disadvantaged background (unless there are not enough applicants with such background).
- Classes which respect regulations regarding minimum and maximum class sizes.
- Offer the adequate courses for the education levels covered and comply with the minimum student learning time for each year.
- Internal regulations about possible cancellation of student attendance and student transfer, with law imposing considerable restrictions.
- No overdue payments to staff.
- Inform parents about the educational project.
- Ensure that teachers undertake the required time of collaborative work in the school's premises.
- No tuition fees (elimination of shared funding following the implementation of the Inclusion Law, see below).
- Student selection on the basis of economic, social and academic criteria is forbidden (following the implementation of the Inclusion Law, see below).
- Education provider has non-profit status (following the gradual implementation of the Inclusion Law which dictates a date by which all schools need to acquire this status, see below) and uses all resources for educational purposes.
- Own educational infrastructure or renting facilities for at least eight years with automatic renewal (following the implementation of the Inclusion Law).

In addition to these school grants based on school attendance (which are mostly used to pay the basic salaries of education staff), financial transfers for education also include allowances directly given to education staff. These are described in Chapter 5 (Table 5.6).

School providers, including municipalities, do not receive specific funds to cover the administrative costs of managing their set of schools (e.g. to cover the costs of municipal staff working in the municipal education department). However, they are allowed to use part of the Preferential School Subsidy (SEP) to fund central or higher management of schools. In addition, financial regulations allow school providers to use part of the general subsidy to cover higher administration costs in case they manage two or more schools. The reform of the administration of public education with the creation of the Local Education

Table 2.4. **Supplementary school grants, 2015**

Name of Grant	Main features	Amount
Preferential School Subsidy (*Subvención de Educación Preferencial*, SEP)	Additional amount for each student attending a school which signed an "Equality of Opportunities and Educational Excellence Agreement" involving a number of conditions. Schools commit to use the additional resources to the accomplishment of an Educational Improvement Plan (but can spend up to 10% of the SEP in administrative costs at the education provider level); they cannot spend more than 50% of the SEP in staff costs; and cannot use the SEP to pay any form of allowance.	Amount depends on two aspects: i) Year level with four categories [NT1-Year 4; Years 5-6; Years 7-8; Years 9-12], decreasing the higher the year level; and ii) the assessed level of autonomy with two categories [Autonomous; Emerging], with higher grant for the "autonomous" category. (Factor USE: 0.5645 to 1.6940)
Grant for Concentration of Priority Students (*Subvención por Concentración de Alumnos Prioritarios*)	As a complement to the SEP and conditional on participating in the SEP, this grant provides an extra amount per student which depends on the proportion of disadvantaged students in the school.	Amount depends on two aspects: i) Year level with four categories as above, decreasing the higher the year level; and ii) the concentration of disadvantaged students with four categories [60% or more; 45%-60%; 30%-45%; 15%-30%], increasing with concentration. (Factor USE: 0.0780 to 0.3020)
Grant for Education Strengthening (*Subvención de Reforzamiento Educativo*)	Grant to cover the costs of additional support for students with learning difficulties and targeted at disadvantaged students.	Same value across schools and education levels – given per hour for extra classes offered to a given number of students (actual attendance considered). (Factor USE: 0.0190)
Grant for Maintenance Support (*Subvención de Apoyo al Mantenimiento*)	Grant to assist schools in covering the costs of infrastructure maintenance.	Amount depends on level of education and type of education (special, adult, general vs. vocational programmes). (Factor USE: 0.13620 to 1.56740), and includes special stream for boarding premises.
Grant for Boarding (*Subvención de Internado*)	Grant dedicated to boarding schools to cover the costs of boarding services.	Amount depends on region of the country. (Factor USE: 0.1563 to 0.1889)
Grant for Retention (*Subvención Educacional Pro-retención*)	Grant provided to school providers for each disadvantaged student [belonging to a family which participates in the programme Solidaire Chile (*Chile Solidario*) of the Ministry of Social Development] they are able to retain in the education system.	Amount per student defined according to four year-level brackets: [Years 7 and 8; Years 9 and 10; Years 11 and 12; graduates from upper secondary school].
Supplement by Area (*Incremento de Subvención por Zona*)	Additional amount per student which depends on how remote the school is.	Increment to the school basic grant which is computed as a percentage of the school basic grant. The given percentage depends on the geographical area in which the school is located.
Supplement for Rurality (*Incremento de Subvención por Ruralidad*)	Additional amount per student provided to rural schools with 90 students or fewer. It recognises the higher per capita costs of providing an education in rural schools.	School basic grant is multiplied by a given "rural factor" which depends on the number of students attending the school (between 1 and 90), with a higher "rural factor" as the number of students decreases.
Minimum Grant for Small Rural Schools (*Subvención Mínima Ruralidad – Piso Rural*)	Additional amount provided to small rural schools (17 students or fewer). It recognises the high fixed costs of very small schools.	Involves providing a minimum amount of public funding per school, which depends on whether the school is full-day or not.
Support for Special Education (*Apoyo a Grupos Diferenciales, Programa de Integración Escolar,* PIE)	Schools with a PIE receive additional resources to support students with special educational needs. This extra support needs to be spent on: i) Additional specialised staff such as special needs teachers, psychologists; ii) Contract hours for co-ordination, collaboration and evaluation of the PIE; iii) Professional development for all school staff on supporting special needs; and iv) Extra specialised materials.	Schools receive a higher basic school grant per student with special needs with a distinction between permanent and transitory needs (see Table 2.3).

Note: "NT1" refers to 1st transition level of pre-primary education (*Primer nivel de transición, NT1*). "Factor USE" is the multiplier for the Unit of School Grant (*Unidad de Subvención Educativa*, USE) used to compute the amount of the grant. The Unit of School Grant (*Unidad de Subvención Educativa*) corresponds to CLP 22 321.769.
Source: MINEDUC, ACE and ES (2016), *OECD Review of Policies to Improve the Effectiveness of Resource Use in Schools (School Resources Review): Country Background Report for Chile*, *www.oecd.org/education/schoolresourcesreview.htm*.

Services will provide for a budget that is specific to the management of education at this administrative level in addition to school grants.

In addition to the school grants, municipalities also receive public funds from special funds or specific programmes for public education. The main one is the Fund to Support Public Education (*Fondo de Apoyo a la Educación Pública*), mainly aimed at covering administrative costs incurred by municipalities in providing education services (and guaranteed up to 2022). In 2015, this fund corresponded to 4.8% of the budget for education grants (MINEDUC, ACE and ES, 2016). This supplementary fund was introduced mostly as a result of the education budget deficit faced by many municipalities. This deficit reveals possible over-employment of education staff in many municipalities as well as shortcomings in educational management (see below). Other funds include the National Regional Development Fund (*Fondo Nacional de Desarrollo Regional*, FNDR), mostly used for infrastructure development (see below).

Funding of infrastructure

School providers are responsible for infrastructure maintenance and capital investment. The school grants system includes a component for maintenance. The Grant for Maintenance Support (*Subvención de Apoyo al Mantenimiento*) aims to support the conservation of subsidised schools, including equipment and furniture. The programme includes an annual allocation of funds calculated on the basis of the Basic Grant (see Table 2.4).

In terms of capital investments, in the private sector, it is mostly funded by debt with the banking sector or through infrastructure projects receiving government support. In the public sector, borrowing for infrastructure investment is less frequent and the national government is the main source of funds. An important source has been the National Regional Development Fund (*Fondo Nacional de Desarrollo Regional*, FNDR) that channels resources at the regional level.

In the context of the full-day schools programme (*Jornada Escolar Completa*, JEC) the Ministry of Education made significant contributions to expand the infrastructure and equipment of both municipal and private-subsidised schools, in order to guarantee the extension of teaching hours and the schools' physical conditions.

Currently the Ministry of Education is implementing the Strategic Plan for School Infrastructure (*Plan Estratégico de Infraestructura Escolar*) for the period 2014-18, in order to upgrade infrastructure standards and to remedy the deficits and shortcomings of pre-primary, basic and upper secondary education schools. The basis for the plan was an assessment of the state of infrastructure conducted between 2012 and 2014 that found significant gaps among municipal schools. Approximately 20% of the 5 509 registered schools were identified as having a precarious drinking water system and deficient construction standards.

Textbooks and libraries

The Ministry of Education provides free school textbooks for all national curriculum subjects to students from all levels of education (from first transition level of pre-primary education to Year 12) from municipal and private-subsidised schools in the country. In addition to this, it also provides teaching guides and other supplementary books. In 2015,

the Ministry of Education provisioned 17 500 000 textbooks, which represent an average of 6 books per student.

All schools must have a library. To support this, the Ministry of Education implemented – since 1995 for upper secondary education and since 2004 for basic education – the Learning Resource Center (*Centro de Recursos para el Aprendizaje,* CRA) School Libraries Programme. Every year, providers of both municipal and private-subsidised schools can apply to the CRA Programme. They must secure the physical space, furniture and staff for the library. In return, the Ministry of Education provides them with a collection of resources (including print and broadcast) and annual subscription to various publications. In addition library staff receives 120 pedagogical hours of distance learning and four face-to-face training sessions. By 2014, 10 781 CRA school libraries had been implemented, 8 456 in basic education and 2 325 in upper secondary education schools, both in municipal and private-subsidised schools.

Monitoring the use of school resources

Beginning in 2008 Chile established a control and audit system for the school system. This was at least partly motivated by weak accountability practices by municipal education departments (or municipally controlled corporations). The fact that municipal administrations did not keep separate accounts for their school spending made it difficult to monitor the use of resources transferred through the grants system. Similarly, up until 2008, the use of education grants was also deregulated in the private-subsidised sector with little school-level monitoring.

Under the new legislation school providers must provide yearly statements detailing the use of education resources in the previous year. The Education Superintendence (*Superintendencia de Educación*) established in 2012, is the agency responsible for auditing those statements. The Superintendence established a platform for data entry and reviews the reports submitted, checking for consistency with administrative data. If discrepancies are found between what is reported and the administrative data, or if resources have not been fully accounted for, the school provider is fined. Not providing the necessary information is considered a serious violation leading to a hefty fine of at least CLP 21 million (Education Superintendence, 2015). The audit programme is based on school samples and uses a risk management model that considers both the probability of transgressions and their potential negative effects (see Chapter 4). In 2015, the Superintendence undertook about 20 000 audit visits to over 9 000 schools (MINEDUC, ACE and ES, 2016). Also, as of 2017, all school resources need to be managed through bank accounts registered in a specific register established by the Education Superintendence. A new requirement, to be implemented gradually, is also that schools report their financial situation following the International Financial Reporting Standards.

The review by the Education Superintendence is only focused on the legality and not the merit of how resources have been used. The Superintendence also monitors compliance with educational regulations, such as those related to the school's infrastructure and security conditions, availability of learning resources (textbooks and others), as well as the working conditions of teachers and other professionals.

Starting in 2015 the Superintendence is responsible for enforcing regulations under the new Inclusion Law (*Ley de Inclusión*) whereby private schools receiving public funds are prohibited from making a profit, and all schools are mandated to use resources only for the

development of educational projects. These regulations have important implications for the operation of private-subsidised schools that now cannot conduct any kind of business with related parties (e.g. close relatives), must pay market prices in all transactions and cannot engage in investments that would put the school's survival at risk.

The evaluation of school effectiveness in the management of resources

While the Education Superintendence focuses on evaluating school providers from a resource management perspective, the Agency for Quality Education, focuses on the evaluation of schools and school providers with a view to academic performance (see Chapter 4). The Agency for Quality Education, also created in 2012, evaluates schools and school providers on the basis of the Indicative Performance Standards for Schools and School Providers (*Estándares Indicativos de Desempeño para Establecimientos Educacionales y sus Sostenedores*). Within the "Resource management" domain (one of four domains of the standards, see Chapter 4), there are nine standards of personnel management, six related to the management of financial resources and five for the management of educational resources (see Table 2.5). Evaluations by the Agency include site visits, during which it also provides guidance to schools with a view to strengthening their institutional capacities. The goal is to guide schools on how to rationalise or professionalise their work, to administer their staff, finances and learning resources more effectively.

Table 2.5. **Indicative Performance Standards for Schools and School Providers, Resource management domain**

Standards for staff management	10.1 The school defines the duties and functions of its staff, and the building meets the requirements to obtain and maintain the official recognition. 10.2 The school effectively manages the staff administration. 10.3 The school implements effective strategies to attract, select and retain competent staff. 10.4 The school has an evaluation and feedback system of staff performance. 10.5 The school has a competent staff based on teacher evaluation results, and manages the improvement of teacher performance. 10.6 The school manages the professional and technical development of staff according to their pedagogical and administrative needs. 10.7 The school implements measures to recognise the staff's work and incentive a better performance. 10.8 The school has fair separation procedures. 10.9 The school has a positive work environment.
Standards for the management of financial resources	11.1 The school manages student enrolment and attendance. 11.2 The school elaborates a budget based on the needs identified in the planning process, tracks expenses and co-operates in the pursuit of the institution's sustainability. 11.3 The school keeps records of income and expenses, and when necessary accounts for the use of resources. 11.4 The school ensures compliance with education regulations. 11.5 The school manages its participation in the available support and technical assistance programs, and chooses them based on institutional needs. 11.6 The school knows and uses existing networks to promote the institutional education project.
Standards for the management of education resources	12.1 The school has the infrastructure and equipment required by the regulations, and these are in conditions that facilitate student learning and the wellbeing of the school community. 12.2 The school has the necessary teaching resources and supplies to promote student learning. 12.3 The school has a CRA library to support student learning and encourages reading habits. 12.4 The school has operating ICT resources for educational and administrative purposes. 12.5 The school has an updated inventory of equipment and educational materials to manage its maintenance, purchase and replacement.

Note: The full Indicative Performance Standards for Schools and School Providers (*Estándares Indicativos de Desempeño para Establecimientos Educacionales y sus Sostenedores*) are available from *www.agenciaeducacion.cl/visitas-evaluativas/estandares-indicativos-de-desempeno*.
Source: MINEDUC, ACE and ES (2016), *OECD Review of Policies to Improve the Effectiveness of Resource Use in Schools (School Resources Review): Country Background Report for Chile*, *www.oecd.org/education/schoolresourcesreview.htm*.

The evaluation of system-level effectiveness

There are two key official sources of evaluations of education policies and programmes. The Ministry of Finance, through its budget department (*Dirección de Presupuestos*, DIPRES) evaluates the design, management and results of public programmes, providing information that supports programme management and the resource allocation process. These evaluations fall under four categories: Evaluations of Government Programmes, Evaluations of Programme Impact, New Programme Evaluations and Comprehensive Evaluations of Expenditures. In 2013 (the latest year for which information is available) the only evaluation published within the education area was for the Intercultural and Bilingual Education Programme and, the previous year, three evaluations were published (two for higher education and one for initial education).

The Ministry of Education conducts its own studies through its research and analysis unit (*Centro de Estudios*). Between 2000 and 2013 a total of 112 evaluations were conducted, 41 of which corresponded to those initiated by DIPRES and the rest to the Ministry (Ministry of Education, n.d.). These evaluations covered 110 programmes. Half of them evaluated programme implementation and process, 32% programme design and only 18% programme impact. Moreover, government programmes are subject to an ex ante evaluation to ensure social returns of the investments under the National Investment System (*Sistema Nacional de Inversión*, SNI) within the Ministry of Social Development.

The results of the educational programme evaluations by the Ministry are delivered to the respective unit authorities that use the information as they see fit. The evaluations commissioned by DIPRES include recommendations by the evaluators, which generate management commitments to improve programme performance. DIPRES monitors systematically the implementation of these commitments through two annual reports.

These official evaluations are complemented by independent studies by an active community of academics and civil society organisations, several of which are facilitated by the financial support of the government. For example, education research centres at both the Catholic University and the University of Chile (*Centro de Estudios de Políticas y Prácticas en Educación* and *Centro de Estudios Avanzados en Educación*) lead a network of researchers with support from the National Commission for Scientific and Technological Research (*Comisión Nacional de Investigación Científica y Tecnológica*, CONICYT). Similarly, the Ministry of Education established in 2006 the Fund for Research and Development in Education (*Fondo de Investigación y Desarrollo en Educación*, FONIDE) that offers competitive grants to universities and research centres. These studies complement the ones conducted by the Ministry itself through research and analysis unit (*Centro de Estudios*), often in collaboration with international organisations such as OECD, Inter-American Development Bank, the World Bank and United Nations Development Bank (UNDP). Also, civil society is actively engaged in education policy debates, with several organisations such as *Educación 2020* (*www.educacion2020.cl/*), *Centro de Estudios Espacio Público* (*http://espaciopublico.cl/*), *Elige Educar* (*www.eligeeducar.cl*) and *Plan Maestro* (*www.elplanmaestro.cl/*) generating regular analyses in key areas of education policy.

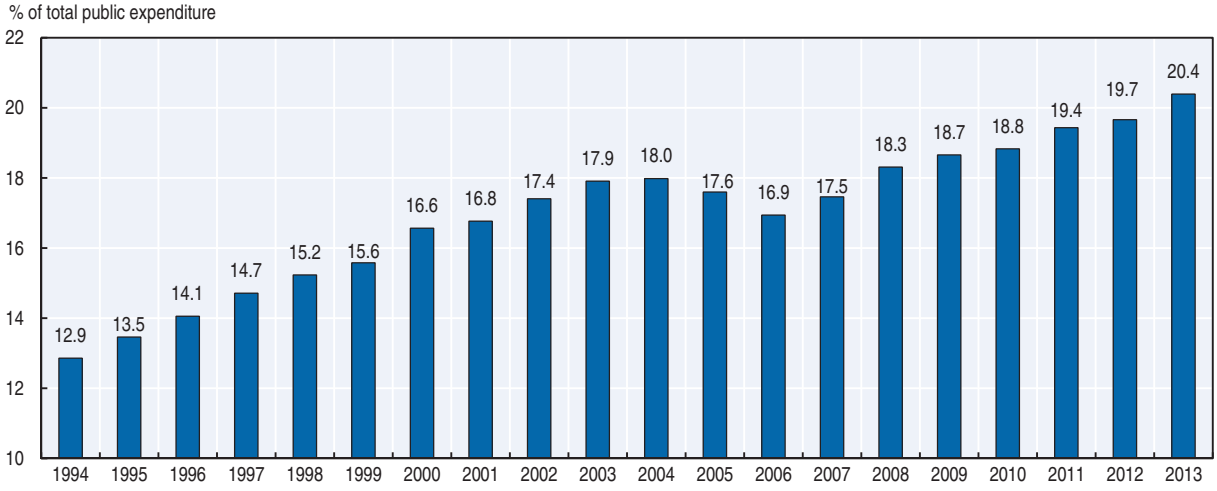
Strengths

There is a commitment to invest significant resources in education

Chile is a country highly committed to education. Both government and families demonstrate that commitment by investing significant resources in education.

Figure 2.8 shows the sustained, long-term effort the government has made, that resulted in almost doubling the share of the national budget allocated to education between 1994 and 2013.

Figure 2.8. **Public expenditure on education as a percentage of total public expenditure, 1994-2013**



Source: MINEDUC, ACE and ES (2016), *OECD Review of Policies to Improve the Effectiveness of Resource Use in Schools (School Resources Review): Country Background Report for Chile*, *www.oecd.org/education/schoolresourcesreview.htm*.

Similarly, Chilean families allocate the equivalent of 3% of GDP to financing investments in education, a higher share than any other country in Latin America (Fiszbein, 2015). Among OECD countries, only in Korea does private expenditure represent a larger share of GDP than in Chile. While in other countries (including in Latin America) high private spending is the result of a low share of government budgets being allocated to education, that is not the case for Chile. Thus, it can be reasonably understood as an indicator of the high value Chilean families give to investing in the education of their children.

However, the level of expenditure on education remains relatively low. A particularly good indicator of a country's relative effort in resourcing education is the amount spent per student as a percentage of GDP per capita compared with other countries, since this takes account of differences in per capita GDP. From Table 2.6 it can be seen that Chile spends four percentage points less as a proportion of GDP per capita than the OECD average on primary education, seven percentage points less in lower secondary education and seven percentage points less in upper secondary education. Averages for Chile are also lower than in other Latin American countries such as Brazil and Colombia. However, the new tax reform approved in 2014 will allow further growth in public spending for education – another demonstration of the country's commitment to education.

The financing of schools is based on a transparent formula-driven grants system

A number of objectives can be used to evaluate a funding formula (Levačić and Ross, 1999), in particular efficiency, equity, integrity, administrative cost, accountability and transparency, and sensitivity to local conditions. Thus, there is no single best practice funding formula – the balance struck between the various objectives should reflect the

Table 2.6. **Annual expenditure per student by educational institutions relative to GDP per capita, Chile and selected countries, 2013**

	Primary education	Secondary education		
		Lower secondary education	Upper secondary education	All secondary education
Chile	**18**	**19**	**19**	**19**
Brazil	24	24	24	24
Colombia	16	21	24	22
Mexico	16	14	24	18
Portugal	26	35	38	36
Spain	21	25	27	26
OECD average	**22**	**26**	**26**	**25**

Note: Data for Chile refer to 2014. Data for Brazil refer to public institutions only.
Source: OECD (2016a), *Education at a Glance 2016: OECD Indicators*, *http://dx.doi.org/10.1787/eag-2016-en*.

government's policy preferences. For example, a formula that emphasises efficiency by allocating funding according to the number of students is weak on sensitivity to local conditions if it makes rural small schools financially unviable.

Chile's system of formula-driven school grants provides a transparent and predictable basis for school providers. Unlike many other countries around the world, school financing is based on objective criteria (number of students being the most important one, but with adjustments for other factors which affect schools' per-student costs) and not the result of negotiations between the government and public and private school providers. Moreover, the existence of a clearly defined and objectively measured formula as the basis for allocating resource imposes a hard budget constraint to providers and creates the conditions for basic spending discipline, an important feature in a system with many school providers. Finally, by using the same formula-driven grants to finance public and private schools, the system facilitated the growth of a diverse network of service providers (see Table 1.2 of Chapter 1) and enabled a high degree of choice among households.

Over time, the system of grants was adjusted to acknowledge that many schools (particularly those serving the less well off) were underfinanced and, as a result, there was a high level of inequality in the system. In particular the introduction of the SEP has resulted in much better endowed schools, particularly those serving poor children contributing to a reduction in inequality in the availability of education resources at the school level. This is complemented by a series of financial and non-financial resources (including free textbooks or free meals) providing support to students in need. Participation in SEP is voluntary and in 2015 it served 94% of all municipal schools (including 99% of those providing basic education) and 50% of private-subsidised schools (including 75% of those providing basic education). Given their almost universal participation in SEP, it is not possible to convincingly estimate the effects on student learning in public schools. However, it has been found that SEP's effects on private-subsidised schools include increases in standardised student assessment scores on average and larger increases for schools with more significant low-income students' attendance (Mizala and Torche, 2013).

Other important changes in the grant system that allocate more resources to those schools that perform more challenging work include extra grants for rural and remote schools and for students with special educational needs covered by the School Integration Programme (*Programa de Integración Escolar*). Also, a special salary allowance for teachers who work in difficult zones is also included (see Chapter 5). Schools are categorised as

performing in difficult zones if they: i) are geographically isolated or in rural areas; ii) serve populations in need, bilingual or bicultural; and iii) face difficulties of access or insecurity in urban areas.

Resource allocation responds to new policy priorities

Another important virtue of the existing system of school financing is that resource allocation is not inertial and responds to new policy priorities. When the government decides on a policy shift that requires additional resources, the new priorities get reflected in the budget. This was the case with the adoption of the full-day schools programme (*Jornada Escolar Completa*, JEC), which demanded not only significant investments in infrastructure but also an increase in the per-student grant of approximately 25%; the more recent decision to expand coverage of pre-primary education (benefitting from CLP 45 617 million in the 2016 budget); and the new career structure (see Chapter 5) that, when fully implemented, will cost an additional 0.8% of GDP.

Budgetary institutions are strong and credible

School financing operates within an environment of strong and credible budgetary institutions. Chile is well known for the quality of its budgeting processes and public financial management systems (OCDE/IDB, 2014; Inter-American Development Bank, 2012). Budget planning seems to be well organised and reasonably well linked to policy priorities. Budgetary resources have tracked policy decisions to, for instance, increase teachers' salaries; create full-day schools and expand the supply of pre-primary education. However, the integration of annual budgeting with strategic planning at the local and school levels remains weak. Indeed both school improvement plans and annual development plans of municipal education have little association with the use of available resources.

Oversight over the use of resources in the education sector is mostly exercised by the Education Superintendence. Financial audits by the Education Superintendence are comprehensive, benefit from considerable resources and adequately compel school providers to maintain an adequate use of public resources for schooling. The Education Superintendence is also integrated within the National System for Quality Assurance (*Sistema Nacional de Aseguramiento de la Calidad*, SAC), which provides the potential to link the monitoring of resource use to the quality of education. Also, schools have limited possibilities for the misuse of funds as school budgets are almost entirely managed by school providers.

Solid information systems facilitate the operation of the school financing system

Sophisticated education information systems provide a further element of support to enable the effective use of resources in the schooling system. The Student General Information System (*Sistema Información General de Estudiantes*, SIGE) is a first rate system collecting detailed information at the individual student level from schools. Chile's student standardised assessment system (*Sistema de Medición de Calidad de la Educación*, SIMCE, see Chapter 1) was created in 1988 (making Chile an international pioneer in the field) and is acknowledged worldwide for its level of technical credibility and sophistication. The presence of a large and strong research community (in universities and think tanks as well as within the Ministry of Education itself, through its research and analysis unit) capable of using that wealth of information distinguishes Chile not only from other countries in Latin America but across the world.

There is an increasing focus on the achievement of results

Consistent with the country's overall emphasis on high-quality public sector management, there is an increasing focus on results in the education sector, and instruments have been developed to promote results orientation throughout the system. Two examples worth mentioning are the National System for Performance Evaluation (*Sistema Nacional de Evaluación de Desempeño*, SNED) and the adoption of individual performance agreements (*Convenios de Desempeño*) for school principals (see Chapter 4).

SNED provides a financial incentive and a special recognition to teachers and other school staff for their excellent performance. Schools are assessed in comparison to other schools with similar characteristics, based on an index that includes a number of factors, including the performance of the school in the national assessment SIMCE (see Chapter 5). About 35% of the schools receive the SNED award. Some evidence shows that the SNED has had positive effects on mathematics and language SIMCE average scores in schools with higher performance, which are the ones that compete for the SNED financial incentive (Contreras and Rau, 2012).

Also, as explained in Chapter 4, the Quality and Equality of Education Law gives new powers to principals in municipal schools. They can propose terminating the contracts for the 5% worst performers among teachers (the decision is in the hands of the school provider) as well as select and change the management team. At the same time, these new powers come with enhanced accountability. Schools principals must sign a performance agreement (*Convenio de Desempeño*) with the school administrator and can be fired if the performance indicators in the contract are not met (see Chapter 4).

The National System for Quality Assurance (*Sistema Nacional de Aseguramiento de la Calidad*, SAC) formed by the Ministry of Education, the National Education Council, the Agency for Quality Education and the Education Superintendence (see Chapter 1), provides a very useful institutional framework to promote a more effective use of resources. It is a relatively new system that complements other mechanisms for institutional accountability Chile has developed over time, including a system of teacher evaluation (see Chapter 5), evaluations by the Ministry of Finance (DIPRES), detailed data and information distributed to the public, among others. As it grows and develops more fully over time, SAC's effects will be more fully felt. This is particularly true in the case of the Agency for Quality Education, which is building up an assessment and feedback mechanism on school effectiveness that should allow schools and their providers to identify bottlenecks to a more effective use of resources to achieve educational outcomes and find solutions that suit their needs and conditions.

The Inclusion Law is making more public resources available to the school system

The system of school grants, as it exists today, implies that the fiscal effort that Chile is making gets reflected in more educational resources at the school level. Indeed, the OECD review team formed the impression that individual schools are well resourced with textbooks, libraries, technology and other materials needed to enable the education process. The recently approved "Inclusion Law" (see Chapter 1) will make further resources available. First, it increases by 20% the amount of the SEP grant for the 40% most vulnerable students. An extended SEP grant will be assigned to schools with students from the 80% most vulnerable population when schools adhere to the elimination of co-payments. Second, through the elimination of co-payments and the establishment of a new grant (the

so-called *aporte por gratuidad*) that will substitute for them. Overall, Chile is putting significant emphasis on equity and creating the opportunities for all students, regardless of their background and characteristics, to receive a quality education.

The regulation of the public funding of private providers seeks to increase equity and efficiency

The conditions under which private schools are eligible for public subsidies are an important factor for the capacity of school choice programmes to expand access to high-quality schools and improve educational outcomes by fostering effective competition between schools (Epple, Romano and Urquiola, 2015; Boeskens, 2016). The new Inclusion Law, adopted in 2015, addresses three of these eligibility requirements – selective admission, for-profit ownership and co-payments – with the aim to facilitate the exercise of free school choice.

The regulation of student admission criteria is likely to bring improvement to the voucher system

One of the aspects introduced with the 2015 Inclusion Law is providing guarantees to students of their right to select a school (and its education project) by forbidding private-subsidised schools to select their students on the basis of economic, social and academic criteria. The reform seeks to enable students to benefit from school choice regardless of their family background and put an end to a longstanding practice which has been considered one of the reasons for the high level of socio-economic segregation in the Chilean school system (see Chapter 3).

In a survey carried out as part of the System to Measure the Quality of Education (*Sistema de Medición de Calidad de la Educación*, SIMCE), 44% of parents whose children attended Year 4 reported that their school selected students based on admission exams, and 36% reported the use of parental interviews (SIMCE, 2006). Empirical evidence indicates that students with higher socio-economic status, from families with higher income and with more educated parents were significantly more likely to gain a place in a selective school (McEwan, 2001) and that students from middle-class families disproportionately enrolled in newly established private institutions, depleting the public sector of high-ability students (Hsieh and Urquiola, 2006). Due to peer effects, this process known as "cream-skimming" is likely to disadvantage students who remain in public schools and contribute to stratification by ability and socio-economic status.

Limiting the practice of selective admission may also provide a means to improve the dynamics of school competition and, as a consequence, improve educational efficiency and aggregate outcomes. If privately managed schools have more leverage to select their students, they have an incentive to compete with public schools by restricting access to students of higher socio-economic status or ability since these are less costly to educate and parents tend to judge a school's quality based on its social composition or aggregate performance (Ladd, 2002; Macleod and Urquiola, 2009). Studies of Chilean private schools provide some evidence that the use of selective admission criteria has indeed given schools a means to compete based on selectivity, rather than by raising their educational quality and attract students with the prospect of a high-performing peer group, rather than their value added (Lara et al., 2011). Controlling for socio-economic characteristics at the school and individual levels, Contreras et al. (2010) find selection criteria to be a major factor explaining performance gaps between public and private schools in Chile. The practice of

excluding retained students has been another form of selectivity practiced by private schools as a means to raise student performance (Bellei, 2008).

Some stakeholders criticise restrictions on selective admission, suggesting that selectivity is the only way in which schools could provide their children with a highly-able peer group and allow students to enjoy a similar level of educational quality as that provided by private non-subsidised schools (MINEDUC, ACE and ES, 2016). Yet, both cross-national comparisons and country-specific studies indicate that student segregation is not associated with higher aggregate achievement or a higher educational quality for all (Hanushek et al., 2003; OECD, 2013).

Forbidding publicly-subsidised schools to make a profit addresses some concerns

The new Inclusion Law also mandates private-subsidised schools to be operated by non-profit organisations – a regulation which is expected to be fully implemented by 2018. Prior to this, in 2006, 76% of private-subsidised primary schools operated under for-profit ownership (Elacqua, 2012), making Chile one of the few OECD countries, alongside Sweden, with a substantial publicly-funded commercial sector. Restrictions on for-profit education tend to respond to the strong public belief that education should be a non-commercial part of the public realm as well as the concern that for-profit providers might cut costs at the expense of educational quality. The difficulty of adequately monitoring their use of public resources and rendering it transparent has added to the general lack of public confidence in the quality of commercial providers.

Although many of the for-profit schools created in the 1980s served students from lower socio-economic backgrounds, there is little evidence that their entry into the market raised average academic achievement by increasing school choice or intensifying competition (Hsieh and Urquiola, 2006). The existing evidence on for-profit schools in Chile also suggests that they perform worse than most non-profit private schools and do not fare consistently better than public schools despite their use of selective admission. Controlling for school's location and socio-economic composition, McEwan and Carnoy (2000) find that non-religious for-profit private schools performed marginally worse in the Year 4 SIMCE assessment of Spanish and mathematics than public schools, albeit at lower levels of expenditure. Controlling for individual and peer socio-economic characteristics as well as student selection using instrumental variables, McEwan (2001) finds similar results for Year 8 students attending for-profit schools, who performed worse on Spanish and mathematics tests than those in public schools. The lower levels of expenditure of for-profit schools may be partly explained by their greater autonomy to allocate resources and by lower salaries for teaching staff (McEwan and Carnoy, 2000).

More recent studies largely confirm these results, suggesting that representative for-profit schools performed slightly worse than the average non-profit school, although the relative quality of commercial providers varied depending on whether they were run independently or as part of a franchise (Elacqua, 2011). Based on Spanish and mathematics SIMCE test scores of Year 4 students (2002, 2005 and 2006) and Year 8 students (2004), franchise for-profit schools performed better than public schools while independent ones did not and fared worse than most non-profit private schools. These differences may reflect the fact that franchise schools benefit from economies of scale and sharing best practices within their network. It could equally be the case, though, that high-achieving schools were more likely to join a franchise or attract enough students and resources to expand their operation (Elacqua, 2011). Despite the evidence on the performance of

commercial providers, it is difficult to predict how the prohibition of for-profit ownership will affect aggregate educational quality. The impact of the new regulation depends on the way different types of commercial providers will respond to and adapt their services under the new regulations, which remains uncertain.

Publicly funding for-profit education has created incentives for private actors to invest in the development of school infrastructure. Preventing the closure of these sites following the implementation of the Inclusion Law may result in substantial fiscal costs related to the provision of subsidised loans or the direct acquisition of infrastructure currently owned or rented by commercial providers (see Salas et al., 2015). The means by which subsidised private schools will finance future infrastructure investments in the absence of shared funding or retained profits and with limited access to public funds remains an issue to be addressed (see below).

The elimination of co-payments in publicly-subsidised schools reduces financial barriers for low-income families to benefit from the voucher system

Over the coming years, the recently approved Inclusion Law aims to gradually abolish the practice of shared funding which allows publicly-funded private schools to charge tuition fees without a corresponding reduction in public subsidies. In order to qualify for public funding, private schools will be required to phase out tuition fees and other obligatory parental contributions (e.g. for school materials). Many countries providing subsidies to private providers, such as Sweden, already have restrictions in place that prevent recipients from charging tuition fees. Others, such as Denmark, provide fee-charging private schools with a proportionately lower amount of public funding (Houlberg et al., 2016). These regulations aim to reduce financial barriers for low-income families seeking to make use of school choice or serve to ensure that private schools do not enjoy competitive advantages over free public schools respectively.

Empirical evidence suggests that tuition fees may have contributed to the high level of segregation in the Chilean school system by deterring low-income students from making use of school choice. Fee-charging private-subsidised schools served less than half as many students of Indigenous descent or low socio-economic status as schools not charging fees in 2006 (14.2% compared to 37.0%) and charging add-on tuition fees has been identified as the school characteristic most strongly associated with socio-economic segregation across different types of voucher schools (Elacqua, 2012). By contrast, there is evidence that the 2008 SEP Law, which provided targeted vouchers to schools that refrained from charging the poorest 40% of households tuition fees has improved their academic outcomes and considerably narrowed the socio-economic achievement gap (Neilson, 2013). These results indicate the equity gains which can result from lowering barriers to entry in combination with targeted funding.

The abolition of shared funding is expected to increase private-subsidised schools' accountability for the spending of public resources. At the same time, concerns have been raised that the new public subsidy (*Aporte de Gratuidad*) may not provide a full substitute for previous parental contributions and reduce their spending flexibility (MINEDUC, ACE and ES, 2016). Empirical studies, however, have failed to establish a clear relationship between private schools' revenue from parental contributions and their educational quality net of their student composition, which raises the question whether the additional private resources had been efficiently put to use. Analysing SIMCE data from 2002, prior to the introduction of the SEP, Mizala and Torche (2012) found "virtually no association

between parental add-on fees and test scores after the school-level socio-economic status is accounted for" (Mizala and Torche, 2012), arguing that tuition fees may have primarily served as a means to cream-skim students with higher socio-economic status from the public sector without raising overall educational achievement. The reform of shared funding could therefore contribute to reducing socio-economic segregation across school sectors.

Challenges

The system of school grants faces a range of challenges

In spite of its many strengths and the improvements it has experienced over the years, Chile's system of school grants experiences a number of challenges that affect the capacity of schools and their providers to make an effective use of resources for educational purposes.

First, the use of daily student attendance as the basis for the grant penalises school providers even for normal and justified student absences. While student attendance fluctuates, school costs cannot be adjusted based on student attendance over short periods of time. This creates a burden for many school providers. In addition, schools in given difficult contexts such as serving a more vulnerable population or geographically isolated are more likely to be affected by student absenteeism. Moreover, schools, school providers, the Ministry of Education and the Education Superintendence, must dedicate resources to monitor and check daily attendance records (which often show significant inconsistencies and irregularities),[1] distracting those resources away from activities more relevant to school quality. At the same time, there are significant doubts about the quality of the attendance data reported to the Ministry with some non-official reports suggesting widespread fraud (Ramirez et al., 2012).

Second, over time, the system has become complex with many components (see Table 2.4), using different criteria and rules that often vary over time. There are more than ten different grants or financial incentives exclusively destined to personnel (see Chapter 5), in addition to other grants only assigned for specific populations (vulnerable students in the case of SEP and special education with the School Integration Programme, *Programa de Integración Escolar*, PIE), and all of them have specific regulations attached. During the review visit, school providers reported to the OECD review team that they spend a lot of effort managing this complexity, including in ways that are not totally transparent, as when providers adjust the allocation of the free-use grants across schools to compensate for the fixed distribution of other grants (i.e. following the rules for the use of given grants such as the SEP).

Third, school providers (both municipal authorities and private conglomerates managing chains of schools) have great autonomy to allocate school basic grants across their schools. As a result funding of individual schools might not be formula driven. This creates the opportunity for sharp differences in per-student spending within municipalities, as well as a lack of transparency that may benefit schools with well-connected principals.

Fourth, a significant share of the grants is earmarked for specific uses. SEP and the support for special education (associated to PIE) (16% and 6% respectively of the total grant) are targeted to specific students and have restrictions in terms of how they can be used. For example, schools cannot spend more than 50% of the SEP in staff costs (except in some circumstances which require a justification) (see also Table 2.4 for restrictions on the use of

PIE funds). Other grants (representing 8% of the total) are targeted to specific teachers. While that earmarking is motivated by the desire to ensure that resources are used to improve quality, the restrictions it generates often force maintainers to allocate resources inefficiently or to find "creative" ways of sidestepping them. Examples mentioned by interviewees of the OECD review team include asking providers to adjust descriptions in invoices to conform to norms or splitting larger purchases into smaller ones. As a result of the growing number of earmarks, both public and private-subsidised schools end up facing high transaction costs, including those related to monitoring the use of resources.

Fifth, the per-student grant allocation mechanism does not fully acknowledge the existence of some costs that are not proportional to the number of students, including administration costs (e.g. salaries for staff in municipalities' education administration departments). Smaller municipalities with weak fiscal capacity (and, thus, limited ability to supplement grants with own resources) suffer this the most. The municipality that receives the smallest transfer collects CLP 24 million a year, while the municipality that receives the most gets more than CLP 28 000 million a year, and the average is CLP 3 854 million per year. The reality is that a majority of municipalities have a relatively small number of students and face limitations due to their low scale (Raczynski and Salinas, 2008). While there are grants that seek to compensate some of these municipalities such as the Supplement for Rurality and the Minimum Grant for small rural schools (*Piso Rural*), their compensation effect might not be sufficient.

The funding of infrastructure needs rethinking

The funding of infrastructure is hard to handle in the existing system. The grants include an allocation for maintenance support but, while those funds can cover the costs of minor repairs, they are not sufficient (nor meant to) for larger investments that involve construction. Moreover, SEP explicitly forbids the use of resources for infrastructure investments. The Ministry is pursuing a new approach whereby needs are identified at the regional level and public funds are allocated on a project basis. While it is too early to evaluate the effects of this new approach, there are concerns on whether it may end up discriminating against low capacity municipalities that cannot compete as easily for those funds. The approach certainly discriminates against private-subsidised schools that do not qualify. This factor may become a serious issue in the future, as those schools will not be able to resort to co-payments or to profits to recover the costs of such investments. The Inclusion Law contemplates the possibility of funding existing debts but only during a transitional period.

Sources of inefficiency in the use of school resources are visible

While there is no evidence of large-scale inefficiencies (the so-called "white elephants") there are signals of inefficiency related to excess employment and an overextended school network.

There is excess employment in the education sector in many municipalities

Even though there is no official estimate of the magnitude of the problem, there is consensus among officials and experts that in many municipalities there is excess employment in the education sector among teachers, teaching assistants and administrators. Some informal estimates suggest up to 15% excess in employment levels. Amaya et al. (2015) use an optimisation model to estimate the savings that could be achieved through a more efficient use of resources in public schools in two average size

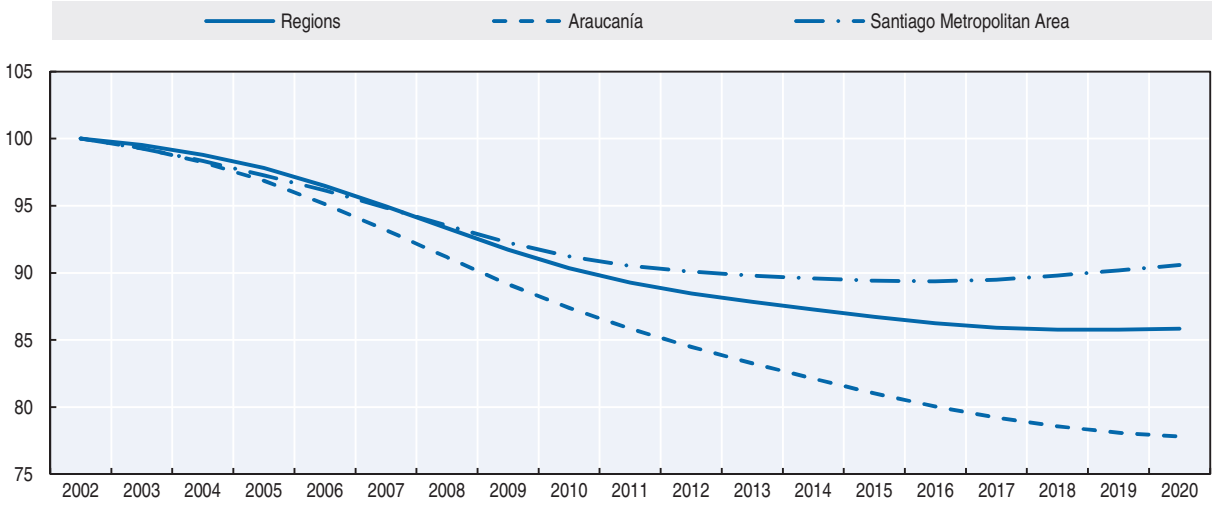
municipalities. They estimate that classroom hours (the number of teaching hours the municipality pays for) could potentially be reduced by 25% to 47%. Similarly, the number of classes could be reduced by 13% to 14%. They argue that the most significant inefficiency is found in the allocation of human resources.

There are also some signs of over-employment in the administration functions at the municipal level. The Municipal Education Administration Departments (*Departamentos de Administración de Educación Municipal,* DAEM or *Departamentos de Educación Municipal,* DEM) employ 1 person per every 7.5 employed at the school level, and only 20% of them perform technical or pedagogical functions.

One important factor that has contributed to this trend is the migration of students to private-subsidised schools, which is leaving too many extremely small public schools with high per-student costs. While the proportion of students enrolled in municipal schools was about 50% in 2004, it stood at about 36% in 2015 (Ministry of Education, 2016). The other contributing factor is a demographic trend of falling school-age population that creates further pressures (see Figure 2.9). This trend is expected to continue over time. In fact, the poorest regions (such as Araucanía) are the ones experiencing the largest reductions in school-age children.

Figure 2.9. **Projection of population ages 3 to 17, 2002-20**

2002 = 100



Source: MINEDUC, ACE and ES (2016), *OECD Review of Policies to Improve the Effectiveness of Resource Use in Schools (School Resources Review): Country Background Report for Chile, www.oecd.org/education/schoolresourcesreview.htm.*

But it is not just a problem of slow adjustment to falling enrolment rates. Between 2007 and 2015 the number of students in public schools fell by 23%, while the number of teachers increased by 20% and the number of assistants increased by 82% (Ministry of Education, 2016). In the same period, private-subsidised schools also experienced an increase in the number of teachers (45%) and assistants (107%), significantly larger than the increase in enrolment (13%). In both cases, the increase in assistants was extremely large and contrasts with a modest increase in the number of assistants in private non-subsidised schools (5%) (Ministry of Education, 2016). The fact that resources from SEP (which can be used to cover the costs of certain categories of assistants) became available

during this period for both public and private-subsidised schools suggests the availability of those resources may have facilitated this expansion.

The school network is overextended

The monitoring and planning of the school network is limited in Chile, leading to an overextended school network. There are quite a number of very small schools with small classes which do not offer a rich learning experience to students. As shown in Table 2.7, the average number of students within a school per education level has decreased between 2004 and 2015 for all education levels except pre-primary education. This decrease is particularly marked in municipal schools. During this period, in rural areas, the average number of students per education level within a municipal school decreased about 18%, 47% and 60% in basic education, upper secondary education/scientific-humanistic programmes and upper secondary education/technical-professional programmes respectively (see Table 2.7).

There has not been a review of the school network to assess the need for some reorganisation of local educational supply and no major school transportation strategies have been developed. School consolidation has been politically difficult for local governments that often prefer to muddle through rather than adopt politically costly decisions (Raczynski, 2010; Solís and Nuñez, 2014). Local officials interviewed by the OECD review team explain that communities reject proposals to consolidate schools, even if that implies improving conditions at the school level. Over the last three years 144 municipal schools have been closed due to low enrolment levels that made maintaining them prohibitively expensive. There is no systematic analysis of those school closings, but the combination of falling enrolments (with the consequent reduction in revenues to the municipality) and limited fiscal capacity appears to be the driving factors.

A school network populated with a large number of small schools might not be the most cost-effective option to deliver education services in rural and remote areas. The preponderance of small schools is driven by the objective of granting every locality the operation of a school, without sufficient regard to the quality, equity and efficiency of the education services provided. Students in small schools tend to suffer from poorer learning environments. Some evidence suggests that the teaching quality in small schools might be lower and thus calls into question the benefits that could accrue from lower student-to-teacher ratios. As analysed in Chapter 5, better qualified teachers are less likely to work in disadvantaged schools. Also, initial teacher education programmes might not prepare teachers for the specific challenges that they will face in small schools, such as multigrade teaching (see Chapter 5), while international research shows that effective multigrade teaching requires capable teachers with a specific preparation to teach in these environments. Overall, there is a lack of clear strategic vision to improve education service delivery in rural and remote areas which might hinder the overall performance of the education system.

Concerns about low efficiency of small schools are also present, to some extent, among private schools. Elacqua et al. (2011) found that private school franchises have a large cost advantage over private independent schools, once student attributes and selectivity are controlled for. They suggest that there may be economies of scale operating in favour of private school chains. At the same time, concerns have been raised in terms of the transparency with which some of the large conglomerates of private schools are operating (Rodriguez, Arcos and Ramirez, 2014).

Table 2.7. **Average number of students per school by level, type of education, location and education provider, 2004 and 2015**

	2004	2015	Percentage change
PRE-PRIMARY EDUCATION			
All schools	**53.0**	**62.3**	**17.5**
Urban	60.4	72.0	19.3
Rural	25.3	25.9	2.0
Municipal schools	**53.7**	**47.2**	**-12.0**
Urban	71.1	61.4	-13.6
Rural	24.8	24.8	0.1
Private-subsidised schools	**51.4**	**70.7**	**37.4**
Urban	52.9	74.2	40.1
Rural	27.4	30.0	9.5
Private non-subsidised schools	**55.0**	**97.7**	**77.5**
Urban	55.4	97.9	76.8
Rural	42.1	68.7	63.3
BASIC EDUCATION			
All schools	**253.3**	**230.1**	**-9.2**
Urban	443.6	356.3	-19.7
Rural	66.8	56.2	-15.8
Municipal schools	**217.8**	**163.6**	**-24.9**
Urban	526.0	326.4	-37.9
Rural	66.5	54.5	-18.0
Private-subsidised schools	**311.5**	**304.8**	**-2.1**
Urban	410.7	377.5	-8.1
Rural	66.2	61.9	-6.6
Private non-subsidised schools	**292.8**	**357.2**	**22.0**
Urban	296.9	358.0	20.6
Rural	170.2	243.0	42.8
UPPER SECONDARY EDUCATION (SCIENTIFIC-HUMANISTIC PROGRAMMES)			
All schools	**320.5**	**239.2**	**-25.4**
Urban	328.5	245.0	-25.4
Rural	170.2	110.3	-35.2
Municipal schools	**550.3**	**297.1**	**-46.0**
Urban	585.2	318.7	-45.5
Rural	205.0	109.1	-46.8
Private-subsidised schools	**260.9**	**221.3**	**-15.2**
Urban	264.5	224.4	-15.1
Rural	165.1	110.4	-33.1
Private non-subsidised schools	**181.2**	**195.4**	**7.8**
Urban	185.0	195.9	5.9
Rural	80.5	135.7	68.5
UPPER SECONDARY EDUCATION (TECHNICAL-PROFESSIONAL PROGRAMMES)			
All schools	**320.8**	**175.5**	**-45.3**
Urban	334.6	184.3	-44.9
Rural	194.0	97.5	-49.8
Municipal schools	**288**	**159.2**	**-44.7**
Urban	300.3	169.6	-43.5
Rural	130.2	52.3	-59.8
Private-subsidised schools	**318.1**	**177.8**	**-44.1**
Urban	332.3	184.3	-44.5
Rural	220.8	134.2	-39.2
Private non-subsidised schools	**10**	**5.0**	**-50.0**
Urban	10	5.0	-50.0
Rural	x	x	x

Table 2.7. **Average number of students per school by level, type of education, location and education provider, 2004 and 2015** *(cont.)*

x: not applicable
Note: Schools may provide more than one level and type of education. In this table, data are organised according to the education level and type within each school and not for schools as a whole. Data for early childhood education do not include enrolment in JUNJI (*Junta Nacional de Jardines Infantiles* – National Board of Kindergartens) and Integra Foundation centres. Data do not include special education and education for adults.
Source: Ministry of Education (2016), *Estadísticas de la Educación 2015* [*Education Statistics 2015*], *http://centroestudios.mineduc.cl* (accessed on 15 April 2016); Ministry of Education (2004), Estadísticas de la Educación 2004 [Education Statistics 2004], *http://centroestudios.mineduc.cl* (accessed on 15 April 2016).

The management of educational programmes has shortcomings

There are also some signs of inefficiency at the national level. The presence of a large number of programmes and activities and budgetary lines makes difficult the regular review of priorities and allocations. The fact that many budgetary lines cannot be easily traced back to the entities in charge of the spending complicates things further. There is a strong sense among budget officials both in the Ministry and in DIPRES that there exist instances of multiple programmes serving similar goals and that efficiencies could be gained by either consolidating them or through better co-ordination. A case in point is the existence of more than one programme focused on student retention by the National Board of School Assistance and Scholarships (*Junta Nacional de Auxilio Escolar y Becas*, JUNAEB) and the Ministry. Also, delays in execution of certain national programmes (particularly those related to infrastructure) mean that appropriated funds are not used within the approved period and thus are lost to the sector (Ministry officials estimate that approximately 20% of funds allocated for infrastructure investments are lost in this way).

Even though there are many studies (particularly those commissioned by DIPRES, see above) that evaluate education programmes, few of them focus on measuring impacts. Even those that attempt to do so are retrospective studies following quasi-experimental methodologies with serious data limitations. Overall, this limits the ability of the Ministry to use rigorous evidence to prioritise among programmes and influence their design and operation.

Regional and provincial services of the Ministry appear to be large

Even though the Ministry does not administer schools it has a sizeable bureaucracy, with territorial presence. The de-concentrated Education Regional Secretariats (*Secretarías Regionales Ministeriales*, SEREMI) and the Education Provincial Departments (*Departamentos Provinciales de Educación*, DEPROV, also appointed by the Ministry) appear to be large: on average a SEREMI employs 92 people and a DEPROV 28 people. They appear to be more focused on ensuring compliance with the instructions and priorities of the Ministry than in helping schools and school providers in managing their schools. The experience with technical assistance programmes (reviewed in Chapter 4) is telling in this respect.

The management of resources is too focused on formal procedures

Paradoxically, in spite of the general concern for quality education observed throughout the Chilean education system, the management of resources is too focused on formal procedures. The monitoring of student attendance alone involves 640 million entries per month that need to be checked. Reporting requirements for the multiple programmes serving schools are typically different multiplying the time and effort

involved (Educación 2020, 2013). The system is overly focused on the fulfilment of norms and processes, which may have created an organisational culture not prone to innovation and risk-taking (see also Chapter 4). While there are useful elements of results-focused management (e.g. the so-called performance agreements (*convenios de desempeño*) to which both school principals and heads of the municipal education office are subject to), these are not always used to improve educational processes and the culture in the system remains heavily legalistic (see also Chapter 4).

This is compounded by the limited financial autonomy observed at the school level within the public sector. Most schools depend on decisions by their providers even for small transactions. Moreover, the lack of financial autonomy limits the ability of schools to link their school improvement plan (*Plan de Mejoramiento Educativo*, PME) to a resourcing strategy. Perhaps more importantly, school principals have limited legal authority to select new teachers and to remove them based on their performance assessment. The contrast in this regard with private-subsidised schools is very strong. Some school principals are nonetheless exercising their informal authority within the school and vis-à-vis municipal education authorities.

While creating opportunities the reform of the administration of public education brings some uncertainty

The transition to a still undefined new institutional model of public education administration under the System of Public Education ("New Public Education") (see Chapter 1), planned for the period 2018-25 and involving the creation of around 70 Local Education Services (*Servicios Locales de Educación*) taking over municipalities as school providers, will affect the governance framework of public schools. The reforms would bring a new emphasis on quality by strengthening the pedagogical support structure to schools, addressing the separation between administrative and pedagogical leadership that is often seen at the municipal level and creating opportunities for stronger networking across schools. Approximately 20% of the municipal departments in charge of education do not have a full-time head. On average a municipal education administration department (DAEM or DEM) employs only seven professionals (Raczynski, 2010).

At the same time, the creation of new Local Education Services under "New Public Education" (and the resulting disempowerment of municipalities) creates uncertainty regarding the room for manoeuvring school authorities will have. On the one hand, some school principals interpret that the disappearance of the municipal education management authority will imply that they will gain more space to make decisions. On the other hand, de-municipalisation runs the risk of wasting the capacity (however limited it may be) that has been built over time at the municipal level and creating further distance between the school and those in charge of administrating the school network.

Furthermore, it also raises further concerns regarding the size of national bureaucracy at the subnational level, if SEREMIs and DEPROVs continue their operation side-by-side with the new Local Education Services with no adjustment to the scope of their functions.

The school system faces significant fiscal challenges

In spite of the strong political commitment to financing education reforms mentioned earlier, there are important fiscal challenges the school system might be facing in the future. The high level of ambition and complexity of the ongoing education reforms raises concerns about its long-term fiscal sustainability.

The new Inclusion Law (*Ley de Inclusión*) (see Chapter 1) incorporates a number of elements that imply higher fiscal costs. The elimination of co-payments in private-subsidised schools will trigger a new subsidy (*Aporte de Gratuidad*) to compensate the loss of revenue. The SEP will be increased by 20%, students in the third and fourth quintile of the income distribution (the so-called *alumnos preferentes*) will now be eligible and schools will receive 50% of the SEP on their behalf. The changes will be introduced gradually. The official estimate is that, when fully implemented, these changes will represent an additional cost of CLP 663 326 million (reference year: 2014), the equivalent of USD 1 036 million per year (Ministry of Finance, 2014a). Alternative estimates suggest a higher cost. An analysis by the Universidad de Santiago de Chile (Salas et al., 2015) estimates the annual cost of the *Aporte de Gratuidad* to be USD 371 million and the total cost of the package USD 1 170 million. An additional potential source of fiscal cost, not taken into account in the estimates above, relates to real estate transactions resulting from the disappearance of private for-profit schools. The new law contemplates both the provision of subsidised credit with government guarantees for the newly established not-for-profit schools willing to buy the facilities (which may have been previously rented or owned by the private individual/corporations), and the purchase with government resources of school infrastructure in those cases in which the school provider decides to close down. Original estimates of these costs were extremely high, in the order of USD 4 800 million.

The Law that creates the System for Teacher Professional Development (*Sistema de Desarrollo Profesional Docente*) (see Chapter 5) includes improvements in teacher working conditions that are expected to contribute to the overall improvement of teacher quality. Two items in particular imply a significant increase in costs: the increase in the number of paid non-teaching hours and salary increases based on seniority and performance. The latter could represent on average a 30% hike, the largest in Chilean history (see Chapter 5). The government estimates the total annual costs to be CLP 1 535 345 million (reference year: 2016), the equivalent of USD 2 399 million per year, when the law is fully implemented (Ministry of Finance, 2016a).

The draft Law for the System of Public Education ("New Public Education") considers the establishment of specialised education services at the local level (Local Education Services) and the transfer of responsibilities for school administration away from municipal governments. It is estimated that the annual administrative cost of these services, once fully implemented, will be CLP 208 943 million (reference year: 2016), the equivalent of USD 326 million per year (Ministry of Finance, 2016b). De-municipalisation is likely to involve also some significant one-time costs. Municipalities have incurred in many cases large debts as a result of their administration of education services, including those related to pensions. Estimates of that debt vary sharply depending on the source of the information,[2] but they all suggest this is a significant issue that will need to be resolved as part of the de-municipalisation process. For example, the municipality of Temuco (DAEM-Temuco, 2015) reports a debt of CLP 2 500 million to the national level due to advanced payments of the education grants, as well as a CLP 620 million debt to teachers due to obligations related to their professional development. These debts are just an example of the transition costs that will need to be covered. Salas et al. (2015), for example, estimate an exorbitant USD 2 225 million cost, including the cost of compensating personnel that would lose their jobs. The government is developing a registry of the debt for each municipality and establishing a plan to ensure the elimination of municipal debts as the new System of Public Education is implemented.

Chilean education reforms also include changes in both the pre-primary and higher education levels. They involve significant costs that may affect the allocation of education resources for the other education levels. At the pre-primary level there is ambitious effort that includes a significant expansion in coverage. The infrastructure investment costs have been estimated to be in the order of USD 500 million while the recurrent costs – particularly those related to salary increases – to be in the order of USD 1 000 million (Salas et al., 2015).

At the higher education level, the long-term goal of the proposed reform is making it universally free of charge. Detailed cost estimates are not available and depend on the actual coverage of the new system (all universities or only some, students of all income levels or only those below a certain threshold), the unit cost to be considered (e.g. replacing current tuition levels vs. using a reference price) and the projected growth in enrolments. Depending on the assumptions used, estimates range widely. For example, Salas et al. (2015) estimate costs of between USD 1 826 million and USD 3 350 million a year. The official estimate is that, when fully implemented, these changes will represent an additional cost of between CLP 690 546 million per year (reference year: 2017; equivalent of USD 1 079 million), when free tuition covers the lower 6 socio-economic deciles, and CLP 2 113 212 million per year (reference year: 2017; equivalent of USD 3 302 million), when free tuition covers all students (Ministry of Finance, 2017). Even under the least ambitious scenarios "free" higher education would represent a major incremental cost, larger than those associated with reforms related to school inclusion and de-municipalisation and similar in magnitude to the already costly reforms in teacher careers.

The official estimate of the additional public revenue resulting from the tax reform, when fully implemented, is CLP 4 306 409 million per year (reference year: 2014; equivalent of USD 6 728 million) (Ministry of Finance, 2014b). This CLP 4.31 billion additional annual revenue is only slightly above the combined estimated annual cost of the full implementation of the Inclusion Law (CLP 0.66 billion), the Law that creates the System for Teacher Professional Development (CLP 1.54 billion), the Law that creates the System of Public Education (CLP 0.21 billion), and gratuity in higher education for students in the lower 9 socio-economic deciles (CLP 1.70 billion; Ministry of Finance, 2017). And, as explained above, other costs will result from eliminating the debt of municipalities in their management of education, dealing with real estate transactions resulting from the disappearance of private for-profit schools, and further investing in pre-primary education.

The Government of Chile is conscious of the difficulty of financing all these changes at once, and is thus wisely pursuing a principle of gradualism in implementation that will spread costs out over a multi-year period. Gradualism is also a realistic option considering that many of the changes contemplated in the new laws will take time to implement and a proper transition needs to be built to the new system. However, there is an inevitable sense of confusion and potential dissatisfaction on the part of different stakeholders in the system once the specifics of the gradual introduction of changes (and the associated trade-offs) becomes clear to everyone. The lack of clarity on what gradualism will imply creates uncertainty among system stakeholders. A particularly clear example is the uncertainty faced by parents that are sending their children to private-subsidised schools and do not know how the new Inclusion Law will affect their ability to continue doing so. Furthermore, the absence of multi-annual budgets does not facilitate the integrated financial planning of the implementation of the reform.

Policy recommendations

Maintain the principle of capitation grants for the funding of schools with some adjustments

Considering the strengths and challenges Chile's school system faces in terms of its financing arrangements, a path of gradual adjustments appears to be more sensible than one of radical change. In particular, given the many strengths it has (and the potential drawbacks of an alternative system) Chile should seek to maintain the principle of capitation grants both for public and private-subsidised schools, but with some adjustments to address the existing challenges.

First, the current practice of linking monthly school grants to actual school attendance imposes an undue financial burden on school providers (considering the rigidity in costs through the school year). It would be important to consider alternative count methods and their effects not only on school attendance but also their implications on equity, including replacing this mechanism with one based on school enrolment at the start of the year, with an adjustment (possibly mid-way through the year) to reflect drop-outs and transfers between schools. In the United States, for example, different states follow a variety of student count methods for school funding formulae, the most popular being "fall enrolment count", "average daily attendance" and "average daily membership". The latter implies measuring the average number of students enrolled throughout the year and may involve periodic reconciliation. There is some evidence that average daily attendance may have positive incentive effects on attendance rates but also worsening equity impacts (ChangeLabs Solutions, 2014; Ely and Fermanich, 2013).

Moving away from the current system based on daily attendance would create a more stable and fair recognition of the actual costs of delivering education services. Concerns about double matriculation ought to be addressed through the Student General Information System (*Sistema Información General de Estudiantes*, SIGE) and the audit functions of the Education Superintendence, and may require stronger sanctions for fraudulent reporting.

Second, considering the complexity of the existing system of school grants, there would be great value in efforts to simplify the grants system by either reducing the number of grants or unifying them altogether into one grant that uses a single formula that adjusts the per-student amount with a small number of indicators that reflect differences in costs depending on level of schooling and school and student body characteristics. This reform is consistent with earlier recommendations to improve the effectiveness of municipal schools (Marcel et al., 2009a and 2009b).

Third, Chile should consider replacing the linear formula by one which tapers-off the per capita allocation more gradually rather than at a fixed level of 45 students per classroom as is currently done. A non-linear formula could duly recognise the existence of costs that are either fixed (e.g. the cost of a school director) or not proportional to the number of students (e.g. the maintenance of the school library) and thus allow for a better approximation to the actual costs of providing a quality education. More generally, the current school grant formula would benefit from a careful review of unit costs using alternative optimisation models as illustrated in the study by Amaya et al. (2015), a point already made by Chilean experts in the past (Marcel et. al., 2009a and 2009b).

Fourth, in order to give school providers more flexibility in the use of resources within schools, Chile could reduce or even eliminate the earmarking of funds for specific purposes

(as is the case with SEP and PIE) while making allocation across schools mandatory. The latter would involve school providers allocating individual schools the amount dictated by the formula, eliminating their discretion in the distribution to individual schools, perhaps allowing a margin of flexibility, e.g. 5% to 10%, to ensure horizontal equity. In other words, school providers would have very limited flexibility to shift resources across schools but great flexibility in deciding how to spend resources in each school, which could serve as the platform for giving schools more autonomy.

Link the use of resources to strategies for improving education results

This added flexibility should be matched by enhanced accountability for results at the school level (see Box 2.1). This could be achieved by making the School Improvement Plan (*Plan de Mejoramiento Educativo*, PME) mandatory for all schools and not just for those receiving the SEP as is currently the case, possibly linking it explicitly to the principal's performance agreement (*convenio de desempeño*). The PME and the principal's performance agreement could then serve as the basis to inform the allocation of resources for the school (including staffing plans) so the use of resources is associated with strategies and education processes to improve the quality of the learning (see also Chapter 4). This new arrangement could become even more powerful if schools were given more financial autonomy under these "contracts", including some freedom to select teachers (see Chapter 5).

Box 2.1. **Accountability and the reform of municipal schools**

Reforms to the existing system of municipal public education have been under discussion in Chile for many years. In an article published in 2008, Elacqua et al. considered the advantages and disadvantages of three alternatives, all seeking to improve the effectiveness of school management. The first alternative involved strengthening the technical role of experts either by centralising school management in the hands of the Ministry of Education or by establishing local education management bodies independent of local political authorities. The latter alternative is close to the current de-municipalisation proposal. The key weakness of this first alternative is the lack of a clear direct accountability mechanism to users of services, and its complete reliance on the predisposition of the central bureaucracy to care about the needs and preferences of citizens and their ability to enforce good performance through top-down management. The second alternative they proposed is the strengthening of citizen participation, through the election of school boards with decision-making power. The key weakness of this second alternative is the danger of political capture by strong interest groups, magnified by the large differences in wealth and capacity across localities. The third and final alternative considered was the strengthening of the mayor's role, giving them full autonomy (which may require changes to the Teacher Statute) matched by stronger citizen oversight – a very demanding requirement in terms of the need for detailed performance information and capacity to evaluate it by citizens. These three alternatives make clear the central role played by accountability mechanisms to ensure the effective performance of schools, regardless of the broad governance approach adopted.

Source: Elacqua, G., S. González and P. Pacheco (2008), "Alternativas institucionales para fortalecer la educación pública municipal" ["Institutional alternatives to strengthen public municipal education"], in C. Bellei, D. Contreras and J.P. Valenzuela (eds.), *La Agenda Pendiente en Educación* [*The Pending Agenda in Education*], *www.uchile.cl/documentos/elaqua_75179_1.pdf*.

The Agency for Quality Education could play a useful role both informing those plans and performance agreements and monitoring their implementation over time through school evaluation processes. This, however, demands a faster expansion of the Agency's programme of evaluation of schools and providers, and may require making additional resources available for that purpose.

Private-subsidised schools would also need to be subject to this enhanced accountability for results if these reforms to the grant system are to go forward. This would imply a shift from the original model in which the entire accountability pressures came from market forces and parental decision-making and would now involve stronger conditionality related to the achievement of education results.

Establish a transparent mechanism to finance large infrastructure projects

Financing of large infrastructure projects (i.e. those that require construction) has been identified as a challenging area both for public and private-subsidised schools. A transparent mechanism to which all public schools in need of support have access is imperative. This would involve publicly disclosing the criteria used to prioritise the requests for infrastructure interventions. More rapid intervention mechanisms for emergency situations might also be needed. These would be made more geographically-equitable if future Local Education Services could manage a budget for addressing infrastructure emergencies in their territory and make the decisions on the needed interventions. Rapid and well-informed interventions need more local co-ordination and better knowledge of needs, placing Local Education Services in a good position to play a key role in the management of education infrastructure.

In the context of the new legal framework that does not allow private-subsidised schools to charge co-payments or to obtain profits from the school operation, there is a need to provide access to the financing mechanism suggested above in similar terms for both public and private providers (that will now be unable to use private financing for these projects). Incorporating private schools in the infrastructure cadastre established by the Ministry of Education appears to be a first logical step.

Adjust levels of employment at the municipal level

Regarding the observed level of excess employment (of teachers and other personnel) at the municipal level, it is critically important that an adjustment takes place before de-municipalisation in order to avoid transferring this lingering source of inefficiency to the new local education services. Addressing this will require affecting not only teachers with fixed-term contracts but also those with open-ended employment contracts, including through the use of early retirement schemes, which are already in place. Also, personnel transferred to the new local education services should have their pension and other contributions up-to-date. This will require a mechanism to eliminate related municipal debts. Even though municipal governments originally contracted the debt, enabling a clean process of de-municipalisation will likely require national resources.

Review the organisation of the school network

A strategic vision is required at the national level on how best to deliver education in rural and remote areas (see also Chapter 3). Smaller schools often have higher operating costs, but also may serve more isolated or remote communities and their existence and

quality need to be seen in the context of wider regional development policies. It is important to keep in mind that the organisation of the school network must be about ensuring quality education for all children. Students' access to high-quality education should not be affected adversely by their place of residence. In some cases, closing the school may not be the best solution – the distance to travel may simply not be practicable. However, in others consolidating educational provision on fewer sites will present wider opportunities for both students and teachers (e.g. closing small schools, sharing of resources between nearby schools, clustering of schools under the same school leadership) (Ares Abalde, 2014).

Hence, it is important to make progress in setting a more propitious framework to advance with the required consolidation of school networks. The international experience shows that countries have promoted consolidation through various combinations of incentives, disincentives and also direct policy interventions (Ares Abalde, 2014). One of the most common practices is to offer special funding to cover the capital investments and the changes in operating costs occurring after consolidation. Pressures to consolidation can also arise from disincentives to sustain small schools, including by requiring conditions (such as a minimum number of specialised teachers, or certain school facilities like a laboratory or library) without supplemental funding.

Considering how politically difficult it is for individual school providers to undertake school closings and/or consolidations, it would be useful to establish legal parameters that trigger mandatory actions that providers need to abide with. An active engagement of national authorities to make that process work in practice may be required. The creation of new Local Education Services under the proposed de-municipalisation reforms (see below) may present a unique opportunity to carry out these consolidation efforts.

Ensure the implementation of the reform of the administration of public education builds on previously established capacity and does not involve unnecessary growth in employment

It is imperative that the implementation of the System of Public Education ("New Public Education") makes good use of the capacity built over time at the municipal level on the administration of education services. Considerable experience has been accumulated in municipalities and it is important not to waste it, especially in those municipalities with good educational performance. One option is to give preference to staff of municipal education administration departments (DAEMs or DEMs) or municipal corporations when recruiting the personnel for Local Education Services. Another option, possibly as a transition arrangement, would be to allow some municipalities, especially those with greater capacity and educational performance, to remain as school providers (Colombia is an example of a country which uses this approach; see OECD, 2016b). Current plans for the implementation of the System of Public Education include provisions to ensure the best capacity for education administration at the municipal level benefits the future operation of Local Education Services. In fact, current plans include a recruitment process for Local Education Services in two competitive stages with the priority given in the first stage to staff in municipal education departments or corporations. The second stage of the competition is only open for those vacancies for which a competent municipal education official was not found. However, in order to be effective and ensure Local Education Services offer quality services, these processes need

to: be highly selective so as to ensure that only high-quality education municipal staff are recruited by Local Education Services; and avoid replicating employment levels of the associated municipalities (so the level of employment in each Local Education Service strictly corresponds to its needs to achieve objectives). Appropriately, current plans include a voluntary early retirement scheme for municipal education officials, facilitate their integration as a municipal employee in other functions, and provide for redundancy schemes with an indemnity.

In any event, it is very important that the establishment of the new Local Education Services (*Servicios Locales de Educación*) does not involve an unnecessary growth in employment. For that, duplications should be avoided at all costs. In that sense, as the new bodies are established it would make sense to absorb some of the services currently provided by the SEREMIs and DEPROVs, namely the provision of technical-pedagogical support to public schools as Local Education Services will take responsibility for school improvement within the public school sector. SEREMIs and DEPROVs would retain their current supervisory role regarding the implementation of policies dictated by the Ministry over both the public school sector and the publicly-subsidised private school sector. Plans for the implementation of Local Education Services go in this direction and, indeed, provide for the transfer of technical-pedagogical functions from DEPROVs to Local Education Services. However, as opposed to the approach to make use of municipal capacity to staff Local Education Services, there are no plans to give priority to ATPs in DEPROVs to fill technical-pedagogical positions in Local Education Services. The plan is to assign a different set of functions (e.g. supervision, audit), within DEPROVs, to current ATPs. This deserves further reflection as two kinds of risk exist: that the capacity for technical-pedagogical functions of ATPs is wasted; and that levels of employment in DEPROVs remain excessively high with the assignment of new functions to current ATPs that might not respond to an actual demand.

Finally, acknowledging the critical functions that the new Local Education Services would play, a funding mechanism should be established to allow them to exercise their administrative and support functions in an effective way. For that purpose, a block grant would be more appropriate than a per-student one.

Review national education programmes in view of a possible consolidation

The Ministry should also advance with its ongoing review of national education programmes with a view to possible consolidation or better co-ordination in the context of the 2018 budget. This is an important initiative to ensure that national resources are allocated to the most effective uses and that duplications are avoided. Over the longer term, these reviews would benefit from a more consistent effort to measure programme impacts within the context of DIPRES' programme of evaluations.

Elaborate a multi-year financing plan for the implementation of education reforms

Considering the level of ambition and complexity of the ongoing education reforms, it is imperative that Chile elaborates a multi-year financing plan for the implementation of the entire package of education reforms that transparently determines the speed at which different components will be introduced. The plan ought to be consistent with overall fiscal projections and be communicated in a clear and transparent way to ensure that all stakeholders in the education system are fully aware of the implications of those decisions. In the transition towards full

implementation, it is imperative that the plan prioritises the allocation of funds to those aspects that benefit the poorest students and delays those that would benefit less vulnerable ones. For that purpose, an explicit presentation of a benefit-incidence analysis would be extremely useful. Moreover, the choice between different components of the reform to be prioritised should be based on their expected cost-effectiveness which, once more, ought to be an explicit component of all budgetary decisions giving citizens the opportunity to understand how trade-offs in the allocation of scarce resources are being addressed.

Notes

1. Reports by the Education Superintendence find that 17% of schools misreport school attendance. See *www.emol.com/noticias/nacional/2013/05/09/597797/detectan-a-695-colegios-con-irregularidades-en-la-toma-de-asistencia-escolar.html*.
2. The Chilean Association of Municipalities estimates the accumulated debt as of 2014 was CLP 250 000 million or close to USD 450 million (see newspaper *La Tercera*, 2 November 2015, p. 16). On the other hand, the self-reported data from the Municipal National Information System (SINIM) administered by the government agency in charge of regional development (SUBDERE) indicates a total debt of CLP 79 570 million.

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Chapter 3

Targeting school resources for equity in Chile

This chapter is about resourcing policies targeted at specific groups of students in view of improving equality of opportunities, in particular: socio-economically disadvantaged students, children and youth living in rural areas, Indigenous students, and students with special needs. It deals with educational outcomes for these groups and analyses the main programmes targeted at them. The chapter places particular emphasis on areas of priority for Chile such as effective ways to use extra resources for disadvantaged students, the monitoring of the learning outcomes of specific student groups, and reflecting Indigenous cultures in the Chilean education system. The chapter also reviews strategies for rural education and the provision and funding of special needs education.

The main objective of this chapter is to analyse resourcing policies targeted at specific groups of students in view of improving equality of opportunities, in particular: socio-economically disadvantaged students, children and youth living in rural areas, Indigenous students, and students with special needs. First, it describes educational outcomes for these groups of students. Second, it considers the main programmes targeted to specific groups and analyses their strengths and challenges. Finally, the chapter provides some specific policy recommendations.

Context and features

Socio-economically disadvantaged students

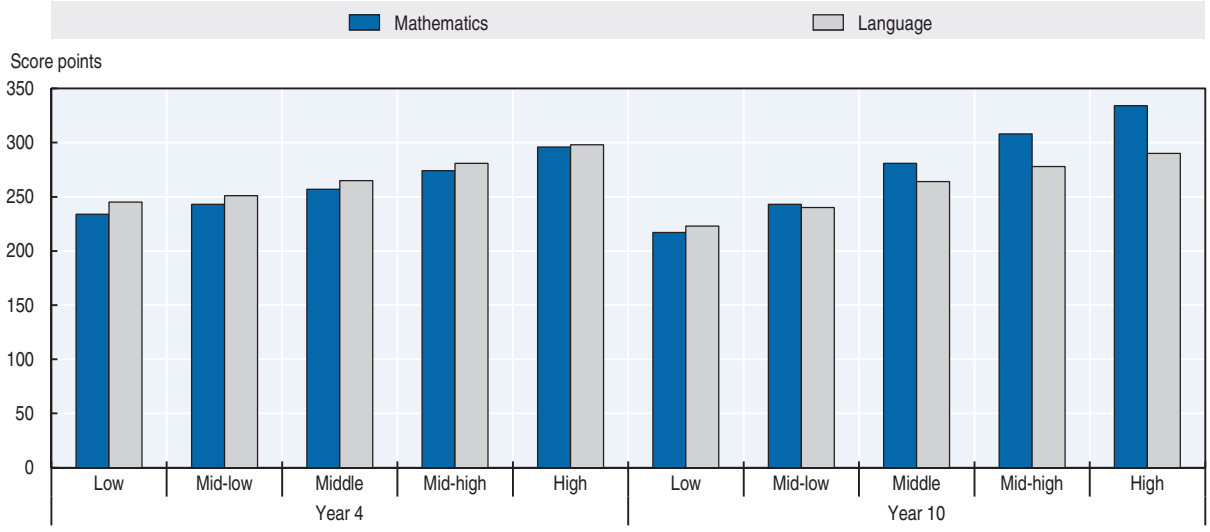
Over the last decade, educational attainment for individuals 15 years old or older has increased by close to 1 year (from 9.9 years in 2000 to 10.8 years in 2013). However, strong inequalities in attainment persist. Individuals from the highest income quintile have on average completed five more years of education than those from the lowest income quintile (MINEDUC, ACE and ES, 2016).

Similarly, Chile stands out in Latin America for improving student learning as measured in international and national assessments over the last decade, but large inequalities between students from different socio-economic background remain. As elaborated in Chapter 1, the performance of Chile's 15-year-old students has been improving in the OECD Programme for International Student Assessment (PISA), most significantly in reading literacy (OECD, 2016a). In the United Nations Organization for Education, Science and Culture (UNESCO) Third Regional Comparative and Explanatory Study (TERCE) mathematics assessment, test scores improved by 10% for students in Year 3 and by 12% for students in Year 6 between 2006 and 2013. This picture is confirmed by looking at test scores in the national standardised assessment of student performance (*Sistema de Medición de Calidad de la Educación*, SIMCE) in Chile. For students in Year 4, scores improved by 4.8% in mathematics and by 3.9% in language between 2005 and 2015 (ACE, 2015a). Also, SIMCE test scores for students in Year 10 improved by 6.5% in mathematics between 2003 and 2015 (ACE, 2015b).

However, there are large inequalities in student learning by socio-economic status (SES). Results from the OECD PISA 2015 show that, in Chile, students from the highest quartile in the economic, social and cultural status (ESCS) index score 24% higher (95 points) in science, 21% higher (89 points) in reading, and 25% higher (95 points) in mathematics than students from the lowest ESCS index quartile (OECD, 2016a). As in other countries, the socio-economic status is a strong predictor of academic performance in Chile. About 17% of the variance in PISA science scores is explained by students' socio-economic background, compared to an OECD average of 12.9% (OECD, 2016a). This is again consistent with results from the national SIMCE assessment. Among students in Year 4, students from high SES households score 26% higher in mathematics and 22% higher in language than students from low SES households. Differences are even larger for students

in Year 10: students from high SES households score 54% higher in mathematics and 30% higher in language than those in poorer households (see Figure 3.1).

Figure 3.1. **SIMCE results by income quintile**



Note: SIMCE is the System to Measure the Quality of Education (*Sistema de Medición de Calidad de la Educación*), a full-cohort national standardised assessment of student performance across the country administered by the Agency for Quality Education.
Source: MINEDUC, ACE and ES (2016), *OECD Review of Policies to Improve the Effectiveness of Resource Use in Schools (School Resources Review): Country Background Report for Chile*, *www.oecd.org/education/schoolresourcesreview.htm*.

At the secondary level, there is a concern in terms of a large performance gap between students pursuing technical-professional and scientific-humanistic programmes (also see Chapter 1). According to a study conducted by the Ministry of Education this difference is in part due to the fact that students in technical-professional programmes have fewer hours of instruction of general education than their peers in scientific-humanistic programmes (Ministry of Education, 2013). Not surprisingly, students who graduate from technical-professional programmes are significantly less likely to enrol in tertiary education than those graduating from scientific-humanistic programmes. This is problematic in terms of the socio-economic achievement gap considering that low-income students are more likely to be enrolled in technical-professional programmes. While close to 60% of the lowest SES students are enrolled in technical-professional programmes, only 13% of students from the highest SES are enrolled in this modality (Ministry of Education, 2013).

There are also geographical inequalities in performance not only by rural or urban area (see below), but also by the type of neighbourhood that students live in: students living in poorer neighbourhoods and with higher inequality have lower results in the SIMCE assessments (OECD, 2015). This is exacerbated by the current voucher system which has created socio-economic segregation as middle-class students have moved to private-subsidised schools (Hsieh and Urquiola, 2006) (see also Chapter 1). In part, this is the result of private-subsidised schools setting admission requirements and selecting students based upon academic achievement or families' socio-economic background (MINEDUC, ACE and ES, 2016), a practise being eliminated through the implementation of the Inclusion Law (see Chapter 1).

Contextual data from both PISA 2012 and PISA 2015 reveal large socio-economic differences in the allocation of educational resources. For example, the difference between schools in the exposure to mathematics in Chile as measured by PISA 2012 is the largest among all OECD countries. When differences are analysed by schools' socio-economic status, evidence shows that the proportion of qualified teachers in advantaged schools is higher than in disadvantaged schools (95% vs. 88%) (OECD, 2013b). Also, in PISA 2015, the index of science-specific resources (resources for science such as laboratories and materials for science activities) is significantly higher for socio-economic advantaged students (OECD, 2016b). In addition, students attending socio-economically advantaged schools are exposed to better disciplinary climates and their parents have higher educational expectations than students attending disadvantaged schools (OECD, 2013b; OECD, 2016b). Socio-economically disadvantaged schools also have higher teacher shortages (perceived by principals as hindering learning), than advantaged schools, to a greater extent than the average in OECD countries (OECD, 2013b; OECD, 2016b). The quality of physical infrastructure (as reported by principals) is also significantly better in socio-economically advantaged schools. Compared to socio-economically advantaged schools, principals in disadvantaged schools disproportionately report shortage or inadequacy of infrastructure (buildings, heating/cooling systems and instructional space) that hinders instruction (OECD, 2013b). In terms of adequacy of other educational resources, such as textbooks, IT equipment, library and laboratory materials, principals in disadvantaged schools report significantly higher shortages than those in advantaged schools both in PISA 2012 and PISA 2015 (OECD, 2013b; OECD, 2016b).

Per-student spending in public (municipal) schools is slightly higher for mid-high-SES students (CLP 1 225 096) than for low-SES students (CLP 1 146 612). Per-student spending in private-subsidised schools (including family co-payment) for low-SES students (CLP 1 021 881) is smaller than for high-SES students (CLP 1 299 153), but is higher than per-student spending for mid-SES students (MINEDUC, ACE and ES, 2016). Overall, education spending in publicly-funded schools is uniformly distributed across all SES levels, except for high-SES students that receive only 1.3% of total spending. Low and mid-high SES students represent 16% of enrolment, and benefit from 18% and 16.5% of total spending respectively (see Table 3.1).

Indigenous students

9.1% of the Chilean population, that is 1.57 million people, belong to Indigenous communities (*pueblos originarios*). Although the majority of Indigenous people (74%) live in urban areas, they represent 18.5% of the rural population and 7.7% of the urban population. The nine major Indigenous groups are: the Aymara, the Colla, the Quechua, the Lican Antai, the Diaguita, the Rapa Nui, the Mapuche, the Kawésqar and the Yagán distributed across 13 regions.[1] The Mapuche constitute the largest ethnic group (84.4%) followed by the Aymara (7.7%) and the Diaguita (3.4%) (Ministry of Social Development, 2015). Four Indigenous languages are currently in use: Aymara, Quechua, Rapa Nui and Mapuzungun. However, the majority of Indigenous people do not speak or understand their Indigenous language. Moreover, this proportion has increased over time: from 72% in 2006, to 79% in 2011. And not surprisingly, knowledge of Indigenous languages is even more limited among children and young people: only 4.5% of school-age children speak and understand their Indigenous language (Ibáñez et al., 2013).

Table 3.1. **Annual expenditure in publicly-funded schools by socio-economic status of students, 2012**

	Low		Mid-low		Middle		Mid-high		High	
		%		%		%		%		%
Public schools										
Spending (million CLP)	457 517	14.4	800 731	25.2	315 269	9.9	32 645	1.0	0	0.0
Number of students	399 016	12.6	758 064	23.8	295 406	9.3	26 647	0.8	0	0.0
Private-subsidised schools										
Spending (million CLP)	115 488	3.6	296 043	9.3	622 909	19.6	492 323	15.5	42 817	1.3
Number of students	113 015	3.6	336 045	10.6	732 483	23.0	485 747	15.3	32 958	1.0
Total										
Spending (million CLP)	573 004	18.0	1 096 773	34.5	938 178	29.5	524 968	16.5	42 817	1.3
Number of students	512 031	16.1	1 094 109	34.4	1 027 889	32.3	512 394	16.1	32 958	1.0

Note: Expenditure in public schools includes school grants, and direct transfers from Ministry of Education and municipalities. Expenditure in private-subsidised schools includes school grants and co-payments by families. The percentage corresponds to the proportion of total spending in publicly-funded schools and proportion of total students in publicly-funded schools.
Source: Authors' calculations based on data from MINEDUC, ACE and ES (2016), *OECD Review of Policies to Improve the Effectiveness of Resource Use in Schools (School Resources Review): Country Background Report for Chile*, *www.oecd.org/education/schoolresourcesreview.htm*.

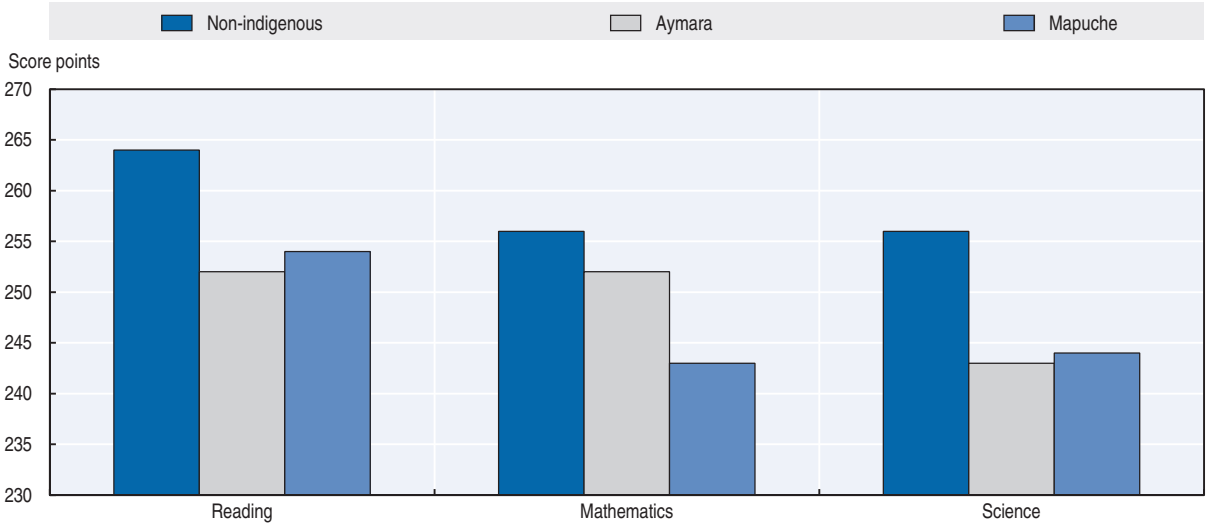
Indigenous families are more vulnerable than non-Indigenous families. Compared to non-Indigenous families, Indigenous families are more likely to have school-age children (57.2% vs. 48.5%), to have a household head with low educational attainment (9.1 years vs. 10.4 years), to have a family member aged 15 years or older who is illiterate (5.0% vs. 3.6%), and to be unemployed (10.6% vs. 6.9%). Not surprisingly, Indigenous people are significantly poorer than non-Indigenous people: Indigenous people are twice as likely to live in extreme poverty than non-Indigenous people (8.2% vs. 4.1%), and 1.7 times more likely to be poor (23.4% vs. 13.5%) (Ministry of Social Development, 2015).

There are no significant differences in net school enrolment by ethnicity. According to data from the national socio-economic characterisation survey carried out in 2013 (*Encuesta de Caracterización Socioeconómica Nacional*, CASEN), among children aged 6 to 13 years, 92.8% of non-Indigenous children and 92.4% of Indigenous children were enrolled in basic school (*educación básica*), and among 14-17 year-olds, 73.6% of non-Indigenous and 70.8% of Indigenous youth were enrolled in upper secondary school (*educación media*) (differences are not statistically significant). However, Indigenous youth aged 18 to 24 years are less likely to be enrolled in tertiary education (29.3%) than their non-Indigenous peers (37.4%) (Ministry of Social Development, 2015). In terms of learning outcomes, students from Indigenous communities have significantly lower test scores than non-Indigenous students. SIMCE results for students in Year 2 show that, on average, Mapuche students score 10 points less in reading, 13 points less in mathematics and 12 points less in science than non-Indigenous students. Similarly, Aymara students score 12 points less in reading, 4 points less in mathematics and 13 points less in science than non-Indigenous students (see Figure 3.2).

Students in rural and remote areas

Individuals 15 years old or older living in rural areas have completed on average 2 years less of education that those in urban areas. This difference holds for all income quintiles (see Table 3.2).

Figure 3.2. **SIMCE results for students in Year 2 by student ethnicity, 2013**



Note: SIMCE is the System to Measure the Quality of Education (*Sistema de Medición de Calidad de la Educación*), a full-cohort national standardised assessment of student performance across the country administered by the Agency for Quality Education.
Source: MINEDUC, ACE and ES (2016), *OECD Review of Policies to Improve the Effectiveness of Resource Use in Schools (School Resources Review): Country Background Report for Chile*, *www.oecd.org/education/schoolresourcesreview.htm*.

Table 3.2. **Educational attainment (years of education) for individuals 15 years old and older by income quintile and geographical location, 2013**

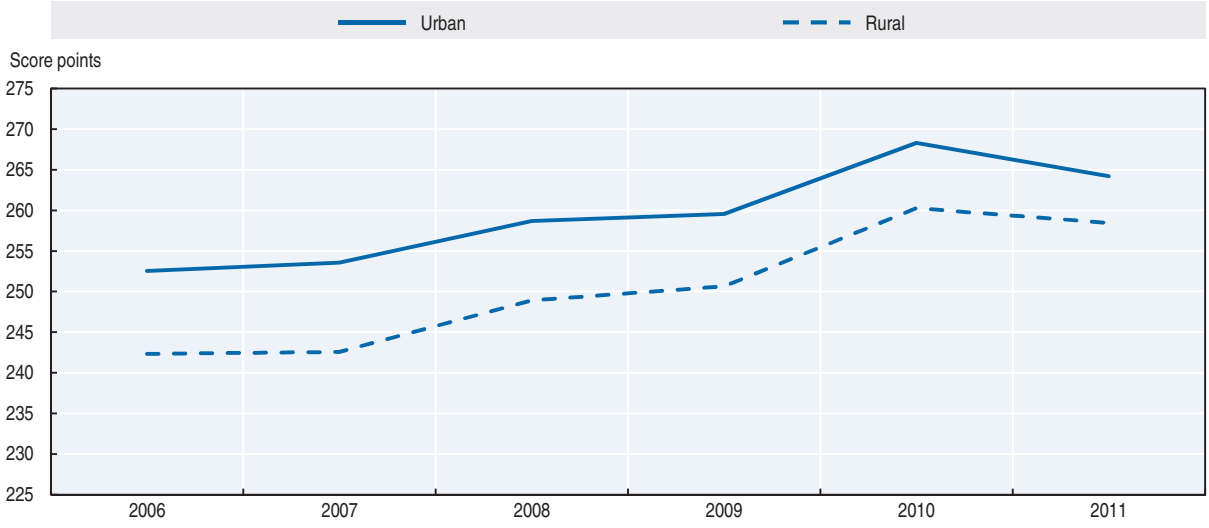
Income quintile	I	II	III	IV	V
Urban areas	9.2	10.0	10.6	11.5	14.2
Rural areas	7.3	8.1	8.4	9.4	11.6

Source: MINEDUC, ACE and ES (2016), *OECD Review of Policies to Improve the Effectiveness of Resource Use in Schools (School Resources Review): Country Background Report for Chile*, *www.oecd.org/education/schoolresourcesreview.htm*.

Results from PISA 2012 show that students living in rural areas score 358 points in mathematics compared to 431 points for students attending schools in large cities (OECD, 2013a). This is consistent with the urban-rural gap in mathematics results from SIMCE (Figure 3.3). These differences are not fully accounted for by differences in the socio-economic background. Evidence shows that differences between urban and rural areas persist even after controlling for SES background (OECD, 2013a).

Educational resources are not equally distributed among rural and urban areas. Compared to urban areas, principals in rural areas report higher teacher shortages as well as higher shortages and inadequacy of infrastructure and resources such as computers, library materials, and laboratories for the OECD PISA 2012 contextual data collection. According to these data, the teacher shortage index is 2.3 times higher in rural areas, and the index of quality of educational resources is 3.6 times worse in rural areas compared to urban areas (OECD, 2013b). Also, according to PISA 2015 data, the index of science-specific resources (resources for science such as laboratories and materials for science activities) is significantly lower for students in rural areas than students in urban areas (OECD, 2016b).

Figure 3.3. **SIMCE Year 4 mathematics results by location of school, 2006-11**



Note: SIMCE is the System to Measure the Quality of Education (*Sistema de Medición de Calidad de la Educación*), a full-cohort national standardised assessment of student performance across the country administered by the Agency for Quality Education.
Source: Figure 4 in FONIDE (2013), *Uso de los Recursos de la Ley SEP y su Efecto en los Resultados SIMCE* [*Use of Resources from the Preferential School Subsidy Law and its Effect on Results in SIMCE*], *http://cedoc.mineduc.cl/mvc/buscador/buscarDocumentoAvanzado*.

PISA 2012 also suggests that students in rural areas have less time of instruction (25 class periods in one full week) than those in urban areas (30 class periods in one full week). When looking at time of instruction devoted to different subject areas, the main difference is in time spent in regular school lessons in science: 246 minutes in rural areas, in contrast with 298 minutes in urban areas (OECD, 2013b).

Transition to upper secondary school is significantly lower in rural areas than urban areas. In order to continue into upper secondary school, the majority of rural students need to change schools. However, parents and students perceive the quality of education in rural upper secondary schools as significantly lower than the quality of education in upper secondary schools located in urban areas. Many students and parents, therefore aspire to move to an urban area (Hernández and Raczynski, 2014).

Students with special educational needs

The most recent national data available on children with special needs comes from the Second National Study on Disability conducted in 2015 (SENADIS, 2016).[2] The study found that 5.8% of children aged 2-17 had a disability and 20.0% of people aged 18 and above had a disability. Over 6 in 10 individuals aged 18 and above with a disability had completed less than upper secondary education (61.6%), slightly more than 2 in 10 had completed upper secondary education (23.4%), and only 9.1% had completed tertiary studies (5.9% had incomplete tertiary education). In 2015, 74.6% of children aged 2-5 with a disability were enrolled in pre-school (compared to 74.6% for children the same age with no disability). The figures for children with a disability aged 6-13 and aged 14-17 are, respectively, 88.7% (enrolment in basic education, compared to 95.8% for children with no disability) and 49.9% (enrolment in upper secondary education, compared to 82.0% for children with no disability) (SENADIS, 2016).

Compensatory funding for schools and education staff to address socio-economic disadvantage

Funding to public and subsidised private school providers specifically targets socio-economically disadvantaged students through the Preferential School Subsidy (*Subvención Escolar Preferencial*, SEP). The main objective of the SEP is to improve the quality of education for disadvantaged students by providing additional resources for these students. School providers that receive SEP funding are required to sign an agreement of equal opportunities and excellence in education (*Convenio de Igualdad de Oportunidades y Excelencia Educativa*), committing to use the additional resources to the accomplishment of a school improvement plan (*Plan de Mejoramiento Educativo*, PME). The PME must contain technical and pedagogical support and initiatives that specifically respond to priority student needs and implement pedagogical strategies for students with low academic achievement (see Chapter 2 for the role of the SEP in the funding system and Chapter 4 for the use of school improvement plans in schools). As a complement to the SEP and conditional on participating in the SEP, school providers can receive a Grant for Concentration of Priority Students (*Subvención por Concentración de Alumnos Prioritarios*). This grant provides an extra amount per student which depends on the proportion of disadvantaged students in the school. School providers with schools enrolling students in extreme poverty can also benefit from a Grant for Retention (*Subvención Educacional Pro-retención*). The grant is provided for each disadvantaged student belonging to a family which participates in the programme *Chile Solidario*, a part of Chile's social protection system designed to address the needs of vulnerable families, individuals and geographical areas (also see Chapter 2) (MINEDUC, ACE and ES, 2016).

In addition to these subsidies and grants, Chile provides additional resources to address socio-economic disadvantage in the form of direct allowances and a higher compensation for teachers and school leaders working in difficult contexts. Teachers in difficult working conditions receive a Difficult Conditions of Work allowance (*Asignación por desempeño en condiciones difíciles*). This allowance is given to teachers in isolated, rural, culturally-diverse and disadvantaged schools (see Chapter 5). School leaders working in schools with a high concentration of vulnerable students also receive a higher compensation (see Chapter 4) (MINEDUC, ACE and ES, 2016).

Support targeted at disadvantaged students and families

Student fees

With very few exceptions,[3] public schools charge no fees to students. Private-subsidised schools can charge tuition fees to families through the shared funding system (see Chapter 2). In practice, however, more than half of private-subsidised schools charge no fees to students (see Table 3.3). In 2014, there were 977 520 students in schools with shared funding schemes. The Inclusion Law (*Ley de Inclusión*), approved in 2015, aims to eliminate shared funding in private-subsidised schools gradually by reducing the number of private-subsidised schools with tuition fees to 249 643 in 2018 and 108 893 in 2025 (MINEDUC, ACE and ES, 2016).

Cash and in-kind support

The Chilean government provides cash and in-kind support to disadvantaged students. Most of these programmes are provided by the National Board of School Assistance and Scholarships (*Junta Nacional de Auxilio Escolar y Becas,* JUNAEB). In 2015,

Table 3.3. **Monthly co-payment per student by school type, 2015**

	Municipal school		Private-subsidised school		Private non-subsidised school		Delegated administration	
	Number of schools	%	Number of schools	%	Number of schools	%	Number of schools	%
No co-payment	5 097	96.6	3 517	58.0	1	0.2	36	51.4
CLP 0 - 10 000	104	2.0	269	4.4	1	0.2	34	48.6
CLP 10 001 - 25 000	8	0.2	726	12.0	4	0.7	0	0.0
CLP 25 001 - 50 000	0	0.0	704	11.6	17	2.9	0	0.0
CLP 50 001 - 100 000	0	0.0	365	6.0	62	10.5	0	0.0
Over CLP 100 000	0	0.0	6	0.1	405	68.4	0	0.0
No information	70	1.3	473	7.8	102	17.2	0	0.0
Total	**5 279**	**100**	**6 060**	**100**	**592**	**100**	**70**	**100**

Source: Ministry of Education (2016), Estadísticas de la Educación 2015 [Education Statistics 2015], *http://centroestudios.mineduc.cl* (accessed on 15 April 2017).

seven different types of cash subsidies (scholarships) were available to specific groups such as Indigenous or socio-economically disadvantaged students (see Table 3.4). To benefit from these scholarships, students are required to apply and, depending on the type of scholarship, they are required to meet certain eligibility criteria in terms of ethnicity, economic need or place of residence. The Indigenous Scholarship (*Beca Indígena*) for students in basic and upper secondary education from an Indigenous community who are socio-economically disadvantaged and who show outstanding performance and the Scholarship of the President of the Republic (*Beca Presidente de la República*, BPR) for socio-economically disadvantaged students in Years 9 to 12 constitute the most important scholarships in terms of amount of expenditure.

The Chilean government also provides in-kind support for low-income children and youth (see Table 3.5 for an overview). Most of these initiatives are again operated by the JUNAEB, but some of these resources are also distributed by the Ministry of Education. The most important in-kind subsidy in terms of expenditure is the School Meals Programme (*Programa de Alimentación Escolar*), targeted at socio-economically disadvantaged students from pre-primary education through Year 12. Vulnerable students also receive school supplies (from pre-primary education to Year 4), dental health services (from pre-primary education to Year 8), personal computers (Year 7) and recreational camps during the school holidays (students aged 8 to 18 years). Three in-kind benefits that are offered to all students in public and private-subsidised schools include free textbooks (from pre-primary education to Year 12), reduced school transportation fees (from Year 5 to Year 12) and medical services for issues related to visual, hearing or back health.

The National Board of School Assistance and Scholarships (*Junta Nacional de Auxilio Escolar y Becas,* JUNAEB) also runs two specific programmes to prevent students from disadvantaged families from dropping out of school. The Programme to Support School Retention (*Programa de Apoyo a la Retención Escolar*) is targeted at students at risk and provides socio-emotional support to students and communities. Services are provided by a multidisciplinary group (social worker, psychologist and teacher) which is in close contact with local social services. The Skills for Life programme (*Habilidades para la Vida*) is targeted at schools with high levels of socio-economic vulnerability and promotes strategies with students, parents and teachers for the development of socio-emotional skills and prevention of risky behaviours such as substance abuse and violence.

Table 3.4. **Scholarship programmes offered in 2015**

Scholarship (cash subsidy)	Objective	Eligibility criteria	Amount	Total budget (in million CLP)
Indigenous Scholarship for Basic Education (*Beca Indígena para educación básica*)	To provide financial support for Indigenous students and facilitate their access and retention in basic education.	• Belong to an Indigenous community • Achieving a minimum grade average of 5.0 • Attend Years 5 through 8 • Demonstrate socio-economic disadvantage	CLP 98 000 per year (approx. USD 150). Two payments at the beginning of each semester.	26 549
Indigenous Scholarship for Upper Secondary Education (*Beca Indígena para educación media*)	To provide financial support for Indigenous students and facilitate their access and retention in upper secondary education.	• Belong to an Indigenous community • Achieving a minimum grade average of 5.0 • Attend Years 9 through 12 • Demonstrate socio-economic disadvantage	CLP 203 000 per year (approx. USD 310). Two payments at the beginning of each semester.	
Scholarship of the President of the Republic *(Beca Presidente de la República)*	To provide financial support to low-income students who show outstanding academic performance to facilitate their access to upper secondary education.	• Achieving a minimum grade average of 6.0 • Attend Years 9 through 12 • Demonstrate socio-economic disadvantage	0.62 Monthly Tax Units (UTM) (approx. USD 42) per month for 10 months.	25 118
Territorial Integration Scholarship *(Beca de Integración Territorial)*	To provide financial support to students coming from remote areas.	• Attend a technical-professional programme in a specialty not offered at the student's place of residence, or a special needs school that is not available at the student's place of residence • Demonstrate socioeconomic disadvantage	Maximum 1.87 Monthly Tax Units (approx. USD 125) per month for 10 months. Plus annual subsidy between 3.73 and 18.65 Monthly Tax Units depending on the place of residence.	2 152
Programme to Support School Retention *(Beca de Apoyo a la Retención Escolar – BARE)*	To promote school retention among upper secondary students with high levels of socio-economic vulnerability to facilitate their completion of 12 years of schooling.	• Attend Years 9 through 11 • Attend a day shift • To be nominated by a school based on specific criteria such as risk of drop-out or low attendance	CLP 182 500 (approx. USD 279) per year. Four payments during the year.	4 475
Polymetals of Arica	To contribute to the intervention programme in zones with the extraction of polymetals.	• To be a beneficiary of the polymetals programme • To be enrolled in upper secondary education (Years 9 to 12)	6.2 UTM (approx. USD 416) per year. Up to 10 payments during the year.	1 056
Technical-professional internship	To facilitate young people's completion of upper secondary education and young people's access to better paid employment.	• Graduates from technical-professional upper secondary programmes • Beginning of the internship in the current year	CLP 62 500 (approx. USD 96). One payment.	2 841

Note: In Chile grades range between 1.0 and 7.0, and the passing grade is 4.0. The Monthly Tax Unit (*Unidad Tributaria Mensual*, UTM) is a unit corresponding to an amount of money determined by law that is updated on an ongoing basis by the Consumer Price Index (CPI). The Territorial Integration Scholarship concerns the following territories: Coyhaique, Aysén, General Carrera, Capitán Para, Pascua Island, Juan Fernández Island and Magallanes. Law 20.590 established an intervention programme in zones with the extraction of polymetals in the region of Arica (the Polymetals of Arica programme).
Source: MINEDUC, ACE and ES (2016), *OECD Review of Policies to Improve the Effectiveness of Resource Use in Schools (School Resources Review): Country Background Report for Chile*, *www.oecd.org/education/schoolresourcesreview.htm*.

JUNAEB uses a measure of social vulnerability (*Sistema Nacional de Asignación con Equidad*, SINAE) to identify students in need and to prioritise the beneficiaries of their programmes and initiatives.[4] First priority students are urban children living in extreme poverty and rural children living in poverty (eligible for *Chile Solidario*), second priority

Table 3.5. **In-kind benefits provided to students, 2015**

Programme	Description	Beneficiaries	Total budget (in million CLP)
School Meals Programme *(Programa de Alimentación Escolar)*	Provides free meals at school (breakfast, lunch, snack, and dinner if needed) in order to improve school attendance and prevent drop-out. This programme includes meals during the regular school year as well as meals during extracurricular activities and summer and winter schools.	Socio-economically disadvantaged students (vulnerable students) enrolled in any year from preprimary education to Year 12.	401 120
Textbooks	Provides free textbooks in all curricular areas (early education, Language, Mathematics, Science, History, Geography, English, Physics, Chemistry and Biology, Indigenous Languages).	All students from public and private-subsidised schools enrolled in any year from preprimary education to Year 12.	33 732
I Choose my PC *(Yo Elijo mi PC)*	Provides personal computers to close the digital gap.	Students in economic need, enrolled in Year 7 who demonstrate good academic performance.	16 481
National Student Card *(Tarjeta Nacional Estudiantil)*	Facilitates the use of public transportation at a lower cost.	Students from Year 5 to Year 12.	12 099
Healthy Schools for Learning *(Escuelas saludables para el aprendizaje)*	Promotion of a healthy lifestyle: physical activity, healthy eating and oral and dental hygiene.	Students enrolled in school, with priority given to students enrolled in preprimary and basic education (Year 1 through Year 4).	9 338
I connect to learn *(Me conecto para aprender)*	Provides personal computers in order to close the digital gap.	Students enrolled in Year 7 in schools that do not benefit from the programme "I Choose my PC".	21 305
School supplies	Kit of school supplies, differentiated by school level. A kit for every 12 students is provided in preprimary education, and individual kits are provided to basic school students.	Socio-economically vulnerable students enrolled from preprimary education to Year 4.	7 048
Dental health	Dental health promotion, prevention and treatment for students.	Students from preprimary education to Year 8 living in the most vulnerable communities.	7 707
Medical services	Provides medical services to students presenting health problems related to visual, hearing or back problems. Services include diagnosis, exams, treatment and control by health specialists.	Students from pre-primary education to Year 4 enrolled in public or private-subsidised schools.	6 015
PSU Scholarship *(Beca PSU)*	Provides a subsidy to pay for the total cost of the university selection test (*Prueba de Selección Universitaria*, PSU).	Students enrolled in Year 12 in public or private-subsidised schools, and economically vulnerable students enrolled in private schools.	5 439
Recreational camps *(Campamentos recreativos escolares)*	Summer and winter holiday camps. Students receive boarding, meals, transportation and recreational activities during school vacation periods.	Students aged 8 to 18 years old enrolled in vulnerable schools.	1 226
Open Schools (*Escuelas Abiertas*)	Day-camps for up to 20 days during school vacation periods. Offers free meals, cultural activities, and activities that promote healthy habits and personal development.	Students with high vulnerability enrolled in preprimary and basic education.	..

.. : not available

Source: MINEDUC, ACE and ES (2016), *OECD Review of Policies to Improve the Effectiveness of Resource Use in Schools (School Resources Review): Country Background Report for Chile*, *www.oecd.org/education/schoolresourcesreview.htm*.

students are children in poverty and with low academic performance or high risk of drop-out, and third priority students are children in poverty with no risk of low performance. By 2015, close to three-quarters (74%) of public schools and almost half of (47%) of private-subsidised schools had at least one vulnerable student.[5]

Finally, as part of the social protection system, Chile has put in place a cash transfer programme targeted at poor families: the Ethical Family Income (*Ingreso Ético Familiar*, IEF). The programme includes three different subsidies: a family allowance (*asignación familiar*) which varies by family size and poverty level, a cash transfer (*bonos por logro*) conditional on children's regular health checkups, school attendance and achievement,[6] and a women's employment subsidy (IDB, 2013).

Approaches to the education of students from Indigenous communities

In 2015, 9 276 schools (about 77% of all schools) had Indigenous students among their student body, and 2 005 schools had an enrolment rate of Indigenous students of 20% or more (data provided by the Ministry of Education from official databases). As mentioned above, in 2013, enrolment rates for Indigenous children in basic and upper secondary school stood at 92.4% and 70.8% respectively (Ministry of Social Development, 2015). In order to promote school attendance, a cash subsidy is provided to those Indigenous students who demonstrate economic need and good academic performance (Indigenous Scholarship [*Beca Indígena*], see Table 3.4). The subsidy is available for both basic and upper secondary education students.

The main educational intervention aimed at Indigenous groups is the Programme for Intercultural Bilingual Education (*Programa de Educación Intercultural Bilingüe*, PEIB). PEIB was created in 1996 with the purpose of developing and maintaining Indigenous languages and culture, and developing intercultural citizenship. The objective is that all students, regardless of their ethnic background, gain knowledge about Indigenous languages and culture (MINEDUC, ACE and ES, 2016; Ministry of Education, 2017a).

PEIB has four main components: i) the incorporation of Indigenous language subjects (*Subsector de Lengua Indígena*, SLI) into the curriculum of basic education in schools with more than 20% of Indigenous students; ii) the provision of funds for the implementation of bilingual projects in areas of high concentration of Indigenous people using the main languages (Mapuzugun, Aymará, Rapa Nui), or implementation of projects that use languages that are endangered (such as Licanantai, Colla, Diaguita, Kawésqar and Yagán);[7] iii) the provision of funds for the implementation of projects that promote the development of intercultural competencies in schools: usually these projects are workshops designed to develop skills of dialogue and respect among students, teachers and school leaders from different cultures; and iv) a system to prepare traditional teachers (*educadores tradicionales*) and integrate them in the relevant schools (Ibáñez et al., 2013; Ministry of Education, 2017a).

The implementation of the SLI initiative has been a gradual process. It started with Year 1 in basic education in 2010, continuing with Year 2 through Year 6 in 2015, and it is envisaged to reach Year 8 in 2017. Schools finance this component either through competitive funds (*proyectos concursables*) or from the resources provided through their regular grants (Ibáñez et al., 2013). In order to incorporate the Indigenous language subject into the curriculum, schools form a pedagogical team (*dupla pedagógica*) made up of a traditional teacher (*educador/a tradicional*) and a mentor teacher. The former brings the language and cultural background and the latter the pedagogical skills and knowledge of the educational system (Sotomayor et al., 2013).

Provision of education in rural and remote areas

Organisation of school network in rural and remote areas: modalities of teaching and learning

Pre-primary and school education is provided in rural areas by 3 649 schools to 265 018 students representing 30% of Chilean schools and 7.8% of students. Over three-quarters (77%) of rural schools are municipal schools and only 23% are private-subsidised schools (in contrast to urban areas where private-subsidised schools constitute 62% of the school offer) (see Table 3.6).

Table 3.6. **Number of schools and students by type of provider and location, 2015**

	Urban		Rural		Total	
		%		%		%
Schools	**8 352**	**100**	**3 649**	**100**	**12 001**	**100**
Municipal	2 484	29.7	2 795	76.6	5 279	44.0
Private-subsidised	5 209	62.4	851	23.3	6 060	50.5
Private non-subsidised	589	7.1	3	0.1	592	4.9
Delegated administration	70	0.8	0	0	70	0.6
Students	**3 141 742**	**100**	**265 018**	**100**	**3 406 760**	**100**
Municipal	1 036 269	33.0	188 828	71.3	1 225 097	36.0
Private-subsidised	1 789 129	56.9	74 848	28.2	1 863 977	54.7
Private non-subsidised	270 492	8.6	1 342	0.5	271 834	8.0
Delegated administration	45 852	1.5	0	0	45 852	1.3

Note: Data on students do not include provision for adults. Data do not include JUNJI (*Junta Nacional de Jardines Infantiles* – National Board of Kindergartens) and Integra Foundation centres.
Source: Ministry of Education (2016), Estadísticas de la Educación 2015 [Education Statistics 2015], *http://centroestudios.mineduc.cl* (accessed on 15 April 2017).

The number of schools in rural areas has dramatically decreased over the last decade: over 1 000 rural schools were closed between 1994 and 2014 (Grau et al., 2015). On average, schools that closed in this period are relatively smaller and had significantly lower levels of enrolment than the rest of the schools in the system (Grau et al., 2015). Also, 33% of schools that closed between 2009 and 2014 were at high financial risk (MINEDUC, ACE and ES, 2016).

The majority of rural schools are multigrade (58% of rural schools), that is, students from 2 or more school years are organised in the same classroom with 1 teacher, and, therefore, schools have 1, 2 or 3 teachers overall. In contrast, only 5% of urban schools offer this modality of teaching. When counting students, however, the proportion of students in multigrade schools in rural areas is lower: 36% of rural students are enrolled in multigrade schools and the majority (64%) are in non-multigrade schools (see Table 3.7).

The proportion of one-teacher schools in rural areas has decreased over time while the proportion of multiple-teacher schools has increased. In 2015, 23% of rural schools had 1 teacher for all years and 55% had more than 3 teachers (see Table 3.8). This compares to 49% of rural schools with 1 teacher for all years, 23% with 2 or 3 teachers, and the remaining 29% of rural schools with more than 3 teachers in 2007 (Mandujano, 2006).

Table 3.7. **Number and percentage of schools by school type and location, 2015**

	Schools		Students	
	Number	%	Number	%
Urban	**8 347**	**100**	**3 277 780**	**100**
Non-multigrade	7 895	94.6	3 200 787	97.7
Multigrade	452	5.4	76 993	2.3
Rural	**3 654**	**100**	**270 956**	**100**
Non-multigrade	1 549	42.4	174 256	64.3
Multigrade	2 105	57.6	96 700	35.7

Source: Data provided by the Statistics Unit, Studies' Centre (*Centro de Estudios*), Planning and Budget Division, Ministry of Education.

Table 3.8. **Number of schools according to location and the number of their teachers, 2015**

	One teacher		Two teachers		Three teachers		Four or more teachers		**Total**	
		%		%		%		%		%
Urban	151	1.8	247	2.9	373	4.4	7 630	90.8	**8 401**	**100**
Rural	853	23.2	497	13.5	317	8.6	2 010	54.7	**3 677**	**100**
Total	**1 004**	**8.3**	**744**	**6.2**	**690**	**5.7**	**9 640**	**79.8**	**12 078**	**100**

Source: Data provided by the Statistics Unit, Studies' Centre (*Centro de Estudios*), Planning and Budget Division, Ministry of Education.

School size

Schools in rural areas are significantly smaller than in urban areas. As shown in Table 3.9, differences in school size are particularly high for schools offering basic education. For this level of education, school size in urban areas is 6 times larger than in rural areas (see also Table 1.9 in Chapter 1).

Extra resources and support for rural and remote schools and students in rural and remote areas

In addition to the SEP, schools serving students in rural areas receive three additional subsidies: a Supplement by Area (*Incremento de subvención por zona*), a Supplement for Rurality (*Incremento de subvención por ruralidad*), and a Minimum Grant for Small Rural Schools (*Subvención Mínima Ruralidad – Piso Rural*). Schools with a rurality index above 25% receive additional funding to pay for student transportation, and rural schools offering boarding services receive an extra subsidy to pay for accommodation and meals (also see Chapter 2). Chile also provides additional resources to compensate staff working in rural and remote areas with a higher remuneration. Teachers and school leaders in rural and remote schools can receive a Difficult Conditions of Work Allowance (*Asignación por desempeño en condiciones difíciles*) and teachers can receive a special allowance if they manage a school without a school principal (*Bonificación especial de profesores encargados de escuelas rurales*) (also see Chapter 5) (MINEDUC, ACE and ES, 2016).

There are also some resources targeted directly at students living in remote and rural areas. In particular, provision of transportation for those who live in a remote area but close enough to attend using transportation, or housing to students living in remote areas who need to move to a municipality or city to continue their education (see Table 3.10).

Table 3.9. **Average school size by school level, type and location, 2015**

	Total	Urban	Rural
Pre-primary education	62	72	26
Basic education			
Regular	230	356	56
Special	47	49	22
Upper secondary education			
Scientific-humanistic	239	245	110
Technical-professional	175	184	97

Source: Ministry of Education (2017b), Database of the Studies' Centre (Centro de Estudios), *http://datosabiertos.mineduc.cl/* (accessed on 15 April 2017).

Table 3.10. **Benefits provided to students in rural and remote areas**

Programme	Description	Beneficiaries	Total budget (in million CLP)
Family Residence Scholarship *(Beca Residencia familiar estudiantil)*	Offers support to students living in remote areas who need to move to a municipality or city to stay enrolled in school. Offers boarding and meals, and socio-emotional support from mentor families.	Students from Year 7 through tertiary education.	7 366
Islanders homes and residence *(Hogares y residencia insular)*	Offers boarding and meals, and socio-emotional support and covers moving expenses.	Students living on Juan Fernandez Island or Pascua Island.	393
School transportation	Transportation for students in pre-primary, basic, upper secondary and special needs education.	Students living in rural or remote areas.	1 418

Source: MINEDUC, ACE and ES (2016), *OECD Review of Policies to Improve the Effectiveness of Resource Use in Schools (School Resources Review): Country Background Report for Chile*, *www.oecd.org/education/schoolresourcesreview.htm*.

Programmes to improve the quality of facilities and materials

Rural schools receive technical support through the Basic Rural Education Programme (*Programa de Educación Rural*, PER). PER was created in 1992[8] in order to provide technical assistance to rural schools. Originally, the programme provided pedagogical materials, teacher training and professional development, and curriculum adaptation to the rural context. The programme also encompassed the creation of rural micro-centres (*Microcentros Rurales*), local networks of rural schools and teachers that meet regularly to collaborate in academic planning and evaluation (also see Chapters 4 and 5). The objective of the programme is to improve rural students' learning through differentiated pedagogical tools and teaching materials (Ministry of Education, n.d.). Currently, PER targets rural multigrade schools and focuses mainly on the work of the micro-centres (MINEDUC, ACE and ES, 2016).

Close to 2 400 multigrade rural schools benefit from 374 micro-centres where teachers meet once a month. According to the law, the objectives of these meetings are all related to the improvement of pedagogical skills and student learning. In particular, the objectives set by law are to: i) assess student learning; ii) work on pedagogical innovations needed to improve student learning; iii) exchange pedagogical experiences; iv) design teaching strategies for students; v) set criteria for improvement plans; and vi) receive technical assistance from the technical-pedagogical advisory services of the Ministry of Education (*Asesores Técnico-Pedagógicos*, ATP) or independent advisory services (*Asesorías Técnicas Educativas*, ATE).

The PER programme also includes other initiatives such as a clearinghouse of best practices of multigrade teaching, support to regional projects aiming at multigrade teaching, or the participation in "School Plus" (*Escuela Plus*), a Latin American TV channel that provides teacher training and digital materials to be used in the classroom. The channel, however, has reached very few schools (in total 1 000 schools in Latin America) (*https://escuelaplus.com/*).

Another programme that seeks to improve the quality of education in rural areas is Rural Connections (*Enlaces Rural*). This programme was introduced in 2000 as a strategy to expand the Connections (*Enlaces*) programme to rural areas and included the provision of computers to multigrade classrooms as well as teacher training. In 2013, the programme also provided digital teaching material and technological infrastructure such as Internet connection to several rural schools (MINEDUC, ACE and ES, 2016). In 2014, a complementary programme *Integrating Rurality* (*Integrando la Ruralidad*) that offered offline digital resources was implemented in 2 043 schools that had limited Internet access.

By 2012, student-computer ratios were five students per computer in multigrade schools and nine in non-multigrade schools. Only 46% of multigrade schools had an Internet connection, in contrast to 95% of non-multigrade schools (MINEDUC, ACE and ES, 2016).

Provision and funding of special needs education

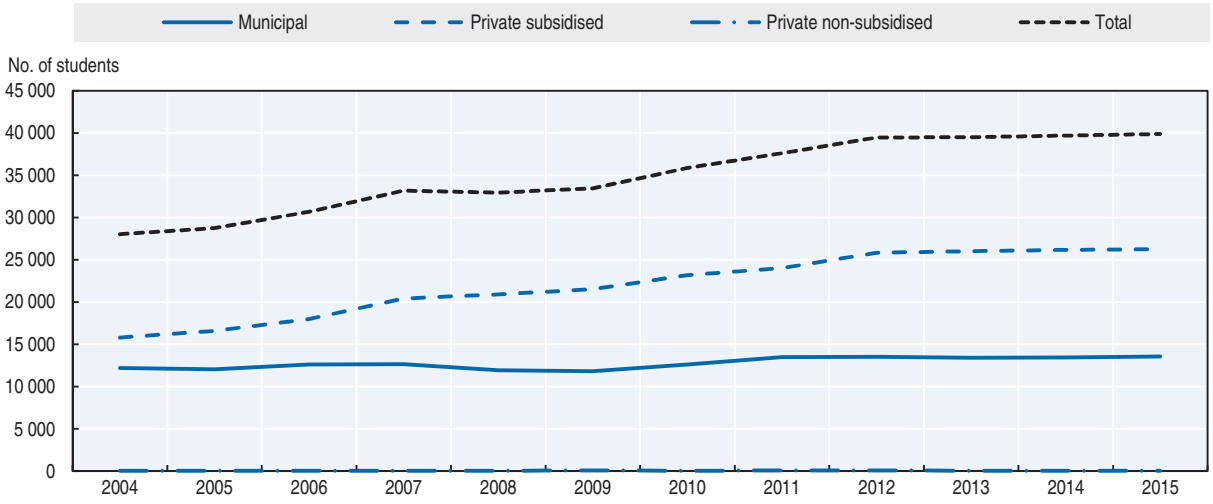
The Chilean education system encompasses special needs education as a modality that is implemented across different education levels (also see Chapter 1). Students are either enrolled in special education schools (*escuelas especiales*) or integrated in mainstream schools. In 2015, there were 782 special education schools offering basic education (Years 1 through 8) and no special schools were available for Years 9 or above. Most special basic education schools (91%) were located in urban areas. In this same year, more than half (57%) of special basic education schools were private-subsidised while 43% were public schools. There were only three private non-subsidised schools offering this modality of education (Ministry of Education, 2016).

In 2015, there were 39 867 students with special needs enrolled in special basic education schools. Close to two-thirds (65.8%) of students in special education basic schools attend private-subsidised schools, 34% attend municipal schools, and only 0.1% attend private non-subsidised schools (Ministry of Education, 2016). As shown in Figure 3.4, enrolment in special basic education increased significantly during the last decade, particularly in the private-subsidised sector, where it went from 15 790 students in 2004 to 26 249 students in 2015, a 66% increase (compared to a 11% increase in public schools) (Ministry of Education, 2016).

The majority of special needs basic education enrolment corresponds to students with cognitive disabilities (86.1%) followed by autism (4.2%). Only 2.2% correspond to students with visual or hearing impairments. The proportion of students with autism is twice as large in private-subsidised schools (5.0%) as in municipal schools (2.6%). In contrast, the proportion of students with visual impairments is twice as large in municipal schools (1.5%) as in private-subsidised schools (0.7%) (see Table 3.11).

Integration in mainstream schools is implemented through the School Integration Programme (*Programa de Integración Escolar*, PIE) (also see Chapter 4). The programme was

Figure 3.4. **Student enrolment in special basic education, 2004-15**



Note: Enrolment in the private non-subsidised sector is very low, below 100 students for all years shown in the figure.
Source: Ministry of Education (2016), Estadísticas de la Educación 2015 [Education Statistics 2015], *http://centroestudios.mineduc.cl* (accessed on 15 April 2017).

Table 3.11. **Student enrolment in special basic education schools by type of special need and school provider, 2015**

	Municipal		Private-subsidised		Private non subsidised		Total	
	Number of students	%	Number of students	%	Number of students	%	Number of students	%
Hearing impairment	153	1.1	339	1.3	0	0	492	1.2
Cognitive disability	10 660	78.6	23 606	89.9	52	100	34 318	86.1
Visual impairment	197	1.5	188	0.7	0	0	385	1.0
Motor disability	181	1.3	148	0.6	0	0	329	0.8
Autism	353	2.6	1 308	5.0	0	0	1 661	4.2
Relational and communication disability	51	0.4	404	1.5	0	0	455	1.1
School integration Programme (PIE option 4) (1)	1 971	14.5	256	1.0	0	0	2 227	5.6
Total	**13 566**	**100**	**26 249**	**100**	**52**	**100**	**39 867**	**100**

1. Integration option 4 is an integration course in mainstream schools for students with a permanent disability. These students attend all the activities in a resources classroom in the mainstream school and share with the rest of students other spaces such as recess, ceremonies or extracurricular activities, *http://portales.mineduc.cl/usuarios/edu.especial/doc/201502131254150.InstructivoPostulacion2015.pdf*.

Note: PIE refers to the School Integration Programme (*Programa de Integración Escolar*).
Source: Ministry of Education (2016), *Estadísticas de la Educación 2015* [*Education Statistics 2015*], *http://centroestudios.mineduc.cl* (accessed on 15 April 2017).

created in 2009 and provides direct funding to mainstream schools with special needs students. Schools and their providers need to invest these resources in specialised human resources (psychologists, speech therapists, specialised teachers or special educators [*educadoras diferenciales*]), teacher training or educational materials that directly respond to the needs of students with special needs. By law, schools can receive a PIE grant for up to seven students with special needs per class (five students with transitory disabilities and two with permanent disabilities).

Beneficiaries from PIE receive a minimum of eight weekly hours of specialised support (and a minimum six weekly hours if they are in a school without full-day schooling). In addition, specialised professionals working for PIE at schools have to devote at least three hours per week to work with classroom teachers on pedagogical strategies for students with special needs.

The number of students benefitting from PIE more than doubled between 2011 and 2015. In 2015, the programme benefited 279 529 students, a 113% increase since 2011. In total, 5 055 schools participate in the PIE programme, and 70% of these are public schools while 30% are private-subsidised schools (see Table 3.12). On average, there are 36.2 integrated students per school (8.5% of total enrolment). Close to two-thirds (66.4%) of PIE schools are located in urban areas (Marfán et al., 2013).

Table 3.12. **Students benefitting from PIE and schools with PIE programme by school provider, 2011-15**

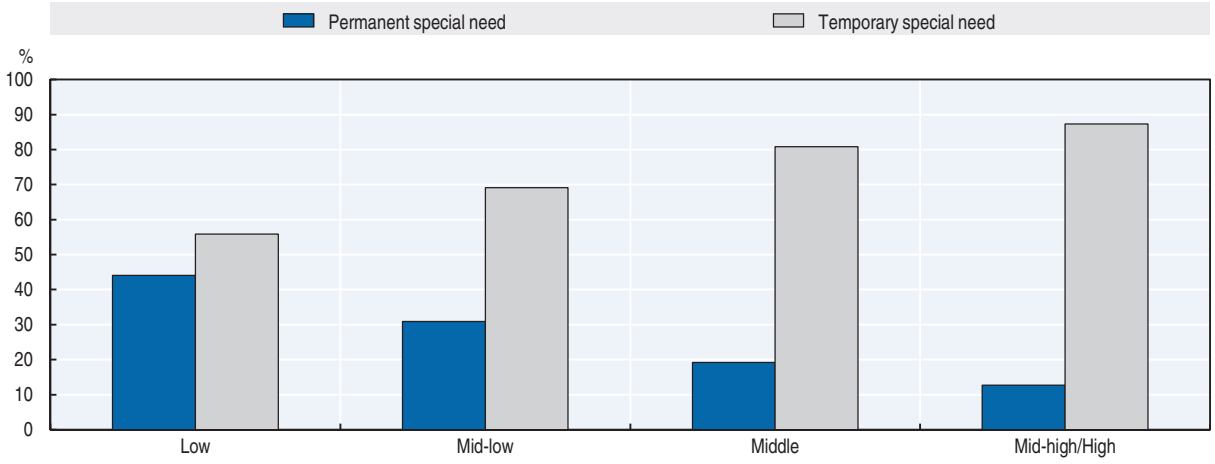
	2011	2012	2013	2014	2015
Students	**130 982**	**171 864**	**210 332**	**251 092**	**279 529**
Public	91 811	117 448	144 323	171759	188 268
Share (%)	70.1	68.3	68.6	68.4	67.4
Private-subsidised	39 171	54 416	66 009	79 333	91 261
Share (%)	29.9	31.7	31.4	31.6	32.7
Schools	**4 317**	**4 506**	**4 851**	**4 888**	**5 055**
Public	3 217	3 251	3 467	3 479	3 551
Share (%)	74.5	72.1	71.5	71.2	70.3
Private-subsidised	1 100	1 255	1 384	1 409	1 504
Share (%)	25.5	27.9	28.5	28.8	29.8

Note: PIE refers to the School Integration Programme (*Programa de Integración Escolar*).
Source: Ministry of Education (2017b), Database of the Studies' Centre (Centro de Estudios), *http://datosabiertos.mineduc.cl/* (accessed on 15 April 2017).

69% of students with special needs enrolled in PIE have a transitory special need and 31% have a permanent special need. This difference, however, varies significantly by socio-economic group. While 44.1% of PIE students from low socio-economic status are diagnosed with a permanent special need, only 12% of PIE students from high socio-economic status are diagnosed with such a need (see Figure 3.5). There are also differences by school provider: municipal schools are more likely to enrol students with permanent disabilities than private-subsidised schools. Over one-third (35.6%) of PIE students enrolled in municipal schools have a permanent special need, in contrast to 20.4% of PIE students in private-subsidised schools (Marfán et al., 2013).

In terms of the socio-economic distribution of schools offering PIE, schools from mid-low socio-economic status are overrepresented, while schools with a high socio-economic status are underrepresented. 46.6% of PIE schools correspond to mid-low socio-economic status, 29.4% to low socio-economic status, 19.2% to mid socio-economic status and 4.8% to mid-high and high socio-economic status (Marfán et al., 2013). In contrast, 33% of schools correspond to mid-low socio-economic status and 15% to high socio-economic status (ACE, 2013).

Figure 3.5. **Type of special need by socio-economic background, 2012**



Note: The horizontal axis refers to income quintiles.
Source: Marfán, J. et al. (2013), *Análisis de la implementación de los Programas de Integración Escolar (PIE) en establecimientos que han incorporado estudiantes con necesidades educativas especiales transitorias (NEET): Informe Final* [*Analysis of the implementation of School Integration Programmes in schools with students with transitory special needs: Final report*], Centro de Innovación en Educación Fundación Chile [Centre for Innovation in Education, Chile Foundation], Santiago.

Strengths

Compensatory funding for socio-economic disadvantage and support targeted at disadvantaged students and families

There are clear efforts to target resources to low-income students to facilitate their access and improve their learning

There is a clear effort to target resources to low-income students in order to facilitate school attendance and improve teaching and learning for these students. The Chilean government set as an explicit aim to have an "equality of opportunity floor" so that all students have access to quality schools. This is clearly seen in practice both through direct grants and subsidies and services to socio-economically disadvantaged children and youth, as well as the introduction of the preferential school funding scheme (SEP).

The government makes special efforts to incentivise school attendance of vulnerable students through the conditional cash transfer (CCT) component of the Ethical Family Income (*Ingreso Ético Familiar*, IEF) and scholarships such as the Scholarship of the President of the Republic. Although there is no impact evaluation of the CCT programme in particular yet,[9] there is strong evidence from other middle-income countries that CCTs have a significant impact on increasing school enrolment and attendance and reducing drop-out, particularly among secondary school students (Fiszbein and Schady, 2009; Saavedra and García, 2013).

Socio-economically disadvantaged students also receive a series of in-kind subsidies aimed at increasing enrolment and attendance: school meals, school transportation, school supplies, basic health services and textbooks (which are universal). While international evidence on the impact of these subsidies on teaching and learning is mixed, some of them (such as school meals or health care) have been shown to have a positive impact on enrolment and attendance (Murnane and Ganimian, 2014).

In terms of targeting, there is evidence of an adequate focus of scholarship programmes on economically vulnerable students: 80% of beneficiaries of the Scholarship of the President of the Republic belong to the poorest income quintile and 19% belong to the second income quintile (Universidad de Chile, 2006). While there is some room for improvement at diminishing inclusion errors, the bulk of these resources are spent on those most in need.

The system goes beyond cash and in-kind subsidies and provides specific programmes aimed at preventing drop-out through the development of socio-emotional skills (Programme to Support School Retention and the Skills for Life Programme). This is particularly important as previous evidence shows that programmes that develop life skills are effective at preventing school drop-out, especially among vulnerable children and youth (Chappell et al., 2015).

In addition to direct subsidies for socio-economically disadvantaged students, the Chilean education system has developed a financial scheme (SEP) aimed at securing resources for schools serving vulnerable children and youth. The design of SEP is progressive as subsidy amounts increase for schools that enrol a greater proportion of socio-economically disadvantaged students. This represents an opportunity for schools to invest resources in improving the quality of education provided to disadvantaged students. The provision of significant resources to vulnerable populations has been highly beneficial. Evidence suggests that SEP has led to an improvement in quality measured through students' mathematics and language test scores (Ministry of Education, 2012). In addition, Chile has put in place incentives as part of the remuneration arrangements for teachers and school leaders (*Asignación por desempeño difícil*) to attract educators to areas with high concentration of vulnerable students.

Combining direct subsidies to children and youth with subsidies to schools has the potential to be highly effective at improving educational outcomes for socio-economically disadvantaged children and youth. Cash and in-kind subsidies can help to encourage school enrolment and attendance, and reduce drop-out. Enrolment and attendance is a first step to reduce educational inequality, but is not sufficient. Improving the quality of schools attended by these children is also necessary. Subsidies to schools and specific grants such as the Difficult Conditions of Work Allowance (*Asignación por desempeño difícil*) specifically address that need. When combined, these interventions to both the supply and demand side of education can be highly effective at improving educational learning (Krishnaratne et al., 2013).

Approaches to the education of students from Indigenous communities

Equity of access to basic education has been achieved

While there remain challenges in providing equitable learning outcomes for children and young people from Indigenous communities and improving attainment at higher levels of the education system, Chile has achieved equity in access to basic education: there are no significant differences by ethnic status in net enrolment for children and adolescents. Furthermore, there are no significant differences in primary completion between Indigenous and non-Indigenous children (Ministry of Education, 2011). These are important steps towards equity in attainment.

In terms of directly targeted resources for individual students, Indigenous students can apply for a scholarship (*Beca Indigena Básica* and *Beca Indígena Media*) if they demonstrate good performance at school. The scholarship for basic education has

demonstrated a significant impact on increasing attendance and reducing drop-out among beneficiaries (Universidad de Chile, 2006). This positive result suggests that, over time, high-performing Indigenous students are likely to stay in the education system and reach higher levels of educational attainment.

The recognition and promotion of Indigenous languages and cultures in the education system benefits from concrete initiatives

At the school level, there is a clear targeting of an intercultural programme (*Programa de Educación Intercultural Bilingüe,* PEIB) to schools that serve Indigenous students. In particular, the component of Indigenous language education (*Subsector de Lengua Indígena,* SLI) in schools has been gradually incorporated in schools offering basic education. This is an important first step into recuperating and promoting Indigenous languages and cultures in the education system, particularly in areas with a significant proportion of Indigenous population. In general, SLI has a positive perception from teachers. For example, the study programme (*programa de estudios*) designed for this subject has a positive perception from both traditional and mentor teachers. In schools implementing Indigenous language in their curriculum, over 90% of traditional and mentor teachers consider that the study programme (*programa de estudios*) serves as a good guide to prepare their classes. Furthermore, over 85% of traditional teachers and over 90% of mentor teachers consider that the contents of these materials are clear and adequate for their teaching purposes (Ibáñez et al., 2013).

The pedagogical team teaching scheme designed for the SLI delivery has a great potential as teaching methodology for both Indigenous and non-Indigenous students. Traditional teachers bring the cultural values and vision of their Indigenous community to the classroom, and mentor teachers support traditional teachers in course planning and development of pedagogical strategies (see case example in Sotomayor et al., 2013). This combination represents an opportunity for both Indigenous and non-Indigenous students to become familiar with Indigenous traditions and at the same time encourages a mutual learning process among teachers.

There is a clear effort to maintain and revive Indigenous languages and cultures in the basic education system. Although incipient, there is also an effort to increase the level of awareness about interculturalism among the general population. While the PEIB programme exists since 1996, it was not until 2009 that the Chilean government explicitly established the principle of interculturalism and protection of Indigenous language and culture through the General Education Law (*Ley General de Educación*), and incorporated Indigenous language into the curriculum. This represents a qualitative improvement as it provides more leverage for the inclusion of Indigenous needs into the education system. In addition, the administration in place at the time of the review visit was showing some further steps in this direction. This includes the creation of a new division at the Ministry of Education (*Secretaría de Educación Intercultural Indígena*) in charge of co-ordinating with other divisions the promotion of the integration of Indigenous language and culture (Ministry of Education, 2015).

Provision of education in rural and remote areas

Rural and remote schools benefit from dedicated resources and initiatives to facilitate access to education for children in rural and remote areas have been established

The school funding system includes various supplementary grants to address the needs of schools in rural and remote areas, which has brought significant resources to

these schools. Chile provides resources for the implementation of programmes that promote school enrolment and attendance in rural and remote areas. In particular, scholarships (*Becas de integración territorial*) are offered to students finishing their basic education so they can continue into upper secondary education. Also, housing and transportation programmes are in place so that rural students have access to schooling despite living in remote areas. And Chile has put in place some steps to improve the quality of education in rural and remote areas by improving teachers' working conditions and opportunities for collaboration. There is a monetary incentive to attract teachers and school leaders to remote areas through the Difficult Conditions of Work Allowance (*Asignación por desempeño en condiciones difíciles*) and teachers taking on the management of a rural school are compensated with a special allowance (*Bonificación especial de profesores encargados de escuelas rurales*) (also see Chapter 5).

There are, furthermore, some special efforts to strengthen school quality in rural areas beyond better teacher and school leader compensation. In particular, the creation and operation of rural micro-centres (*microcentros rurales*) represents an opportunity to share best practices and challenges rural teachers face (although, as explained below and in Chapter 4, most of the meetings deal with administrative issues rather than pedagogical strategies). This is important as close to half of rural schools have three teachers or less, meaning that there are few opportunities to do collaborative work and engage in peer learning. Also, the supply of professional development opportunities in remote areas is scarce, and therefore the micro-centres can be the only professional development opportunity for many teachers. In addition, the Rural Connections (*Enlaces Rural*) programme (provision of technological infrastructure and teaching materials adapted for multigrade settings) is a promising intervention to equip rural schools with technology that can allow teachers to have access to instructional materials and strategies and incorporate new pedagogical tools into their classes. Finally, while the small size of rural schools poses a considerable financial challenge and although evidence on the effects of class size on learning is mixed (Jepsen, 2015), small classes allow for a more personalised education and closer relationship with parents. During the visit of the OECD review team to schools, it was evident that this feature is perceived by both parents and teachers as an advantage to address learning needs.

These resources and initiatives are important steps for providing the conditions for reducing educational inequality between rural and urban areas as they encourage school enrolment and attendance, minimise the deterrent effect of distance as a barrier for school attendance and attempt to improve learning conditions by compensating for the difficulty of recruiting high-quality teachers and facilitating teacher learning and collaboration.

Provision and funding of special needs education

Additional resources to meet the needs of students with special needs are provided in order to facilitate their inclusion in mainstream education

The Chilean government emphasises equality of opportunities not only by poverty or ethnic and cultural background, but also by ability to learn. This is also reflected in the investment of significant resources targeted towards students with special needs which has increased significantly over time. Between 1990 and 2004 the special needs grant increased by 330% (Ministry of Education, 2005). While resources *per se* do not guarantee school quality or learning, the significant increase in funding for special needs indicates the particular attention to the needs of these students. One clear example for this

attention is the PIE programme. Even though a grant for students with special needs integrated in mainstream schools has existed since 1990, the PIE programme has a specific focus on educational equity not only in terms of access but also quality. The PIE programme has an explicit emphasis on the inclusion of students with special needs and the instructional work needed to guarantee an effective inclusion and learning progress of beneficiary students (Marfán et al., 2013).

A special feature of PIE's design is that schools that receive a PIE grant must have a rigorous investment plan and make sure that funds are invested in resources that benefit directly students with special needs: teachers or specialists, teacher training, teaching materials, diagnostics, co-ordination or collaborative work between specialists and teachers (Marfán et al., 2013). This was also evident in schools visited by the OECD review team. These visits indicated that PIE resources are invested in specialised materials and human resources to serve students with disabilities and special needs. This is an advantage since it indicates that PIE funding scheme does motivate schools to invest in inputs and develop processes aimed at improving learning of those with special needs.

As its name indicates, PIE has an "integration" focus. This is clearly reflected in a more flexible curriculum for students with special needs and more intensive work of a special education teacher inside the regular classroom instead of taking the student outside of the classroom. Moreover, specialised professionals work directly with students and collaborate with classroom teachers so that they acquire teaching skills that respond to students' specific special needs. Altogether, these efforts can better facilitate effective integration of students with special needs into mainstream schools.

PIE has contributed to increase access to special education teachers in schools that attend low socio-economically disadvantaged students. This is particularly important if it is taken into account that socio-economically disadvantaged students are more likely to have a permanent special need (as explained above). Moreover, among schools with a low socio-economic status, PIE schools obtain better mathematics test scores than non-PIE schools (Marfán et al., 2013). While this is not causal, it suggests that PIE might be making a difference in improving learning outcomes of socio-economically disadvantaged children.

Finally, Chile has an initial teacher education programme for learning disabilities in place. This is a particular strength as schools can have access to qualified teachers that respond to students' needs (also see Chapter 5).

Challenges

Compensatory funding for socio-economic disadvantage and support targeted at disadvantaged students and families

Guidance on effective ways to use additional resources for meeting the needs of disadvantaged students is limited

While SEP has served as a mechanism to provide disadvantaged students with additional school resources and services, there is heterogeneity in the quality of these services. There is no clear policy to guide schools and school providers on effective ways to improve learning of the most vulnerable students or to meet the needs that are most prevalent among this population.

Eligibility for SEP funding by law requires school providers to invest these resources in initiatives that benefit vulnerable students. However, schools receiving the SEP are

not required to necessarily invest the extra funds in programmes or initiatives that target directly the learning needs of vulnerable children. Schools are required to develop a school improvement plan (PME) addressing the needs of all students while ensuring the needs of vulnerable children are safeguarded. In cases where the proportion of vulnerable children is large, general investments that benefit all children in school will benefit both vulnerable and non-vulnerable students. However, where this is not the case, funds are not necessarily spent on the needs of the most vulnerable. This can be problematic if socio-economically disadvantaged students have special educational needs. As was discussed earlier, students from low socio-economic backgrounds are more likely to be diagnosed with permanent special needs. This can be an indication that poor children need pedagogical strategies that compensate for the underdevelopment of certain cognitive skills that start early in life and that pedagogical strategies are needed that address the specific needs of socio-economically disadvantaged children and the consequence of their growing up in poverty (Brooks-Gunn and Duncan, 1997; Duncan et al., 2012).

As is elaborated further below, educational needs are not uniformly distributed across socio-economic groups. Socio-economically disadvantaged students face particular challenges for cognitive development compared to socio-economically advantaged students. This might require special resources (such as additional materials, differentiated teaching strategies, and specialised human resources) in order to level-off their learning difficulties. This means that in schools with higher concentration of poor children, special attention must be paid to their specific learning needs.

The monitoring of the learning outcomes of socio-economically disadvantaged students is lacking

There is no system in place for monitoring the learning outcomes and achievement of socio-economically disadvantaged students. As a result, there is no clear diagnosis or knowledge at the national, regional, provincial or local level of the most pressing needs of schools that serve students from vulnerable communities. Having information on the learning needs of disadvantaged children as well as the pedagogical needs and challenges of schools attending these children would be very useful for the design of specific interventions addressing those needs at different levels. The Agency for Quality Education is currently addressing this concern by developing formative standardised assessments for teachers to apply, on a voluntary basis, to their students as part of the monitoring of their learning (progressive evaluations, *Evaluación Progresiva*). Also, at the level of the provinces, there is no information of the pedagogical needs of teachers which limits the possibility to design the supply of in-service teacher training strategically according to the needs of teachers and students (see also Chapter 5). Also, there is no big picture of the learning needs of vulnerable children that schools can have in common. Schools and school providers, therefore, do not benefit from a set of targeted strategies that can be designed at the provincial or national level. There is no strategy or priority of interventions for schools serving students from disadvantaged families as a function of their needs. In addition, there is no technical review of the school improvement plan (PME), and therefore the interventions at the school level do not necessarily have a direct effect on the performance of the most vulnerable students. Also, teacher incentives to attract teachers to vulnerable areas are not linked to teacher quality or performance which does therefore not necessarily ensure that the best teachers are attending this population.

Targeting resources to those most in need and those who will benefit the most remains a challenge

Scholarships to vulnerable students who demonstrate academic excellence are well targeted (as described above). However, other cash transfers provided directly to families are not necessarily targeted to the most vulnerable families. 60.6% of the families that receive the Ethical Family Income (*Ingreso Ético Familiar*, IEF) belong to the poorest 30%, but only 8.8% of the families in the poorest decile benefit from this cash transfer (OECD, 2015). Similarly, there is room for improvement in the targeting of the school meals programme. According to a programme evaluation, between 18% and 22% of vulnerable students (*alumnos prioritarios*) do not benefit from the programme while 63% of non-eligible students receive free school meals (Villena, 2013).

Evidence suggests that the Scholarship of the President of the Republic which is designed for socio-economically disadvantaged students who demonstrate academic excellence has no impact on drop-out or attendance (Universidad de Chile, 2006). To put it differently, for high achieving students, attendance and drop-out rates would be the same without the programme, thus raising questions about the effectiveness of the use of these resources. There might, then, be an opportunity to reconsider the current relevance of this programme for this group of students and to reflect if it would be more beneficial to offer the scholarship to other students who may benefit more from a monetary subsidy.

There is a potential risk of discrimination and possibility for exclusion in the case of poor performance or misconduct

A non-trivial proportion of complaints (10%) to the Education Superintendence (*Superintendencia de Educación*) are related to discrimination. While the Inclusion Law, adopted in 2015, prohibits the selection of students (see Chapter 1), there are instances where schools still exclude students with poor performance. For instance, schools can argue that students who have to repeat a year may not be able to attend the same school in the following school year as all places have been filled and no further enrolments are possible. Also, schools are allowed to suspend students on the grounds of misconduct. Such possibilities to exclude students constitute implicit forms of selection and risk to disproportionally affect the most vulnerable children. The Inclusion Law, being gradually implemented, seeks to limit this problem by limiting the ability of publicly-subsidised schools to transfer or expel a student on the basis of academic achievement – students may repeat a year in basic education and a year in upper secondary education before a transfer can be considered.

The quality of technical-professional programmes raise inequality concerns

Students enrolled in technical-professional programmes are disproportionately from low-income families. This is problematic considering that this form of upper secondary education has several disadvantages compared to scientific-humanistic programmes. Technical-professional programmes offer students less hours of instruction and students from these programmes are less likely to participate in the university selection test (*Prueba de Selección Universitaria*, PSU), and to perform worse in standardised assessments. In its current form, the nature of technical-professional programmes does not contribute to social mobility and can contribute to perpetuate poverty and inequality.

Furthermore, students do not benefit from systematic guidance counselling in their transition from upper secondary education to tertiary education. Career guidance and

counselling can make a contribution to equity and be particularly important for youth from low-income families. Lack of mentoring and career guidance means that students might be confined with their own personal experiences and life expectations. Students from disadvantaged backgrounds may not have access to guidance and support from other sources to inform their choices, such as their parents who may hold low expectations of them. Effective career guidance services can help close that gap (OECD, 2012; OECD, 2010).

Approaches to the education of students from Indigenous communities

Addressing the learning needs of Indigenous students and reflecting Indigenous cultures in the Chilean education system remain a challenge

There is no clear effort to target specific initiatives to Indigenous students in order to improve their learning. Thus far, Chile has mostly implemented a single programme aimed at Indigenous students. The Bilingual Intercultural Education Programme (PEIB) constitutes an important first step, but it does not sufficiently address the special needs or traditions of Indigenous communities. For example, pedagogical methodologies do not adequately reflect Indigenous cultures or traditions. Moreover, pedagogical tools such as teacher guides and textbooks are designed for the general population and do not necessarily take into account the context or learning needs of Indigenous students.

This is a challenge for two main reasons. First, as Indigenous communities have claimed for a long time, the education system should also seek to understand and respect their own worldview and vision of the world rather than impose standards that are foreign to them. A lack of sensitivity to such needs creates a risk for Indigenous communities to reject mainstream education altogether. Second, Indigenous children are probably used to learn in different ways that are not being incorporated into regular schools. Drawing even further on Indigenous traditions and ways of learning than is currently the case through the Bilingual Intercultural Education Programme presents an opportunity to enable Indigenous students to learn better.

There are channels of communication between Indigenous communities and the national government, but there is a large room for improving this dialogue. Some communities claim the need for developing their own pedagogical techniques and teaching some knowledge ("*saberes*"). As they perceive it, this has not been taken sufficiently into account in the design of programmes at the national level.

The evaluation and assessment framework needs to give greater attention to Indigenous students

As with socio-economically disadvantaged students, there is lack of information regarding the special learning needs of Indigenous students, such as learning difficulties or nutritional needs. Such information is important to design strategies for improving the learning outcomes and the educational attainment of Indigenous students. Education system evaluation has arguably a strong potential to pay attention to equity issues and to inform policies on how to address these and to target support more effectively. The monitoring of student performance across specific groups, including from cultural minorities, should, therefore, receive adequate attention (OECD, 2013c).

Also, Chile's evaluation and assessment framework is not sensitive to the needs of the country's Indigenous population. Standardised national assessments (SIMCE) are not adjusted to the background of students from Indigenous communities. The results of students in these assessments, therefore, risk suffering from a cultural bias. As an OECD

report on evaluation and assessment in education pointed out, it is important that assessments allow all students to show what they know and can do without being unfairly hampered by individual characteristics that are irrelevant to what is being assessed. Assessment needs to be not only appropriate for students at a range of developmental levels likely to be in assessed population, but also sensitive to the needs of particular groups such as cultural minorities, students whose mother tongue is not the language of instruction and students with special educational needs (OECD, 2013c).

Indigenous language education has room for improvement both in coverage and in quality

Although the Bilingual Intercultural Education Programme (PEIB) has been running for more than 20 years, the impact of this programme has not been evaluated or monitored in terms of effectiveness, for example through a standardised assessment for Indigenous languages. There are data available on students' grades in Indigenous languages which show that more than 84% of students obtained a grade of 5 or higher with 4 being the required grade to pass the course. However, this information is limited to measure the proficiency level of students in Indigenous languages (Ibáñez et al., 2013).

Evaluations of the implementation and perceptions of the programme show challenges in several areas: teaching materials, human resources and programme coverage. Although traditional and mentor teachers have a positive perception of the available teaching guides, they lament a lack of sufficient teaching materials or online resources to teach Indigenous languages (Sotomayor et al., 2013). There are also concerns about the appropriateness of teaching guides in terms of their use of Indigenous languages: only 49% of mentor teachers and 53% of traditional teachers consider that the use of language is adequate (Ibáñez et al., 2013).

Traditional teachers have low educational attainment and have no previous pedagogical training. For example, among Mapuche traditional teachers, the average schooling is 11 years, which is less than upper secondary education (Sotomayor et al., 2013). Moreover, there is no formal training for these teachers in instructional practices and pedagogical methods. In some cases, traditional teachers have the opportunity to participate in ad hoc workshops, but these are generally not perceived to be of high quality (Sotomayor et al., 2013). This is problematic because not always the pedagogical team of a traditional teacher working with a mentor teacher is implemented. According to Sotomayor et al. (2013), 28% of traditional teachers work without the support of a mentor teacher.

Programme coverage is low: in 2012, only close to one-third (34.5%) of all eligible schools had implemented the Indigenous language education (*Subsector de Lengua Indígena,* SLI) as part of the Bilingual Intercultural Education Programme (Ibáñez et al., 2013). Taking into account that eligibility for the PEIB in 2012 required an enrolment rate of Indigenous students of 50% or more, participation in this programme is very low. However, as of 2013, the minimum enrolment rate of Indigenous students to grant school eligibility for the PEIB was lowered to 20%. Since then programme coverage improved to 48.7%, 58.7% and 60.9% of all eligible schools in 2013, 2014 and 2015 respectively (data provided by the Ministry of Education from official databases).

Attention to interculturalism across the curriculum as a whole is narrow

Interculturalism is not included in the curriculum across the board. When taking into account all components of the Bilingual Intercultural Education Programme (PEIB),

programme coverage increased from 296 schools in 2010 to 356 schools in 2012 (Ibáñez et al., 2013). Among these schools, however, only slightly over 10% (41 schools) correspond to the component of interculturalism (Sotomayor et al., 2013). This is very limited if one takes into account that over 8 000 schools have Indigenous students among their student body which presents great potential for developing intercultural citizenship and competencies through activities that involve students from different cultures. General intercultural awareness among the population seems to be low. However, this challenge is receiving increasing attention by the PEIB through the growing offer, as extracurricular activities for Indigenous and non-Indigenous students in basic and secondary education, of workshops on interculturalism (97 workshops organised in 2016) and on cultural and linguistic revitalisation targeted at Indigenous Peoples with less linguistic presence (52 workshops organised in 2016). Finally, there are at present no initiatives or plans to develop and introduce a specific training on interculturalism for teachers and school leaders, be it as part of initial teacher education or through professional development (also see Chapter 5). However, at the time of the writing of this report, the Centre for Pedagogical Training, Experimentation and Research (*Centro de Perfeccionamiento, Experimentación e Investigaciones Pedagógicas*, CPEIP) was developing plans to address this gap.

The coverage of Indigenous scholarship programmes is low

Only 19.5% of eligible students for the Indigenous Scholarship for basic education and only 41.6% of eligible students for the Indigenous Scholarship for upper secondary education benefit from these financial support programmes (Universidad de Chile, 2006). This is relatively low if it is taken into account that eligibility conditions require students to have grades of 5 or higher. As mentioned above, the scholarship for basic education has been demonstrated to have a positive impact on attendance and drop-out reduction. Increasing coverage of this programme would, therefore, promise high returns in terms of better outcomes for Indigenous students.

Provision of education in rural and remote areas

The lack of a clear strategy for rural education limits the ability of the system to address the needs of rural schools

Chile does not have a comprehensive approach to education in rural and remote areas. There is no national strategy or clear vision on rural education. Some promising initiatives have no continuity as was, for example, the case for the support programme "Accompaniment" (*Acompañamiento*). *Acompañamiento* provided teacher training and technological support to multigrade schools, but it was discontinued after only three years. Other initiatives at the national level aimed at improving education quality in Chilean schools in general, such as the introduction of performance standards for the evaluation of schools or the introduction of performance agreements for school leaders do not sufficiently consider the needs and particular circumstances of multigrade schools (MINEDUC, ACE and ES, 2016).

This lack of a clear policy for rural education is also evident in the lack of attention of teacher education to the needs of rural teachers. Both initial teacher education and professional development do not adequately prepare teachers for their work in rural areas. Although the majority of rural schools offer education in the form of multigrade teaching, there is no specific teacher training on teaching multigrade classrooms (also see Chapter 5). There is, furthermore, scope for improving existing opportunities for teacher

development in rural areas. While by law rural micro-centres should be used to share best practices among teachers and to work on pedagogical strategies to improve student learning, they are mainly used for administrative purposes and for communicating information about procedures (also see Chapter 4). Rural micro-centres, nevertheless, often constitute the only source of support for teachers in rural areas.

A second area where greater policy attention could be needed concerns the state of school infrastructure in rural areas. Despite the availability of resources for rural schools, it was not clear to the OECD review team whether the infrastructure is adequate or in good condition in all schools. Information on the conditions of buildings and sanitary facilities across the country is limited. Moreover, there is still a large gap in technological resources and Internet access between urban and rural schools. Although the gap diminished between 2009 and 2012, it is still large and no initiatives were implemented in 2015 to close this gap further (MINEDUC, ACE and ES, 2016). According to the latest library census, only close to one-third (32.2%) of schools with less than 100 students had a library (Ministry of Education and STATCOM, 2011).

School closures in rural areas and transition to upper secondary education from rural schools require greater attention

One of the biggest challenges for the provision of education in rural areas is low population density. As a result, rural schools are significantly smaller than urban schools. Extremely small school size makes it difficult to maintain a basic infrastructure and teaching force, which encourages school closures and mergers to create some economies of scale. This explains the steady decline of the number of rural schools over time. However, school closures and mergers also pose their own challenges and can have unintended consequences for student learning. There is some evidence that school closure can have a detrimental effect on year retention and school drop-out (Grau et al., 2015). Future closures should, therefore, be particularly attentive to smoothing transitions between schools and to making sure that students have the resources they need to guarantee their continued success in school after they have moved schools. Furthermore, policies to school consolidation need to take into account the wider social function of schools for rural areas and communities.

Attention to rural students' transition to upper secondary education is needed as well. At present, there is a lack of orientation to students in the transition from basic education to upper secondary education. Information is limited and not always accurate in terms of the supply and quality of upper secondary education available to them (Hernández and Raczynski, 2014). Also, there is no specific programme to support students that transition from basic education in rural areas to upper secondary education in urban areas. Some schools offer remedial programmes to students entering upper secondary education during the first months of school, but these programmes are not necessarily targeted to students coming from rural areas and their specific needs, particularly socio-emotional support after leaving home (Hernández and Raczynski, 2014).

Provision and funding of special needs education

The provision of inclusive education for students with special needs faces some challenges

Educational provision for children with permanent disabilities seems to be in short supply and, if available, schools for children with special needs have a low level of

integration. Qualitative evidence suggests that schools select the type of special educational need they respond to depending on their resources for both diagnosing the educational needs of students and attending to the students' special needs (Marfán et al., 2013). As a result, mainstream schools tend not to work with students with permanent disabilities as these imply more specialised resources, greater teaching materials and additional investments in infrastructure.

One specific feature of the design of the PIE programme raises concern. The fact that schools can receive a PIE grant only for up to seven students with special needs per class (five with transitory disabilities; and two with permanent disabilities) introduces a bias against disadvantaged schools as these schools tend to have a higher proportion of students with special needs and a higher proportion of students with permanent disabilities.

The diagnosis of special needs requires improvements

A clear diagnosis is needed for socio-economically vulnerable students. As described above, students from socio-economically disadvantaged backgrounds are significantly more likely to be diagnosed with a permanent special need than students from advantaged socio-economic backgrounds (44% vs. 13%). The size of the difference suggests either a structural problem in poor children's development that needs urgent attention or a bias towards over-diagnosing disadvantaged students with permanent special needs.

When looking in detail at the type of disabilities, there are two important differences that deserve more in-depth analysis. First, students from low socio-economic status are close to 6 times more likely to be diagnosed with a mild cognitive disability than socio-economically advantaged students (34.1% vs. 5.9%) (Marfán et al., 2013). If this gap is that large,[10] this means that urgent action must be taken in early education to prevent that school-age children enter the schools system in such a disadvantage. Second, students from high socio-economic backgrounds are more likely to be diagnosed with attention deficit disorders (ADD) than students from low socio-economic backgrounds. One possible explanation is that, in Chile, ADD must be diagnosed by a psychiatrist. It is likely that well-off parents and schools have more means and resources to access the necessary services than low-income parents and disadvantaged schools. Schools with a low socio-economic student intake then face greater challenges in diagnosing certain special needs as they lack the specialised medical personnel to identify these needs.

The diagnosis of learning disabilities is regulated by law. The law defines the different learning disabilities, stipulates a process to diagnose each one of them and specifies which professional is supposed to make the diagnostic for each of the learning disabilities (e.g. psychiatrist, psychologist, speech therapist). The Ministry of Education also provides schools with guidelines to apply the procedures stipulated by the law. However, schools might not be systematically following the procedures suggested in the law. More than 30% of schools with funding through the PIE programme design their own protocols for detecting learning disabilities (Marfán et al., 2013). This makes it difficult to gain a precise understanding of students' types of educational needs. The lack of systematic application of procedures for diagnosing special needs also creates a considerable risk for the misdiagnosis of certain special needs with consequences for students as they may not get the support they need or as they may be wrongly diagnosed. There is also a risk for the system as a whole considering the funding implications of providing additional resources for special needs students and the possible incentive for schools to diagnose students with special needs to access these resources.

Policy recommendations

Compensatory funding for socio-economic disadvantage and support targeted at disadvantaged students and families

Further develop the monitoring system to follow resources for and educational outcomes of specific groups of students

Chile is investing a significant amount of resources to improve access and quality for vulnerable students. At the same time, the government has a sophisticated evaluation system that measures educational outcomes regularly. However, most of these measures are implemented at the school or regional level which makes it impossible to follow progress of specific groups of students over time. It would be of great value to establish a systematic approach to monitor the educational progress of specific groups of students against educational standards that are common to all students. This would shift attention from the average learning outcomes at the school level to the average learning outcomes of those most in need. Accordingly, Chile should consider further developing its monitoring system so that it provides information on the education outcomes for specific groups in relation to common national benchmarks. Similarly, formative student assessment should be strengthened to inform subsequent learning at the individual level. In this respect, the progressive evaluations (*Evaluación Progresiva*) being developed by the Agency for Quality Education is a promising new development to closely monitor the learning of individual students.

Information for specific groups of students (e.g. socio-economically disadvantaged students, Indigenous students and those living in rural areas) would facilitate the analysis of the particular learning needs of these groups and the pedagogical needs of the schools serving these students. The monitoring system could draw on qualitative information gathered through the school visits of the Agency for Quality Education. Systematic feedback from the teacher performance evaluation system as well as the teacher certification process (System for the Recognition of Teacher Professional Development, *Sistema de Reconocimiento del Desarrollo Profesional Docente*) to be implemented from 2017 onwards could help identify teacher needs in schools that serve a high proportion of vulnerable students. All these insights can inform actions at the level of regions and municipalities as well as individual schools. At the school level, this information can be used to design specific strategies to address particular needs and help to elaborate school improvement plans (PME). Strategies of individual schools can then be shared among schools that serve similar groups of students and that face similar challenges for teaching and learning. England (United Kingdom) provides an example for ways of monitoring attainment and provision of educational strategies for disadvantaged students and of using the resulting information for quality improvement (see Box 3.1).

Improve the incentive structure for teachers to teach in challenging and disadvantaged areas

Although the Chilean system of teacher remuneration already entails a monetary incentive for teachers to work in poor or difficult areas (also see Chapter 5), teacher shortages in schools serving socio-economically vulnerable children are still a challenge. One option to attract more good teachers to poor areas is to complement the financial incentive with non-monetary incentives. For instance, providing teachers with safe housing in rural areas could be a potentially effective incentive, particularly to attract female teachers to rural areas (World Bank, 2009). Other non-monetary incentives that can

Box 3.1. **Monitoring learning and school quality for disadvantaged students: the case of England**

In 2011, England's Department for Education introduced the Pupil Premium, an additional funding scheme provided to schools attending disadvantaged students (Department of Education, 2015). Like SEP, Pupil Premium funds are provided on a per-student basis. Also as with SEP, schools have autonomy on how these resources are spent. Schools are expected to spend these resources on strategies that better support learning for disadvantaged students and close the achievement gap between disadvantaged and advantaged students. Since 2012, schools are required to publish online information about how the Pupil Premium is used and the interventions they are implementing to address the needs of disadvantaged students as well as the impact they are having (Department of Education, 2015).

Schools receiving the Pupil Premium are required to monitor and report achievement of all students and to report achievement specifically of disadvantaged students. The inspection agency Ofsted (The Office for Students in Education and Children) closely monitors the attainment and progress of disadvantaged students and how schools are addressing the needs of disadvantaged students (Ofsted, 2015). For example, inspectors evaluate whether or not school leaders have a special focus on improving learning of disadvantaged students, if the schools review disadvantaged students' progress on a regular basis and how they develop strategies with this information, and if teachers understand how best to meet the needs of disadvantaged students.

If the inspection identifies issues regarding the provision for disadvantaged students, then a more thorough review (the pupil premium review) is conducted. The purpose of this review is to help schools to improve their pupil premium strategy so that they "spend funding on approaches shown to be effective in improving the achievement of disadvantaged pupils" (National College for Teaching and Leadership, 2015).

The Department for Education uses information reported by schools to highlight and reward those schools reaching good results for disadvantaged students (*www.gov.uk/government/publications/pupil-premium-schools-with-good-disadvantaged-pupil-results*). Schools demonstrating good progress in reading, writing and mathematics for disadvantaged students and consistently high or improving attainment for other students, receive an award (Pupil Premium Award). This serves as repository of good practices for other schools aiming at improving attainment of disadvantaged students.

An independent implementation evaluation of the programme found that schools mostly use the additional funds from this Pupil Premium to support for disadvantaged students on learning in the curriculum and socio-emotional support (Carpenter et al., 2013). Specific interventions aimed at disadvantaged students include tutoring in out-of-school hours; mentoring for social skills such as confidence, organisation and self-esteem; classroom and homework support; subsidised learning devices such as laptops or tablets; and subject specific intervention sessions (see examples of strategies and plans reported by schools: *http://oldburyacademy.co.uk/index.php/about-us/pupilpremium* or *www.cockermouthschool.org/about-us/Pupil%20Premium/Pupil_Premium_2015-16.pdf*). Also, schools are encouraged to use the Teaching and Learning Toolkit (*https://educationendowmentfoundation.org.uk/evidence/teaching-learning-toolkit*), a guidance that shows cost-effective strategies to improve the attainment of disadvantaged students.

Box 3.1. **Monitoring learning and school quality for disadvantaged students: the case of England** *(cont.)*

Recent evidence shows that the gap in grades across eight subjects has been narrowing in the last four years (Sutton Trust and Education Endowment Foundation, 2015). While this cannot be interpreted as causal evidence of the impact of Pupil Premium, it does suggest that it is a promising policy.

Source: Department of Education (2015), *Policy Paper – 2010 to 2015 Government Policy: Education of Disadvantaged Children*, *www.gov.uk/government/publications* (accessed on 15 March 2016); Ofsted (2015), *School Inspection Handbook*, *www.gov.uk/government/publications* (15 March 2016); National College for Teaching and Leadership (2015), *Pupil Premium Reviews*, *www.gov.uk/guidance/pupil-premium-reviews*; Carpenter, H. et al. (2013), *Evaluation of Pupil Premium: Research Report*, *www.gov.uk/government/uploads/system/uploads/attachment_data/file/243919/DFE-RR282.pdf*; Sutton Trust and Education Endowment Foundation (2015), *The Pupil Premium: Next Steps*, *www.suttontrust.com/wp-content/uploads/2015/06/Pupil-Premium-Summit-Report-FINAL-EDIT.pdf*.

be offered are related to teachers' career development. Time spent in difficult contexts could count towards teachers' career progression. For example, teachers could be given placement priority after demonstrating two or three years of service in a school serving a high proportion of priority students.

Consider the redesign of conditional cash transfers for socio-economically disadvantaged students

The conditional cash transfer model built into the Ethical Family Income (*Ingreso Ético Familiar*, IEF) programme is promising as it combines incentives for both attendance and achievement. Evidence from conditional cash transfers (CCTs) in other countries show that conditions on achievement can produce larger effects on enrolment and drop-out (Saavedra and García, 2013). The new bonus for students performing in the top 15% of their class can be expected to produce positive results. However, the government may consider additional achievement conditions such as year promotion or graduation which can be highly effective on longer-term achievement outcomes, particularly for upper secondary level students. Special attention should be paid to the results of the impact evaluation that was being undertaken at the time of the drafting of this report. Box 3.2 provides a successful example of a low cost redesign of CCT conditions with large impact on upper secondary graduation and tertiary enrolment in Colombia.

Approaches to the education of students from Indigenous communities

Strengthen training for traditional teachers serving Indigenous students as well as general teacher training on interculturalism

Given the low educational background of traditional teachers and the fact traditional teachers do not always pair up with a regular teacher, Chile should strengthen the pedagogical training of traditional teachers. Most traditional teachers do not have access to formal training since they do not fulfil the relevant prerequisites and hold the necessary qualifications. Traditional teachers, therefore, require a tailor-made training programme that addresses their pedagogical needs. One option lies in promoting the creation of specialised technical-pedagogical advisors (ATPs) and independent advisory services (ATE) for traditional teachers. Another option would be to incentivise the participation of accredited institutions of tertiary education in the design and implementation of

Box 3.2. **Differential effects of Conditional Cash Transfers in Colombia**

In 2005, the city of Bogotá experimented with a pilot project to improve the design of its Conditional Cash Transfers (CCTs). The programme "Conditional Subsidies for School Attendance" (*Subsidios Condicionados a la Asistencia Escolar*) aimed to reduce school drop-out and child labour. The pilot consisted of an experiment with three types of CCTs: i) the basic conditional cash transfer model providing students with a regular monthly payment of USD 15 conditional on regular school attendance, and payments on a bi-monthly basis; ii) the savings model providing students with part of the monthly payment (USD 10) on a bi-monthly basis, with the rest (USD 5) of the payment being withheld in a savings account. If students demonstrated regular attendance throughout the school year, then the savings (USD 50) were available to them at the end of the year; and iii) the tertiary model similar to the savings model with students receiving a lump sum of USD 300 in the case of successful graduation instead of receiving the savings at the end of the school year. If students enrolled in a tertiary education institution, they received the funds immediately; otherwise, they received the funds after a year of graduation.

A Randomized Control Trial (RCT) was conducted by Barrera et al. (2011) to estimate the impact of these three models. Students were randomly assigned to four different groups: basic treatment, savings treatment, tertiary treatment or control group. Results of the study show that the three models increased school attendance (between 3 and 5 percentage points) and that both the savings and the tertiary treatments had larger effects on school enrolment on the following school year compared to the basic treatment. While the basic CCT increased enrolment by 1 percentage point, the savings and tertiary treatment increased enrolment by about 4 percentage points. Moreover, the tertiary model had a large impact on tertiary enrolment (48.9 percentage points). This illustrates that with the same financial resources, but with additional conditions related to achievement, more leverage of CCTs can be obtained to improve longer-term educational outcomes.

Source: Barrera, F. et al. (2011), "Improving the design of conditional transfer programs: Evidence from a randomized education experiment in Colombia", *American Economic Journal: Applied Economics*, Vol. 3, No. 2, American Economic Association, pp. 167-195.

pedagogical courses for traditional teachers. Also, it would be important to adequately prepare regular teachers to work with traditional teachers in a team.

If the intercultural component of the Bilingual Intercultural Education Programme (PEIB) is to be implemented successfully, all teachers need further tools and competencies to develop the intercultural competencies of their students. Currently the number of voluntary projects to this end is extremely low. It would, therefore, be important to develop a larger strategy and to incorporate and strengthen the intercultural component in both initial teacher education and professional development for in-service teachers, for example.

Consider giving Indigenous communities more autonomy to develop and implement their own pedagogical projects

Many Indigenous communities lament the fact that the education system does not adequately reflect their ways of thinking, learning and teaching, both in the form of learning goals and in the pedagogical methods used to achieve them. It is clear that there are learning standards that all Chilean students must achieve, and that this is part of an equality of opportunities approach. However, allowing for more autonomy for Indigenous

communities on how to achieve student learning does not mean abandoning national standards. National standards can still be required, but with greater attention to the particular needs of Indigenous communities in achieving these standards.

Chile could develop a pilot project that involves the creation of a private-subsidised institution that is operated by an Indigenous community. The key would be to maintain overall national standards, but to allow the school and the community more autonomy in developing its pedagogy and ways of teaching and learning. Colombia again provides an example of how national standards can be achieved in a context of greater autonomy for Indigenous communities (see Box 3.3). The pilot project should be subject to a sound evaluation and the experience should inform further strategies. Plans to reform the administration of public education through the New Public Education process, for example, would then provide an opportunity to give Local Education Services the freedom to operate such schools and support them with adequate teacher training, school materials, etc. This could create a way for the school system to be more responsive to the needs of Indigenous communities, but to maintain minimum national standards at the same time. An OECD Review of Indigenous Education in Canada highlighted the need to give visibility to Indigenous cultures in schools and classrooms, the value of adopting Indigenous cultural practices and including Indigenous histories and cultures in the curriculum, the importance of using curriculum resources developed by and reflecting Indigenous peoples and the benefit of providing learning opportunities in Indigenous languages (OECD, 2017).

Implementing steps to increase the participation of Indigenous communities in local school governance should be another important element of a strategy to better meet the needs of Indigenous communities. School providers (and the new Local Education Services in the case of a governance reform) should support their schools with a high proportion of Indigenous students in involving Indigenous families in schools' and parents' councils. The OECD Review of Indigenous Education in Canada highlighted the importance of giving visibility to Indigenous people in leadership or governance roles within schools, the value of involving Indigenous students' families with the school and the significance of roles for elders in the school (OECD, 2017). The Agency for Quality Education could play a key role in supporting schools to involve parents and students from Indigenous communities and in spreading and disseminating good practices (e.g. through the Agency's learning visits) and in monitoring the involvement of Indigenous communities in local school governance to introduce further measures, if needed. Chapter 4 provides some general recommendations on community participation in local school governance and Box 4.3 in that chapter gives an interesting example of Learning and Change networks in New Zealand that seek to establishing learning partnerships with a particular focus on disadvantaged communities.

Improve the monitoring of Indigenous students' school outcomes and address potential biases in student assessment against Indigenous students

As elaborated above, Chile should further develop its present monitoring system so it ensures the availability of timely indicators of vulnerable students' school progress and performance, including that of Indigenous students. Such information is crucial to better diagnose the specific needs of Indigenous students, to identify major challenges, and to design specific strategies and interventions that respond to students' needs based on this knowledge. Also, it is important to address the potential bias of national standardised assessments so they do not disadvantage students from Indigenous communities. As OECD (2013c) highlights, assessment systems should respond to individual learner needs

Box 3.3. **Etnoeducación: a promising experience in Colombia for Indigenous students**

Since the late 1970s, Colombia has built into the educational system a specific policy for Indigenous communities with the purpose of respecting and maintaining Indigenous culture and values. In the early 1990s, this was formalised in the General Education Law with the creation of ethnic education (*etnoeducación*). The main purpose is to provide more autonomy to Indigenous communities in the design and implementation of their educational programmes and to promote the use of their own languages and the preservation of Indigenous cultural identity (Rodríguez, 2011; UNESCO, 2005).

The model of *etnoeducación* has not reached all Indigenous communities in Colombia, and has experienced a heterogeneous implementation process. It has been criticised for not always respecting the experience and knowledge of Indigenous communities by national or local authorities (Castillo, 2008; UNESCO, 2005). However, there are successful experiences suggesting that, when implemented appropriately, it can have a positive impact on students and communities. Moreover, Palacios Quejada et al. (2015) found that, on average, *etnoeducación* has a positive effect on learning in basic competencies such as mathematics and science (between 0.12 and 0.16 standard deviations of standardised test scores). Successful cases can, therefore, be expected to produce larger effects.

Qualitative research shows positive experiences with the implementation of educational projects within Indigenous communities in Colombia. For example, UNESCO (2008) presents an in-depth case study of a *wayüu* community in Guajira in the north of Colombia that was able to integrate Indigenous values and traditions into the curriculum of different areas: language, science, history and art. In this case, teachers developed teaching practices that incorporate ancestral traditions of *wayüu* culture, such as consulting with older people, doing observations or hands-on activities. Students work on research projects that integrate different areas. For example, they conduct research on medical plants, their uses and preparations in their communities, but also they study the plants in art class and use them to create artisan pieces such as traditional bags (*mochilas*). Teachers also make use of traditional pedagogical materials such as mud figures (*wayuunkeera*).

Both Spanish and Indigenous language (*Wayuunaiki*) is taught throughout all years (from Year 1 to upper secondary education). The study of *wayüu* culture and cosmovision is embedded in different subject areas. For example, in science, students analyse and contrast ancestral knowledge about the universe with occidental science and technology. In language class, students learn about *wayüu* traditions, how life and death are considered, their connection with earth and nature, how different gods emerged in their history, etc.

Another recent successful case is that of the Nasa community in the Valle del Cauca in the south-west of Colombia. The school principal, Anibal Bubu, belongs to the Nasa ethnic group and was elected by the community to run the school. The school has been ranked among the best public schools in the department of Valle del Cauca for several years, and Bubu was nominated as the best school principal by Compartir Foundation in 2013 (Ministry of Education, 2013).

The educational organisation led by Bubu has over 1 800 Indigenous students distributed across 56 rural schools. The school curriculum combines basic subject areas mandated by the national government with over 20 traditional areas that allow students to be proficient in their native language and at the same time strengthen their culture, values and their relationship with nature and "mother earth" (Fundación Compartir, 2014).

Box 3.3. **Etnoeducación: a promising experience in Colombia for Indigenous students** *(cont.)*

The curriculum includes both Spanish and native language throughout all years. The area of Indigenous Dignity includes both universal history and their own history; also, they study both the Colombian constitution and Indigenous legislation. They have subjects such as medicine, cosmovision and own (Indigenous) thinking, along with philosophy, physics and chemistry. The area of Man-Mother Earth includes geography as well as the relationship and interaction with earth, and environmental preservation. As in the case of Guajira, students also work in research projects that strengthen their relationship with "mother earth". For instance, they work in productive agricultural projects that include a cycle of feeding cattle, using manure as organic fertiliser and growing vegetables and herbs.

This curriculum reflects the solution to a permanent tension in Indigenous education: being able to provide "high-quality" education in occidental terms while at the same time preserving and developing traditional values and culture. This can be clearly seen in Bubu's own words: "although this project has been created by and for Indigenous, this does not mean that we do not have the need to relate with non-Indigenous knowledge and traditions, that is why we designed a curriculum that responds to the globalised world, and at the same time serves our particular realities" (Fundación Compartir, 2014).

Source: Rodríguez, S.M. (2011), *La Política (Etnoeducación) para Pueblos Indígenas en Colombia a partir de la Constitución de 1991* [*The Etnoeducation Policy for Indigenous Peoples in Colombia since the 1991 Constitution*], Universidad Nacional de Colombia [National University of Colombia], Bogotá; UNESCO (2005), *Políticas educativas de atención a la diversidad cultural: Brasil, Chile, Colombia, México y Perú* [*Education policies to address cultural diversity: Brazil, Chile, Colombia, Mexico and Peru*], *www.unesco.org/new/es/unesco/resources/publications/unesdoc-database/*; Castillo, G.E. (2008), "Etnoeducación y políticas educativas en Colombia: la fragmentación de los derechos" ["Ethnic education and education policies in Colombia: The fragmentation of rights"], *Revista Educación y Pedagogía* [*Education and Pedagogy Journal*], Vol. 10, No. 52, Universidad de Antioquia, Colombia, pp. 15-26; Palacios Quejada, G., F. Sánchez Torres and C. Córdoba (2015), "Etnoeducación y desempeño escolar en la región pacífica colombiana" ["Etnoeducation and school performance in the Pacific region of Colombia"], *Documentos CEDE* [*CEDE Documents*], No. 36, October, Centro de Estudios sobre Desarrollo Económico [Studies Centre on Economic Development], Faculty of Economics of Universidad de Los Andes, Bogotá; UNESCO (2008), *Educación y Diversidad Cultural: Lecciones desde la Práctica Innovadora en América Latina* [*Education and Cultural Diversity: Lessons from Innovative Practice in Latin America*], *www.unesco.org/new/es/unesco/resources/publications/unesdoc-database/*; Ministry of Education (2013), "Educación media técnico profesional: Hallazgos del seguimiento a una generación" ["Technical-professional secondary education: Findings of following one generation"], *Serie Evidencias* [*Evidence Series*], 20, *http://centroestudios.mineduc.cl* (accessed on 15 March 2016); Fundación Compartir (2014). *Nuestros Mejores Rectores: Experiencias Educativas Ejemplares* [*Our Best School Leaders: Outstanding Educational Experiences*], Fundación Compartir [Compartir Foundation], Bogotá.

and school community contexts, and countries need to design assessment strategies that suit the needs of different learner groups. Inclusive student assessment systems should be based on the principle that all students have the opportunity to participate in educational activities, including assessment activities, and to demonstrate their knowledge, skills and competencies in a fair way. The format of standardised assessments should be sensitive to all groups of students and avoid biases, including by cultural background, and students should be offered a range of different assessment formats and tasks (e.g. test-based, performance-tasks, oral, written). Inclusive assessment should also involve studies on differential test functioning for particular groups and the provision of specific test accommodations where necessary. It may also be necessary to further ensure inclusive assessment practices by teachers (e.g. by including sensitivity to cultural and linguistic aspects of assessment in teacher education).

Provision of education in rural and remote areas

Bring rural education to the national debate on education policy and design a national education strategy for rural areas

There is a clear need to undertake a strategic reflection on education in rural areas to establish a comprehensive strategy for rural education. This should address issues such as:

- **Teacher training:** there is a need to provide high-quality professional development to teachers in rural areas. The online training programme designed by the Centre for Pedagogical Training, Experimentation and Research (CPEIP) is a good opportunity to make this happen. The programme diagnoses teachers' pedagogical needs and, based on this information, provides a portfolio of online courses. In addition, if multigrade schools continue as a strategy in rural areas, it would be beneficial to include multigrade methodologies in the curriculum of both initial teacher education and teacher professional development. Rural micro-centres should be monitored more closely and supported to make sure that they focus sufficiently on pedagogical innovation and less on administrative issues (also see Chapter 4 and Box 4.3 on examples of peer learning among schools).
- **Teacher incentives:** it is not clear how effective the current bonus for teachers working in rural areas is. Additional incentives should be considered (such as the non-monetary incentives for teachers serving schools with socio-economically disadvantaged students discussed above).
- **School materials:** teacher guides and student working books are only available on line. This poses a challenge as not all schools have access to the Internet and/or printing services. A special effort should be made to guarantee that teachers and students have the materials they need.
- **School organisation:** extremely small schools are not viable financially and are unlikely to provide the best possible learning environments. There are, then, strong arguments for reorganising small schools so they better serve their students. This reorganisation, however, needs to be implemented so it does not put at risk students' continuation in the education system. The government may consider expanding or revising remedial programmes that are in place for students who are in the transition to upper secondary education and make sure that students coming from rural areas receive special attention, particularly those who leave their homes to move schools and who may need stronger socio-emotional support.

Provision and funding of special needs education

Improve the process of diagnosis for students with special needs, paying particular attention to the needs of disadvantaged children

The School Integration Programme (PIE) has been successful at serving a significant number of students with special needs. However, it is not clear if all students with special educational needs are benefitting from the programme and there are some special needs that might be over-diagnosed. Failure in the diagnosis of children with special needs has high costs, both for individual students and for the education system as a whole. Resources may not be used for those in need. And students may be wrongly labelled and not receive the motivation and challenge they need, if misdiagnosed. Chile should, therefore, develop a more structured and integrated approach to the diagnosis of special needs. This will entail the more systematic implementation of the law stipulating procedures to undertake

the diagnostic and the development of more detailed standardised protocols for diagnosis and treatment.

As part of a more structured approach to the diagnosis of special needs, Chile should implement processes and structures to ensure the provision of timely diagnosis and services to socio-economically vulnerable children. Disadvantaged children need adequate access to the diagnosis of their learning needs. This requires good co-ordination with the health system so that mental health services are available to disadvantaged families, both for diagnosis and treatment. Chile should, furthermore, analyse the gap in the diagnosis of special needs between different socio-economic groups and use this information to address this gap. If differences in diagnosis are found to begin before basic education, it would be important to make sure that high-quality early childhood care and education is accessible to all children from socio-economically vulnerable families.

Improve the provision of special needs integration for students with permanent disabilities and for students in rural areas

To boost the provision of services for children and youth with permanent disabilities and to improve the quality of education for these students, authorities should make sure that mainstream schools have the resources as well as incentives in place to serve these students. Chile could consider introducing monetary incentives to those mainstream schools that enrol and retain students with permanent disabilities (to take account of the associated higher educational costs) and make sure they are not penalised in the accountability system (e.g. for a lower SIMCE score). Adjusting funding through the School Integration Programme (PIE) to the severity or type of disability would be another option. A more refined funding approach (with funding associated with type of disability) could recognise financially the additional investments that are needed to provide a quality service to students with permanent disabilities in terms of infrastructure, educational materials and human resources. Furthermore, special schools could take on a support function to aid regular schools in the integration of students with permanent disabilities while remaining in place for students with severe disabilities.

In rural areas, it is difficult to implement the School Integration Programme (PIE) due to funding constraints. Given the low enrolment rates, funding through PIE may not be sufficient to cover the specialised human resources and educational material and facilities that are needed to provide an adequate education for students with special needs. To improve the education of children with special needs in rural areas, Chile could provide professional development in special education to rural teachers, for example through the online course currently being introduced by the Ministry of Education. In addition, rural micro-centres could offer an opportunity to bring specialised resources for special needs education (e.g. teaching materials and training from specialists in special needs education) as part of its greater focus on improving pedagogical processes as recommended above.

Finally, the design of the PIE programme should be adjusted so that the limit in the number of students per class who can receive a PIE grant varies according to the level of vulnerability of the school, with a greater limit for disadvantaged schools.

Notes

1. The regions are Arica-Parinacota, Tarapacá, Antofagasta, Atacama, Valparaíso, Coquimbo, Santiago, Bío Bío, Araucanía, Los Lagos, Los Ríos, Aysén and Magallanes.
2. The conceptual definition of the study and the instrument used to compile information were based on the International Classification of Functioning, Disability and Health (ICF) promoted by the World Health Organization (WHO). The study defined disability as "a dynamic and relational concept that links individuals' health status to the existence of a set of contextual, attitudinal and environmental barriers leading to restrictions on their full and active participation in society" (SENADIS, 2016).
3. School fees were allowed for public schools offering upper secondary education.
4. Chile's social protection system uses the "Protection System Card" (*Ficha de Protección Social*, FPS) as a targeting mechanism for different social services. FPS information is used to identify vulnerable students. When this information is not available, other variables associated with poverty and vulnerability are used (*www.junaeb.cl/como-funciona-el-sinae*).
5. Data provided by the Ministry of Education to the authors of the report.
6. Students enrolled in Year 5 through Year 12 who are in the top 15% of the school class performance receive an additional cash payment on top of the cash transfer conditional on regular attendance.
7. The programme provides financial resources to schools through competitive funds (*proyectos concursables*).
8. Under a different name: *Programa de Mejoramiento de la Calidad y Equidad de la Educación Básica Rural – MECE/Básica Rural* (Programme for Improving the Quality and Equity of Basic Rural Education MECE, Rural basic education).
9. An impact evaluation was under implementation at the time of the writing of this report and results were not available then (IDB, 2013).
10. Evidence from Latin America shows that socio-economic gaps in cognitive development start in early childhood get larger as children grow and do not close once children enter primary school (Schady et al., 2014).

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Chapter 4

School organisation and operation in Chile

This chapter analyses how school organisation and operation in Chile can contribute to the effective use of resources at the school level. It deals with the distribution of responsibilities for school organisation and operation and analyses school quality assurance and development. Furthermore, it discusses the approach to school leadership and how resources in schools are organised to create environments conducive to effective teaching and learning. The chapter places particular emphasis on areas of priority for Chile such as the approach to external school evaluations, the effectiveness of school improvement plans and the operation of external technical-pedagogical support services for schools. The chapter also reviews the organisation of the school leadership profession, the preparation of school leaders, local capacity to manage and support school leadership and school-community relations.

The statistical data for Israel are supplied by and under the responsibility of the relevant Israeli authorities. The use of such data by the OECD is without prejudice to the status of the Golan Heights, East Jerusalem and Israeli settlements in the West Bank under the terms of international law.

This chapter analyses how school organisation and operation in Chile can contribute to the effective use of resources at the school level. Among other things, it considers how responsibilities for school organisation and operation are distributed; how school quality assurance and development are structured (e.g. school self-evaluation, externality in quality assurance); how school leadership is organised, distributed and prepared; and how resources in schools are organised to create environments conducive to effective teaching and learning (e.g. outreach to parents and communities).

Context and features

Distribution of responsibilities

Since the market-oriented reforms of the 1980s, schools in Chile have been operating in a fairly decentralised environment, but within a centrally regulated framework. The Ministry of Education is responsible for co-ordinating and regulating all aspects regarding education, designing policies, developing programmes, defining quality standards (including the curriculum), and recognising schools. Through its regional and provincial bodies – the Education Regional Secretariats (*Secretarías Regionales Ministeriales*, SEREMI) and the Education Provincial Departments (*Departamentos Provinciales de Educación*, DEPROV) – the Ministry oversees the implementation of education policy across the country and provides direct technical and pedagogical support to schools. With the implementation of the 2009 General Education Law (*Ley General de Educación*), three further central bodies were created to provide advice for policy and to strengthen evaluation and accountability for the delivery of education: the National Education Council (*Consejo Nacional de Educación*, CNED), the Agency for Quality Education (*Agencia de Calidad de la Educación*, ACE) and the Education Superintendence (*Superintendencia de Educación*). Together with the Ministry of Education, these institutions form the Education Quality Assurance System (*Sistema Nacional de Aseguramiento de la Calidad de la Educación Escolar*) (see also Chapter 1).

Within this central framework and these central structures, the operation of schools that receive public funding is the responsibility of public and private-subsidised school providers (*sostenedores*). There are also independent private providers that do not receive public funds, but these operate with considerable more autonomy even if they have to comply with a number of central regulations to receive official recognition (e.g. follow the national curriculum, educational project, adequate staffing). In the public sector, schools are administered by municipalities and their municipal education administration departments (*Departamentos de Administración de Educación Municipal*, DAEM, or *Departamentos de Educación Municipal*, DEM) or municipally controlled non-profit corporations with delegated authority (*Corporaciones de Administración Delegada*). In November 2015, the Chilean government presented draft legislation that envisages the recentralisation of public schools through a national system of public education (*Sistema Nacional de Educación Pública*) and the creation of around 70 Local Education Services

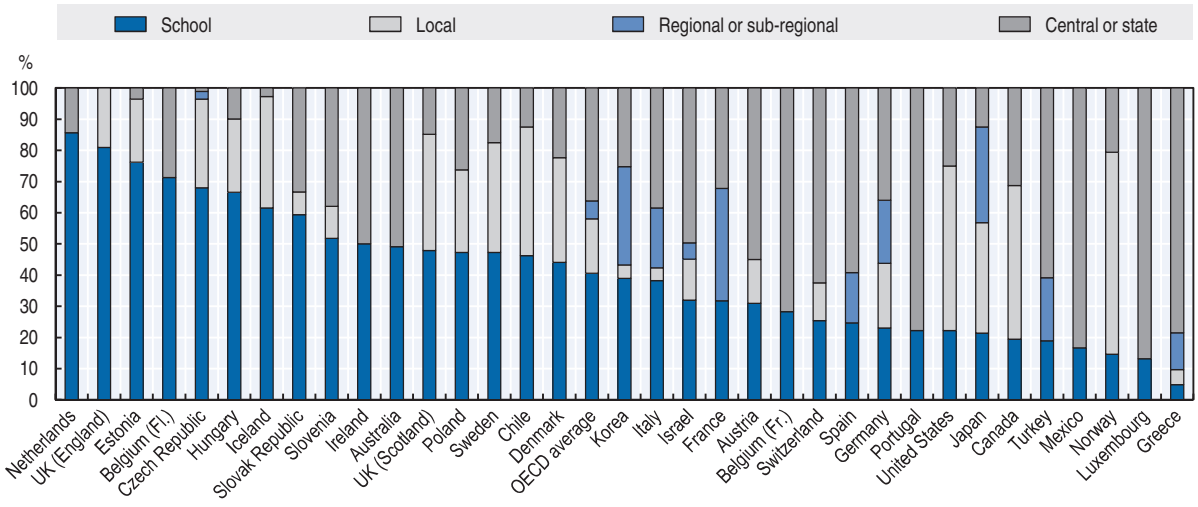
(*Servicios Locales de Educación*). These local education services are planned to take over the responsibility for the operation of public schools from municipalities and are to be administered through a Directorate of Public Education (*Dirección de Educación Pública*, DEP), a body within the Ministry of Education (see Chapter 1). In the subsidised private sector, schools are managed individually or as a group of schools by a non-profit or for-profit organisation. With the implementation of the Inclusion Law (*Ley de Inclusión*), all private providers that receive public funding will have to operate on a non-profit basis only (see Chapter 1). All school providers are responsible for meeting and maintaining the requirements for the official recognition of their establishments, for organising and managing the staff, infrastructure, equipment and teaching materials of their schools, and for accounting for the academic performance and use of public resources of their institutions. As specified in the General Education Law, school providers have the right to establish and implement an educational project (*Proyecto Educativo Institucional,* PEI) and to establish plans and programmes for their schools with the involvement of the school community (see Chapter 1).

Individual schools are responsible for the implementation of their school educational project (PEI) to offer an education that complies with the overall normative framework. Schools are therefore typically responsible for decisions directly related to the implementation of the school project, such as class size (within the regulated minimum and maximum size), student grouping, support for students with learning difficulties, school leadership arrangements, and the use of school facilities. In addition, school providers may delegate further tasks and responsibilities to schools, while retaining the final overall responsibility for the operation of their schools. For example, schools may make suggestions for staffing decisions, but the school provider will take the final decision. The precise distribution of tasks and responsibilities between school providers and schools, and therefore the degree of school autonomy for the use and management of resources, will always depend on individual school providers and their schools (MINEDUC, ACE and ES, 2016; Santiago et al., 2013).

Administrative data from the OECD *Education at a Glance 2012* illustrate the distribution of tasks and responsibilities in the public school sector between the central, municipal and school levels. According to this survey, 13% of decisions in public lower secondary education are taken at the central level (OECD average: 24%), while local authorities and schools take 41% and 46% of key decisions respectively (OECD average: 17% and 41% respectively) (see Figure 4.1). The data thus demonstrate the important role of school providers in education governance in Chile. Overall, school autonomy is comparable to other OECD countries. The level of school autonomy, however, differs greatly across different domains (see Annex 4.1). While schools hold full responsibility for decisions related to the organisation of instruction (OECD average: 75%), and take 60% of decisions related to planning and structures (OECD average: 24%), they make only 25% of decisions related to personnel management (OECD average: 31%) and no decisions related to resource management (OECD average: 32%) (OECD, 2012a, Indicator D6, Tables D6.2a and D6.2b).[1]

Regulations for some aspects of the operation and organisation of schools differ between the public and the private-subsidised sectors, thus giving school providers and schools in both sectors somewhat different levels of autonomy. This concerns in particular the regulations for staff and the purchase of goods and services. In the public sector, teachers and principals are subject to the Teacher's Statute (*Estatuto Docente*) that specifies

Figure 4.1. **Percentage of decisions taken at each level of government in public lower secondary education, 2011**



Note: Countries are ranked in descending order of the percentage of decisions taken at the school level. This indicator shows where key decisions are made in public institutions at the lower secondary level of education. The indicator does not capture the totality of decisions made within a school system. Instead, a representative set of 46 key decisions, organised across four domains, are considered. Responses were compiled in each country by a panel of experts representing different levels of the decision-making process at the lower secondary level. Information on the composition of these panels and the methods and process used to complete the survey can be found in the "Notes on methodology" in Annex 3, available at *www.oecd.org/edu/eag2012*.
Source: OECD (2012a), *Education at a Glance 2012: OECD Indicators*, *http://dx.doi.org/10.1787/eag-2012-en*, Table D6.1.

certain procedures for recruitment, dismissal and remuneration that school providers need to comply with and thus limit the role of school providers for determining the working conditions of teachers and school leaders (Weinstein et al., 2011). The recruitment of support staff is regulated through the Labour Code (*Código de Trabajo*). There are also some differences in the regulations for personnel management between DAEMs (or DEMs) and municipal corporations with delegated authority. The purchase of goods and services is regulated through the Purchasing Law (*Ley de Compras*). In the private-subsidised sector, all staff, including teachers and principals, is subject to the Labour Code. The purchase of goods and services is not regulated further beyond the general conditions related to obtaining public subsidies (MINEDUC, ACE and ES, 2016; Santiago et al., 2013).

School leadership

Profile

As specified in the Teacher's Statute, school principals in public and private-subsidised schools are responsible for the leadership, administration, supervision and co-ordination of education, which includes holding responsibility for teachers, administrative and other support staff, and students. The main task of school principals is the implementation and management of the school educational project (PEI). For public schools, the Teacher's Statute further specifies that school principals should lead the administrative and financial management of the school and meet the functions and responsibilities attributed by law. The Teacher's Statute lays out the minimum function of schools principals in both public and private-subsidised schools. Accordingly, all school principals should at least develop, monitor and evaluate the goals and objectives of the school, the study plans and curricula and strategies for their implementation; organise

and guide the technical-pedagogical work and professional development of teachers; and ensure that parents and guardians receive regular information on the operation of the school and the progress of their children. For principals of public schools, the Teacher's Statute stipulates further administrative and financial responsibilities. Further administrative tasks include organising, supervising and evaluating the work of teachers, suggesting the dismissal of up to 5% of teachers with a poor evaluation, proposing staff for recruitment and replacement, providing input in the selection of teachers, proposing salary allowances for teachers, appointing and dismissing other school leaders, and promoting a good school climate. Financial responsibilities include assigning, managing and controlling the resources allocated to the school in accordance with legislative requirements.

Different sets of school leadership standards provide guidance for school leaders about the role they should fulfil. In a shift from the traditionally administrative and managerial role of school leaders, all of these frameworks and standards emphasise school leaders' role as pedagogical leaders. A first set of standards, the Good School Leadership Framework (*Marco para la Buena Dirección*) published by the Ministry of Education in 2005 was updated with a new set of standards in 2015 (*Marco para la Buena Dirección y el Liderazgo Escolar*). The new school leadership standards have been designed to support school leaders in their self-reflection, self-evaluation and professional development; to establish a common language around school leadership that facilitates reflection of school leadership within the school community; to guide the initial preparation and professional development of school leaders; to provide a reference for the recruitment and evaluation of school leaders; to facilitate the identification of effective school leaders and to spread good practices; and to promote shared expectations about school leadership and provide a reference for professional learning. They are not prescriptive, but should be a common reference that is adapted to local contexts. To reflect the contextual nature of school leadership, the standards distinguish conceptually between "practices" and "competencies". They describe practices, personal resources, competencies and knowledge that form the basis of successful school leadership. Practices entail five dimensions: i) constructing and implementing a shared strategic vision; ii) developing professional competencies; iii) leading processes of teaching and learning; iv) managing the school climate and the participation of the school community; and v) developing and managing the school. Personal resources comprise three areas: i) ethical values; ii) behavioural and technical competencies; and iii) professional knowledge (Ministry of Education, 2015a).

In addition to these Good School Leadership Frameworks, Chile has developed different sets of performance standards to guide school evaluation processes. In 2006, the Ministry of Education developed an evaluation framework for a system of self-improvement in schools that has now been discontinued (*Sistema de Aseguramiento de Calidad de la Gestión Escolar*, SACGE) (Santiago et al., 2013). In 2014, the Ministry of Education published newly developed Indicative Performance Standards for Schools and School Providers (*Estándares Indicativos de Desempeño para Establecimientos Educacionales y sus Sostenedores*). These new performance standards include four domains: leadership, pedagogical management, professional development and school climate, and resource management. The "Leadership" domain includes the following subdomains: Leadership of the school provider (6 standards); Leadership of the school principal (7 standards); and Planning and management of results (6 standards). The "Pedagogical Management"

domain includes the following subdomains: Curriculum management (7 standards); Teaching and learning in classrooms (6 standards); and Support for the development of students (7 standards). The "Professional Development and School Climate" domain include the following subdomains: Professional development (7 standards); School climate (7 standards); and Participation and school democracy (6 standards). The "Resource Management" domain include the following subdomains: Human resource management (9 standards); Financial management (6 standards); and Management of educational materials (5 standards). For the full set of performance standards, see *http://archivos.agenciaeducacion.cl/documentos-web/Estandares_Indicativos_de_Desempeno.pdf*.

The Performance Standards for Schools and School Providers seek to provide further guidance for schools and school providers on how to improve their institutional management processes (e.g. through self-evaluations) and for defining goals and actions (e.g. through improvement plans). At the same time, they provide a framework for the Agency for Quality Education to implement external school evaluations (*evaluaciones indicativas de desempeño*) as part of the Education Quality Assurance System (Ministry of Education, 2014).

Further leadership roles exist in Chile's schools. This includes the function of deputy principals (*subdirectores*), heads of technical-pedagogical units (*jefes de unidades técnico-pedagógicas*) and general inspectors (*inspectores generales*) that have been established by law as part of the teacher career. As specified in the Teacher's Statute, school principals are free to delegate their responsibilities to other school leadership staff. Heads of technical-pedagogical units are typically in charge of pedagogical and curricular issues, general inspectors take on responsibilities for a range of organisational aspects such as student admission, staff and class management and school discipline. Besides these legally established roles, teachers may take on further administrative or technical-pedagogical leadership roles, such as the head of a department or the head of an educational cycle. The actual organisation of school leadership structures and the distribution of tasks in schools are not defined centrally, but by school providers and schools themselves. School leadership structures can therefore differ between schools, also depending on aspects such as the type of providers (public or private-subsidised), and school characteristics (e.g. level of autonomy, capacity, resources, school size, priorities, etc.). As the size of schools grows, and in higher levels of education, leadership structures tend to be more elaborate. By contrast, rural schools with a small number of students and teachers are usually managed by a teacher that takes on the leadership role. Teachers can also provide advice on pedagogical issues through the school's teachers' council (*consejo de profesores*) which all schools should establish by law.

According to data provided by the Ministry of Education for 2016 based on the Student General Information System (*Sistema Información General de Estudiantes*, SIGE), there were 9 413 school principals in Chile, 4 712 heads of technical-pedagogical units and 4 097 general inspectors. A large share of the school leadership profession in Chile is considerably older than in other countries, but also has more years of experience. According to the OECD 2013 Teaching and Learning International Survey (TALIS),[2] 30.2% of lower secondary school principals in Chile are at least 60 years old, compared to a TALIS average of 15.0%. On average, Chilean lower secondary school principals are 53.7 years old, also older than the average across countries participating in TALIS 2013 (51.5 years) (see Table 4.1, OECD, 2014). Data from the Second Regional Comparative and Explanatory Study (*Segundo Estudio Regional Comparativo y Explicativo*, SERCE) for primary school principals

indicate that the challenge of an ageing workforce is greater for public schools than for private schools and particularly so for rural schools (Murillo, 2012; Weinstein and Muñoz, 2012a; Weinstein and Muñoz, 2014).

When compared to other TALIS countries, school leadership in Chilean lower secondary schools is slightly more feminised (OECD, 2014). However, when compared to other Latin American countries participating in SERCE, a smaller share of school principals in primary education are women (52.5%, SERCE average: 62.5%). In private urban schools, only 38.8% of primary school principals are women, the lowest proportion for Latin American countries participating in the survey (Murillo, 2012; Weinstein and Muñoz, 2012a; Weinstein and Muñoz, 2014).

Table 4.1. **Profile of Chilean school principals in international comparison, lower secondary education, TALIS 2013**

	Chile	Brazil	Mexico	TALIS average
Aged 60 years and above (%)	30.2	6.2	16.3	17.1
Aged under 40 years (%)	6.4	29.8	8.7	7.2
Mean age (years)	53.7	45.0	51.9	51.5
Females (%)	53.4	74.5	40.8	49.9
ISCED 5A or 5B qualification (%)	98.9	97.9	93.5	96.4
ISCED 6 qualification (%)	2.0	0.0	5.7	3.3
Employed full-time and teaching (%)	20.8	36.3	20.7	35.4
Employed full-time but not teaching (%)	75.1	52.5	71.8	62.4
Employed part-time and teaching (%)	2.8	3.8	2.0	3.4
Average years of work experience as a principal (years)	11.3	7.3	10.8	8.9

ISCED: International Standard Classification of Education.
Source: OECD (2014), *TALIS 2013 Results: An International Perspective on Teaching and Learning*, *http://dx.doi.org/10.1787/9789264196261-en*, Tables 3.8, 3.8c, 3.9c, 3.12 and 3.13.

Employment

Recruitment, performance appraisal and dismissal. In public schools, school principals are subject to the Teacher's Statute. In private-subsidised schools, principals are employed according to the Labour Code. While the employment framework, therefore, differs, school principals in both systems need to have relevant training and teaching experience to be eligible for a position. Professionals from other fields outside education may only apply in exceptional cases. In public schools, the normative stipulates that principals must have undertaken specialised training relevant for the function and have at least five years of teaching experience. Candidates holding a professional qualification or degree of at least eight semesters with at least three years of teaching experience are also eligible for school principalship. It is no surprise then that nearly all school principals in the public sector hold a professional qualification in the area of education (MINEDUC, ACE and ES, 2016). School principals must also have had training in administration, supervision, evaluation or vocational guidance. For the private-subsidised sector, the training and qualifications requirements are not specified further.

The appointment of school principals is the responsibility of the school providers. In public schools, the recruitment and selection process is specified through the Teacher's Statute. Since the introduction of the Quality and Equality of Education Law (*Ley de Calidad y Equidad*) in 2011, school principals in this sector must pass a standardised selection process (*concurso público*), which involves a representative of the System of High Public

Service (*Sistema de Alta Dirección Pública*) administered by the Civil Service (*Servicio Civil*). The Civil Service is a decentralised body that is linked with the President of the Republic through the Ministry of Finance (*Ministerio de Hacienda*) responsible for the recruitment of the highest-ranking civil servants of the Chilean state. By 2016, all principals of public schools had to be recruited through the new selection system, with the exception of small schools with one, two or three teachers.

The selection process involves a number of steps:

1. The municipal school provider defines the basic requirements for the post and a candidate profile that specifies the required competencies and qualifications. To support school providers in this task, the Ministry of Education has made available examples of professional profiles for different contexts (e.g. for vulnerable schools, rural schools). The vacancies are then announced through the Civil Service and the Ministry of Education, through the media and a dedicated online platform ("School leaders for Chile"/"*Directores para Chile*", *www.directoresparachile.cl/index.aspx*).
2. With the passing of the application deadline, external consulting companies registered with the Civil Service make a pre-selection of all applicants that involves a check that the requirements meet the job description and professional profile of the post and an evaluation of the competencies (*evaluación psicolaboral*).
3. A selection panel then interviews all pre-selected candidates and proposes a ranking of at least three and up to five candidates to the school provider. In smaller municipalities of less than 10 000 inhabitants, a proposal of 2 candidates is sufficient if there is an insufficient number of applicants that meet selection criteria. Selection panels are made up of the head of the municipal education administration (*Departamentos de Administración de Educación Municipal,* DAEM, *Departamentos de Educación Municipal,* DEM, or municipal corporation), a member of the Council of the High Public Service (or a representative of similar standing in the area of education approved by the council), and a teacher chosen by lot from the same municipality. The teacher must be part of the "Maestros" Teacher Network (*Red Maestros de Maestros*) that teachers with a certification of pedagogical excellence (*Asignación de Excelencia Pedagógica*, AEP) can become part of, or have been evaluated as outstanding in the teacher performance evaluation system (*Sistema de Evaluación del Desempeño Profesional Docente*).
4. The mayor as the highest authority of the municipality is then free to select any candidate from the ranking suggested by the selection panel or to declare the selection process void in case he finds none of the candidates suitable. In this case, a new selection process is required.

School principals are appointed for a period of five years. Within the first thirty days of the appointment, school principals and school providers are required to sign an individual performance agreement (*convenio de desempeño*) that specifies annual goals and objectives and a list of related indicators and sources of evidence to assess the achievement of the objectives. The performance agreement is a public document. The achievement of the objectives specified in the agreement is evaluated by the head of the municipal education department (DAEM or DEM) or the municipal corporation on an annual basis. In these annual performance conversations, the goals and objectives can be modified provided that both the school principal and school provider agree. In case the head of the municipal education department or municipal corporation judges that a school principal has not met the agreed goals and objectives, they can propose the removal of a

school principal. All school principals need to reapply to their position after their five-year term.

In the private-subsidised sector, the selection and appointment of school principals is not regulated and is entirely at the discretion of school providers. The process tends to be less formal and competitive, and while school principals in the public sector tend to move through progressive levels of responsibility before taking on a principal position, access to principal positions in the private-subsidised sector seems to be quicker (Weinstein et al., 2011). A representative survey of school principals carried out in 2014 indicates that 65% of school principals in the private sector (private-subsidised and non-subsidised private schools) had been appointed by direct invitation of the school provider, 16% of principals had passed a selection process, and 20% of principals were themselves the school provider at the same time (UDP, 2014a, cited in MINEDUC, ACE and ES, 2016).

The selection and appointment of other school leader positions in public schools has also been changed with the implementation of the Quality and Equality of Education Law. As a result, school principals have more discretionary power to form their school leadership team. They can select their deputy, head of the technical-pedagogical unit and general inspector from the municipality's teaching body as long as they fulfil the central requirements necessary to assume such a position. In case a principal wants to appoint a school leader from another municipality, approval of the school provider is required. In private-subsidised schools, the selection of other school leaders is not regulated and again is at the discretion of school providers.

Preparation and training. While the Teacher's Statute requires school leaders to undertake relevant training, and enshrines the right of education professionals for professional development, there is no specific initial training course that school principals and other school leaders need to complete to access their position. Instead, there is a large offer of courses available, which is also a result of a growing private higher education sector since the 1980s (Weinstein et al., 2011). According to a register of 2010, universities and professional institutes offered 78 programmes for school principals and other school leaders with a duration of 1 year or more. The largest share of programmes had the status of a master's qualification (66.7%), a number of programmes offered some other postgraduate qualification (26.9%), and a very small number offered diplomas (3.8%), doctorates (1.3%) and other qualifications (1.3%) (Muñoz and Marfán, 2012, cited in MINEDUC, ACE and ES, 2016).

According to a representative sample of school principals in 2014, 74% of school principals had a specialisation in administration, management or school leadership when taking up their position. School principals of public schools were more likely to hold such a specialisation than principals in private-subsidised schools or school principals in non-subsidised private schools. While 83% of public school principals had participated in specialised training, this was only the case for 62% of principals in private-subsidised schools and for 75% in non-subsidised private schools (UDP, 2014a, cited in MINEDUC, ACE and ES, 2016). This may reflect more detailed legislative requirements for the training of school principals of public schools as described above.

Following previous experiences with training programmes for school leaders, in 2011 the Ministry of Education established a professional development programme for school leaders (*Plan de Formación de Directores*) administered through the Centre for Pedagogical Training, Experimentation and Research (*Centro de Perfeccionamiento, Experimentación e*

Investigaciones Pedagógicas, CPEIP). This programme aims to develop the school leadership skills of current and aspiring principals and other school leaders through grants and scholarships for participation in high-quality, flexible and pedagogically-centred professional development programmes. Courses have been aligned with the 2015 professional school leadership standards and have been organised according to different levels of leadership experience and school location since changes implemented in 2015. Courses thus distinguish between: i) aspiring school leaders and school leaders (school principals, heads of technical-pedagogical units and school leadership teams) with a maximum of three years of leadership experience; ii) school leaders with between 3 and 12 years of leadership experience; and iii) school leaders with 13 or more years of experience. Courses are offered within five geographical areas (*macrozonas*): North, Valparaíso, Centre, Centre-South, and Extreme South. The Ministry of Education funds 100% of the participation costs through the CPEIP and provides a maintenance grant depending on the participant's distance from work to the place of study. Participation is open to candidates with at least three years of experience in teaching. Interested individuals have to apply for the programme and participants are selected for their academic and professional credentials and experience and motivation. Since inception of the programme, 3 027 principals and aspiring principals had participated until 2014 in between 19 and 30 selected programmes each year. This programme was under evaluation at the time of the writing of this report.

At the end of 2015, the Ministry of Education established two national school leadership centres (*Centro de Desarrollo de Líderes Educativos,* and *Centro de Liderazgo para la Mejora Escolar)* to promote the further development of the school leadership profession. Among others, these institutions carry out related research, develop tools for the development of good school leadership practices, offer training to school leaders such as system leaders, heads of technical-pedagogical units and general inspectors, and advise the Ministry of Education on school leadership policies.

Remuneration and working time. As regulated in the Teacher's Statute, similarly to teachers, the remuneration of school leaders in public schools is based on the National Minimum Basic Salary (*Remuneración Básica Mínima Nacional de los profesionales de la educación,* RBMN) (see Chapter 5). To compensate school principals for their higher level of responsibility, they receive a school principal allowance of 25% of the RBMN (*Asignación por Responsabilidad Directiva*) in addition to their teacher salary (see also Chapter 5). The level of this allowance depends on the school's size and concentration of disadvantaged students (*alumnos prioritarios*) (see Table 4.2). To better reflect the greater level of responsibilities and to increase the relative compensation of school principals, the Chilean central government increased the amount of the school principal allowance with the introduction of the Quality and Equality of Education Law. Similarly to teachers, school principals may also receive additional allowances for experience, difficult working conditions or professional development specified in the Teacher's Statute (*Asignación por Experiencia, Asignación por Desempeño Difícil, Asignación por Perfeccionamiento*) (also see Table 4.2 and Chapter 5).

The remuneration of school principals in the subsidised private sector is not regulated and instead determined by the individual school providers. The average levels of remuneration are similar between school principals in public and private-subsidised schools, but the salaries of school principals in the private-subsidised sector differ more between schools than is the case in the public sector. While many principals in private-

Table 4.2. **School principals' allowance, public schools**

	Allowance level (% of RBMN)	CLP per month
School principal allowance		
School principal position in a school with a low concentration of disadvantaged students		
< 399 students	25	110 000
400-799 students	37.5	165 000
800-1 199 students	75	330 000
> 1 200 students	100	440 000
School principal position in a school with a high concentration of disadvantaged students		
< 399 students	25	110 000
400-799 students	75	330 000
800-1 199 students	150	660 000
> 1 200 students	200	880 000
Allowance for experience		
School leaders with a specific length of service	6.76% of RBMN for the first two years of experience and 6.6% of RBMN for subsequent two-year periods of experience, with a maximum of 100% of RBMN	
Allowances for difficult working conditions		
School leaders in isolated, rural, culturally-diverse and disadvantaged schools	up to 30% of RBMN	
Allowance for training		
School leaders undertaking certified professional development activities	up to 40% of RBMN	

Note: RBMN refers to the National Minimum Basic Salary (*Remuneración Básica Mínima Nacional de los profesionales de la educación*).
Source: MINEDUC, ACE and ES (2016), *OECD Review of Policies to Improve the Effectiveness of Resource Use in Schools (School Resources Review): Country Background Report for Chile*, *www.oecd.org/education/schoolresourcesreview.htm*.

subsidised schools earn lower or higher than average salaries, most principals in public schools share a similar level of remuneration. School principals in non-subsidised private schools tend to earn higher salaries than principals in both public and private-subsidised schools. Female school principals earn on average less than their male counterparts, and gender differences in remuneration are higher in the private-subsidised sector than in the public one (Weinstein and Muñoz, 2012b).

Like school principals, other school leaders also receive an allowance that constitutes a certain percentage of the National Minimum Basic Salary (*Remuneración Básica Mínima Naciona*, RBMN). Heads of technical-pedagogical units receive 20% of the RBMN, other members of these technical-pedagogical units receive 15% of the RBMN. In 2005, the Ministry of Education created a financial incentive scheme for school leadership teams in public and private-subsidised schools to encourage shared leadership (*Asignación de Desempeño Colectivo*). Participation is voluntary and involves setting annual goals and objectives in a school management improvement plan (*Plan de Mejoramiento de Gestión Educativa*).

As data from TALIS 2013 highlight, the vast majority of school principals in Chile dedicate themselves to their school leadership role full-time, do not have other jobs, and dedicate little time to teaching in the classroom (see Table 4.1). Based on data from SERCE, 92.7% of primary school principals are employed full-time, compared to an average of 57.5% across Latin American countries participating in the survey. Only 15.8% of primary school principals in Chile had another employment (SERCE average: 26.2%). And primary school principals in Chile dedicated on average only 17.9% of their time to teaching (SERCE

average: 20.4%). In rural schools, the proportion spent teaching was higher amounting to 37.3% (Weinstein and Muñoz, 2014; Murillo, 2012).

Organisation of the learning environment

Learning support staff

By law, schools need to employ the leadership, technical-pedagogical and classroom staff that are adequate for the size of the school and the level of education and type of education a school offers to gain official recognition. This includes sufficient learning support staff to meet the needs of all students. Learning support staff provides help in different areas, from the pedagogical to the administrative. The law distinguishes between three different types of learning support staff: i) educational professionals, such as psychologists and speech therapists, who are however not affiliated to the Teacher's Statute; ii) assistant teachers that fulfil technical roles related to both teaching and learning in classrooms and the general administrative operation of the school; and iii) other auxiliaries in charge of the maintenance and cleaning of buildings. There are also school medical services that offer medical examinations and treatments for students related to achievement at school (e.g. visual and hearing disabilities).

Schools can receive funding to finance and manage their learning support staff through the preferential school subsidy (*Subvención Escolar Preferencial*, SEP), a compensatory funding mechanism that is linked to standards-based accountability (more on this in Chapter 2), and through the School Integration Programme (*Programa de Integración Escolar*, PIE) (more on this in Chapter 3). Through SEP funding, schools can dedicate up to 50% of the subsidy for extra staff and develop technical-pedagogical teams made up of teachers and learning support staff that accompany pedagogical processes within and outside the classroom with a focus on the school's most vulnerable students. Through the School Integration Programme, schools can integrate up to five students with transitory disabilities and two students with permanent disabilities per classroom. Integrated students with special needs receive at least between six (half-day school) and eight (all-day school) hours of professional support per week within the classroom. To meet the needs of these and all other students and to provide an inclusive education for students with special needs, schools receive additional resources. These resources can be used for a range of purposes, such as the purchase of educational materials and the adaptation of the physical space to the special needs of students, but also for hiring learning support staff. Schools can establish multidisciplinary teams that include specialists such as speech therapists, special needs teachers and psychologists to provide support for teachers and students within classrooms. But learning support staff hired through the PIE programme also needs to dedicate at least three hours to collaborative work with classroom teachers of the school. In 2015, 44.6% of schools had established a PIE. Most public schools take part in PIE (67.3%, compared to 24.8% of private-subsidised schools) (Ministry of Education, 2017).

In addition, the National Board of School Assistance and Scholarships (*Junta Nacional de Auxilio Escolar y Becas*, JUNAEB) has established programmes to provide psychological and social support for vulnerable students at the risk of drop-out (see Chapter 3). Through the Programme to Support School Retention (*Programa de apoyo a la retención escolar*, *www.junaeb.cl/programa-de-apoyo-a-la-retencion-escolar*) interdisciplinary teams made up of pedagogues, social workers and psychologists provide pedagogical and psychological support in groups of students or individually. The work of the teams targets psychological

and social aspects and the school as well as the family and the community. It is available in selected regions of the country: Antofagasta, Valparaíso, Metropolitan Region of Santiago, Maule, Bio bío and La Araucanía. The Skills for Life initiative (*Habilidades Para la Vida*, *www.junaeb.cl/habilidades-para-la-vida*) provides psychological and social support for the school community, including students, teachers and parents, in the two years of pre-primary education prior to entering primary education and the first two years of primary education. The programme seeks to identify and prevent risks in vulnerable contexts, to promote better learning outcomes and to reduce school drop-out. It also seeks to increase individuals' wellbeing and health (e.g. by reducing violent behaviour and substance abuse and alcoholism) and social and emotional competencies (e.g. for building relationships). Teams and units of social work and psychological services within municipalities develop projects that are then presented to the regional offices of the JUNAEB. If selected and approved, teams and projects receive initial funding for three years with the option of extension.

School development

Schools in Chile are required by law to develop a school educational project (*Proyecto Educativo Institucional,* PEI) to gain official recognition from the Ministry of Education. The school educational project is an instrument that provides a sense of direction and sets out the principles and objectives of education in a school. It defines the educational aspects that a school wants to emphasise in its teaching and learning. Schools may also develop school improvement plans which span a period of four years (*Plan de Mejoramiento Educativo*, PME).

For all schools that receive funding through the preferential school subsidy (SEP), the development of an improvement plan is obligatory. As part of the SEP subsidy, the school provider signs an agreement of equal opportunities and excellence in education (*Convenio de Igualdad de Oportunidades y Excelencia Educativa*). This agreement commits the school provider to use the additional resources provided through the SEP to put the school improvement plan into practice while respecting certain regulations for how the funds can be used. The school improvement plan is required to establish strategic objectives covering a four-year period as well as annual objectives. It should describe support initiatives that target priority students and technical-pedagogical actions to improve the achievement of low-performing students. It should also aim to improve school processes as a whole and set indicators, measurements for evaluation and monitoring, timelines, and sources of funding. School improvement planning typically involves a school self-evaluation to analyse the school's management and operation and to identify strengths and weaknesses. At present, there are more than 8 000 schools that have committed themselves to engage in school improvement planning in return for SEP subsidies.

All schools that receive public funding can seek support from technical-pedagogical advisors (*Asesores Técnico-Pedagógicos*, ATP) that are organised within the Ministry's Education Provincial Departments (DEPROV). Technical-pedagogical advisors work with schools, for instance, to support the effective implementation of the curriculum, the planning of improvement strategies and the identification of instruments and tools to assess the implementation of the school improvement plan. Public technical-pedagogical support targets low-performing and disadvantaged schools. It is at the discretion of education provincial departments to determine how best to do so (CPP-CEPPE-UC, 2014).

In addition to these public services, schools can contract independent private consultant services (*Asesorías Técnicas Educativas*, ATE). Independent technical advisory services can be natural persons and institutions, such as universities and foundations. They need to comply with standards to be certified and be listed in a public register of institutions providing pedagogical-technical support. Advice is typically available in four areas: curriculum management, school leadership, school climate, and resource management. Private technical advisory services have been available since the 1990s (e.g. through the Programme for the Improvement of Education Quality and Equity in Secondary Schools, *MECE-Media*, and the Schools in Critical Situation programme, *Escuelas Críticas*), in particular as part of school improvement programmes targeting disadvantaged schools.

The involvement of private technical advisory services in school development has been promoted more strongly by the Ministry of Education since the introduction of the preferential school subsidy (SEP) in 2008. Schools are thus encouraged to use some of the public funds allocated through SEP to contract private external technical providers to support them in their improvement process and to meet required improvement targets. The promotion of private technical advisory services was also grounded in a belief that public technical-pedagogical support was often perceived by schools as an external imposition and that these services did not always meet schools' needs. Between 2010 and 2012, about 9% of the resources provided through SEP were invested in private technical-pedagogical consultancy services, representing more than USD 90 million per year (Osses et al., 2015).

School networks and collaboration

Schools can collaborate and share experiences and resources informally under the umbrella of a common school provider. However, such exchanges tend to be more common among private-subsidised schools than public schools and, considering that the large majority of school providers (around 90%) are only responsible for one single school, these opportunities are generally limited. The Ministry of Education has established two main school networks: rural school networks (*microcentros rurales*) (also see Chapter 3) and communities of practice of English teachers (*redes de docentes de inglés*).

Since 1992, the Programme of Basic Rural Education (*Programa de Educación Básica Rural*) has provided technical-pedagogical support to small schools in rural areas. This initiative, which comprises a number of actions from adaptations of the curriculum to teacher professional development, has also established rural school networks (*microcentros rurales*) that provide a space for different multigrade schools and their staff within the same area to come together and reflect about their work. School networks seek to address the particular needs of public and private-subsidised multigrade schools and the challenges they face (e.g. cultural, social and ethnic diversity of students, teaching of students of different ages in the same classroom, personal and professional isolation of staff, weak links between schools and other institutions, including the Ministry of Education and the municipalities). In 2015, 374 rural school networks brought together 2 400 rural multigrade schools. By law, school networks meet for two hours on a weekly basis in technical meetings to evaluate teaching and learning in schools, reflect about teachers' pedagogical work and necessary changes and innovative approaches to improve student outcomes, exchange pedagogical experiences, plan classroom teaching strategies, and agree criteria for the development of school improvement plans. When necessary, school networks receive support from the technical-pedagogical advisory services of the Ministry of

Education (ATP) or independent advisory services (ATE). The co-ordinators of the individual rural school networks meet on an annual basis for two days to receive training, support and information on the Ministry's initiatives and policies.

The communities of practice of English teachers (*redes de docentes de inglés*) are part of the Ministry's programme "English Opens Doors" (*Programa Inglés Abre Puertas*, PIAP) established in 2003 (*www.ingles.mineduc.cl*). These networks provide an opportunity for English teachers of different schools across the country to work together to improve their practices with the ultimate goal of improving students' English language skills. PIAP provides funding for materials to ensure the operation of the communities of practice, finances projects realised for English Week (*Semana del Inglés*), provides participating teachers with priority places for professional development and teacher certification, and provides information through regional co-ordinators. The establishment of a community of practice requires the participation of at least eight English teachers in public and/or subsidised private schools, a commitment to meet at least once per month, the support of a school principal who provides the necessary facilities for the community's activities, and the approval of the regional co-ordinator. In 2015, there were 140 communities of practice bringing together about 2 500 teachers.

Parent, student and community involvement

The General Education Law promotes the participation of the school community in the operation of all schools. As the law suggests, schools should establish students' councils (*centros de alumnos*), parents' councils (*centros de padres y apoderados*), teachers' councils (*consejos de profesores*), and school councils (*consejos escolares*). These different bodies should provide platforms for the different members of the school community to express their views and make their voice heard. The functions and working arrangements of the different councils are regulated through different laws and decrees. Students' councils are made up of students in the second cycle of basic education and upper secondary education and should provide students with the opportunity to develop critical thinking and to prepare students for democratic participation in society. Parents' councils should represent the interests of parents and families in schools and contribute to the achievement of the educational goals of the school. Teachers' councils include the school's leadership, technical-pedagogical staff and teachers. They are consultative bodies that allow professionals to develop a common vision and to make decisions in technical-pedagogical questions. School councils provide an opportunity for collaboration of the different members of the school community. They need to include at least the school principal, the school provider or a representative of the school provider, a teacher elected by the school's teaching body, the president of the parents' council, and the president of the students' council if the school offers secondary education. School councils issue positions at the request of the school leadership and may be asked to take a decision at the discretion of the school provider. School councils must be consulted at least about the following aspects: the definition of the school educational project; proposed school targets and improvement projects; the report about leadership management at the school; and development and modifications to internal regulations. Also, school councils are to be provided with information on student outcomes, the school budget and its implementation, and the recruitment of staff.

Chile has also established a number of regulations related to the promotion of a good school climate. By law and to gain official recognition, schools need to develop internal

regulations (*reglamento interno de convivencia escolar*) that define the relations between schools and their community. Internal regulations should contribute to the development of the school community and support the holistic development of students. They must be in line with the educational project of the school and need to pay attention to prevention policies, pedagogical measures, protocols for action, and fair disciplinary proceedings for disruptive behaviour. Schools also need to appoint a school climate co-ordinator (*encargado de convivencia escolar*) who is responsible for developing an action plan to develop a positive school environment and to implement any measures decided by the school council. The Ministry of Education has established a formative school climate policy (*Política Nacional de Convivencia Escolar*, *www.convivenciaescolar.cl*) that emphasises the participation and commitment of the whole school community and highlights that all individual stakeholders have rights and responsibilities. The related strategy for the period 2015-18 was published in November 2015 (Ministry of Education, 2015b). A law against school violence implemented in 2011 promotes a preventive approach to school violence and encourages the development of a positive school climate. Anti-discrimination legislation implemented in 2012 equally emphasises the importance of a positive school climate and highlights the importance of diversity, integration, sustainability and intercultural awareness.

School evaluation

In 2009, the General Education Law introduced a new system of school evaluation as part of the National System for Quality Assurance in School Education. This new approach to evaluation and assessment seeks to promote the improvement of institutional processes of schools and school providers. It is based on the work of four institutions: the Ministry of Education, the National Education Council (CNED), the Agency for Quality Education and the Education Superintendence.

Following the introduction of this new evaluation system, schools are subject to external evaluation processes by both the Agency for Quality Education and the Education Superintendence. The Agency, which is also in charge of co-ordinating student national assessments, validating personnel evaluation processes, evaluating school providers, monitoring national system performance (including the use of international assessments), providing performance information to stakeholders, and offering analysis for future policy development (see also Chapter 1), focuses on the evaluation of educational processes in schools. Schools are classified on the basis of their performance in national standardised assessments and in "other performance indicators" (*Otros Indicadores de la Calidad Educativa*) in one of four performance categories (*categorías de desempeño*): high-performance, average performance, average-low performance, and unsatisfactory performance. Schools with unsatisfactory performance are evaluated more frequently than other schools and are obliged to seek technical-pedagogical support (ATP or ATE). In case of continuous underperformance for a period of four years, schools risk losing their official recognition.

Schools are evaluated against a central evaluation framework, the Performance Standards for Schools and School Providers. As described earlier, these performance standards cover four dimensions: leadership, pedagogical management, professional development and school climate, and resource management, and also apply to the evaluation of school providers. The Agency was also planning to adapt performance standards to the needs of multigrade schools and schools with only one, two or three teachers at the time of the review visit.

School evaluations can take different forms: holistic visits (*visita integral*) that evaluate all dimensions of the performance standards, thematic visits (*visita temática*) that evaluate one or two dimensions of the performance standards, learning visits (*visita de aprendizaje*) that identify best practices, visits to strengthen self-evaluation practices (*visita de fortalecimiento de la autoevaluación*), and local visits (*visita territorial*) that evaluate municipal school providers and all of the schools that a school provider is responsible for. School evaluations involve two to four external evaluators, take place over a period of two to three days, and include the participation of the whole school community, including school providers, school leaders, teachers, students and parents. School evaluations result in an evaluation report that takes into account the school educational project, the school context, and results. The school evaluation report itself, however, does not result in a classification or rating. The dimension of "results" encompasses a number of elements: the classification of schools as described above; student learning outcomes, which include a comparison of performance in standardised national assessments (*Sistema de Medición de Calidad de la Educación*, SIMCE, more on this below) with schools with similar characteristics, the trend of the share of students with low performance, the general trend of performance in standardised national assessments over time, the distribution of performance in different subjects and years; performance in the other indicators of education quality; parental satisfaction; and compliance with the normative as evaluated by the Education Superintendence. School evaluations were piloted between December 2014 and December 2015 in all public and private-subsidised schools offering basic education with more than 30 students taking part in the standardised national assessments and with more than three years of operation.

Schools and school providers are also evaluated by the Superintendence. These evaluations focus on auditing the use of public resources by schools and school providers and their compliance with legislation, standards and regulations. This includes checking that school providers and schools meet the minimum requirements for official recognition and other issues, such as building and infrastructure standards, safety standards, and labour standards. It also includes reviewing school providers' and schools' compliance with the Inclusion Law that prohibits school providers and schools that receive public funding from making a profit, from selecting students, and from charging student fees. Schools and school providers may also be subject to evaluations and financial penalties by the Superintendence in the case of claims or complaints. In addition, the Superintendence provides the public with information on schools and school providers in the areas of evaluation for which it is responsible. As school providers tend to be responsible for the management of resources, evaluations by the Superintendence focus on the evaluation of school providers.

Schools are subject to further evaluation and incentive mechanisms that focus on the assessment of students' performance and the evaluation of teachers' work. The System to Measure the Quality of Education (*Sistema de Medición de Calidad de la Educación*, SIMCE) measures student performance across the country through a full-cohort national standardised assessment (see Chapter 1 for further details). The results of SIMCE are widely publicised and their impact is substantial. As Weinstein et al. (2012) highlighted, the SIMCE assessment has become the language for describing success and failure in the Chilean education system. School-level results are used to allocate resources and rewards to schools and teachers, to guide educational policy and to provide information to parents. They are used to classify schools for the preferential school subsidy (SEP) and school

evaluations by the Agency for Quality Education, and to make decisions about schools' needs for pedagogical-technical support and school closures. SIMCE results are used for the National System for Performance Evaluation (*Sistema Nacional de Evaluación de Desempeño*, SNED), a collective economic incentive programme for public and subsidised private schools allocated through the school provider (see Chapter 5).

Organised on a biannual basis, the SNED awards a financial bonus (*Subvención por Desempeño de Excelencia*) to schools showing the highest SIMCE performance compared to schools with a similar context in the same region. The financial bonus must be used for increasing the remuneration of staff in the school (see Chapter 5). Also, SIMCE results constitute a basic element in the performance agreements of schools principals that form part of school principals' contracts in public schools. Depending on the type of school provider, teachers in Chilean schools are subject to different evaluation and reward processes (more on this in Chapter 5). All teachers in the public sector are evaluated through the mandatory teacher evaluation system (*Sistema de Evaluación del Desempeño Profesional Docente*). Teachers in public schools can also take part in the Programme for the Variable Individual Performance Allowance (*Asignación Variable por Desempeño Individual*, AVDI), and teachers in all subsidised schools can participate in the Programme for the Accreditation of Pedagogical Excellence Allowance (*Asignación Excelencia Pedagógica*, AEP). A recent addition refers to the certification process associated with the transition of stages in the new career structure: the System for the Recognition of Teacher Professional Development (see Chapter 5).

Strengths

School leadership

There is a longstanding and ongoing commitment to school leadership development

Chile has recognised the importance of school leadership for teaching and learning. The Ministry of Education has established a dedicated unit to work on the development of the profession and Chile has implemented various measures for strengthening the school leadership profession throughout the last decade. Past initiatives have sought to improve school leadership through the promotion of a common vision of leadership, through changes to recruitment, training and development, and through greater autonomy and accountability of school leaders. At the time of writing this report, the Ministry of Education was planning the introduction of new comprehensive legislation on the function of school leaders, initial training and preparation, entry to the profession, performance evaluation and continuous professional development. This new framework could create greater coherence in school leadership policies in the future considering that the past initiatives have not yet created a coherent and systematic approach to the development of the profession and failed to build synergies between the Ministry of Education, school providers, and other actors, such as training institutions, to develop and manage the school leadership profession effectively (Weinstein and Muñoz, 2012b; Weinstein et al., 2011).

Two further aspects stand out with regards to the development of the school leadership profession in Chile. First, national education authorities have created regional platforms in the form of School Leadership Consultative Councils (*Consejos Consultativos de Liderazgo Escolar*) to facilitate and encourage the participation of school leaders in the design and evaluation of education policies and the development of their profession. These

consultative bodies, which were established in 2014, bring together school principals of all types of school providers and levels and types of education within a region to discuss school leadership initiatives and education policy more broadly. The creation of bodies to facilitate the participation of school principals in the formulation of education policies and the development of their profession is an interesting initiative to strengthen professionalism and to raise the prestige of the profession. Unlike teachers, school principals have traditionally not played a strong role in the development of education policy and have not had their own organisation to represent their views (Weinstein et al., 2011).

Second, civil society organisations have played a strong role in raising awareness of the importance of school leadership and in developing the profession. The *Fundación Chile*, a private non-profit organisation, for example, has established a technical programme on School Management and Leadership (*Programa de Gestión y Dirección Escolar*) based at the Centre for Innovation in Education (*Centro de Innovación en Educación*, *www.gestionescolar.cl*). Some of the programme's activities have included developing a quality framework for school leadership (*Modelo de Gestión Escolar de Calidad*) and professional standards for school leaders, offering professional development for school leaders, offering advice through consulting services, and promoting quality in school management through a national prize and competition (*Premio Nacional a la Cultura de la Calidad Gabriela Mistral*).

Legislation and professional standards promote a vision of pedagogical leadership.

Legislation emphasises the pedagogical leadership role of school principals in all public and private-subsidised schools (Weinstein et al., 2011). As stipulated in the Teacher's Statute, school principals' main role is to oversee and lead the schools' educational project, which includes setting and monitoring school goals, study programmes and implementation strategies; organising and guiding the technical-pedagogical work and professional development of teachers; and ensuring adequate reporting to parents about their children's progress. The General Education Law further emphasises the right of school leaders to implement their school educational project (PEI). It also points out school leaders' responsibility for promoting the quality of their institution and for promoting the professional development of their teachers to achieve pedagogical goals. Legislation goes as far as to stipulate school leaders' responsibility for supervising teachers in their classroom, a key element of pedagogical leadership.

Chile has promoted a common vision of school leadership that focuses on school leaders' pedagogical leadership role through the development of professional standards. In 2005, the Ministry of Education published a first national Good School Leadership Framework (*Marco para la Buena Dirección*). This initial set of national standards was updated in November 2015 with the publication of a new framework (*Marco para la Buena Dirección y el Liderazgo Escolar*, *http://portales.mineduc.cl/usuarios/cpeip/doc/201511131613560.MBD&LE_2015.pdf*) developed by the CPEIP (Ministry of Education, 2015a).

In addition to these professional school leadership standards, Chile has developed further performance standards to serve as a reference for school evaluations that also communicate a vision of pedagogical leadership. This includes the performance standards for the now discontinued system of school self-improvement (*Sistema de Aseguramiento de Calidad de la Gestión Escolar*, SACGE) and the Performance Standards for Schools and School Providers (*Estándares Indicativos de Desempeño para Establecimientos Educacionales y sus Sostenedores*) for the recently introduced National System for Quality Assurance in School

Education (*Sistema Nacional de Aseguramiento de la Calidad de la Educación Escolar*, SAC). All of these frameworks and reference documents communicate the pedagogical role of school leaders.

The standardisation of the school principal recruitment process and increases in school principals' remuneration improve the status of school leadership. With the implementation of the Quality and Equality of Education Law in 2009, Chile introduced a new standardised recruitment process for school principals in the public sector. The new recruitment process is based on a competitive selection process organised through the municipal school provider and involves a representative of the System of High Public Service and the Civil Service.

Researchers have raised some shortcomings of the new recruitment process concerning the capacity of municipal school providers to define local competency profiles, discrepancies in the quality of the external providers responsible for the pre-selection of qualified candidates, and a lack of clarity in the final selection of school principals by the mayor (e.g. Grupo Educativo, 2015 and Ñuñez et al., 2012 cited in MINEDUC, ACE and ES, 2016). But the design of the new recruitment process entails a number of positive elements which provide the basis for attracting good potential school leaders to the profession and for selecting the best candidates. This seems essential considering that Chile has been facing a persistent challenge to fill all vacant school principal positions. In 2013, more than one-fifth of school principal positions remained vacant after the first call (OECD, 2015a).

As Pont et al. (2008) pointed out, one of the key questions related to the recruitment of school principals concerns the trade-off between central and local involvement to ensure capacity, reduce administrative costs and efforts, and match candidates to local needs. The new process in Chile gives municipal school providers overall responsibility for the recruitment process and gives them a number of mechanisms to match the recruitment to local needs. Municipal school providers define the local competency profiles that form the basis for selection, they are represented in the final selection panel with one representative, and the municipality's mayor has the final say about the selection of the school principal. At the same time, the involvement of specialised external consulting firms for the pre-selection of qualified candidates and the involvement of the High Public Service that is responsible for the recruitment of high-ranking officials in the Chilean public administration in the selection panel ensure a minimum level of capacity to carry out the selection process. The Ministry of Education furthermore supports municipal school providers in the recruitment process (e.g. through the availability of an online platform to disseminate the vacancies and through a public central database of school leader profiles for different contexts, such as rural and vulnerable schools).

It is also important for recruitment processes to be objective, fair and transparent to ensure that the best candidate is selected and to encourage motivated candidates to apply (Pont et al., 2008). The new recruitment process ensures some level of objectivity through the involvement of the High Public Service. And while the mayor's power to select the final candidate introduces some room for arbitrary decision-making, municipalities should arguably hold the final responsibility for the appointment of their school principals as part of their human resource management responsibilities. This power allows school providers to match human resources with their education strategies, for example. Also, the mayor's final choice is limited to the ranking of the selection panel.

Besides introducing changes to the recruitment process, the Quality and Equality of Education Law implemented further steps to make school leadership more accessible and attractive and to reward school principals for their higher levels of responsibility. It opened school principal positions for teachers with less experience as long as they hold a certain level of education, and it increased the levels of remuneration of school principals. The size of the new school principal allowance depends on the size of the school and the proportion of disadvantaged students, thus setting financial incentives for school principals to work in large and disadvantaged schools. An allowance for work in difficult working conditions (*Asignación por Desempeño en Condiciones Difíciles*) provides some additional compensation and a small incentive for working in schools in remote and marginal areas or disadvantaged communities. These steps to increase the attractiveness of school leadership are important to tackle the low status of school leaders and principals in the Chilean education system and to address the limited salary differentiation between school leaders and teachers (Weinstein et al., 2011).

However, considering that it remains challenging to recruit sufficient school principals, it seems necessary to further analyse the attractiveness of the school leadership profession among potential school leaders and the reasons for the lack of applicants for different schools types and contexts. Serving school principals report relatively high levels of job satisfaction for international surveys, including the OECD TALIS 2013 and UNESCO SERCE (Weinstein and Muñoz, 2014; OECD, 2014; Murillo, 2012), but more systematic information on teachers' perception of the profession is not available. Such information could support the design and implementation of specific measures to build a sustainable supply of school leaders.

School principals benefit from greater autonomy which goes alongside reinforced accountability requirements. The legal framework introduced with the Quality and Equality of Education Law has given school principals some more autonomy for the management of their staff. School principals recruited under the new recruitment process can appoint and dismiss the members of their school leadership team and propose the dismissal of up to 5% of teachers in their school who have been poorly evaluated in the national teacher evaluation system. These new powers to organise their leadership team and to replace underperforming teachers give school principals some more tools to shape the organisation of their school and to influence teachers' work. As data from the OECD Programme for International Student Assessment (PISA) suggest, school autonomy for resource allocation can have a positive impact on student performance, even if it is relatively small, also compared to the impact of school autonomy for curricula and assessments and depends on other factors, including accountability mechanisms (e.g. public availability of achievement data) and teacher participation in school management (OECD, 2013a).

At the same time, the new employment framework introduced with the Quality and Equality of Education Law and the new recruitment procedures have established a greater degree of accountability for school principals. Under the new recruitment process, all school principals are appointed for a period of five years only after which they need to reapply. This provides an opportunity to periodically reassess, recognise and acknowledge well-performing principals, and to provide incentives for continuous development and improvement (Pont et al., 2008). When taking on a new post under the new recruitment system, school principals now also have to sign individual performance agreements with

their municipal school provider on the basis of which they are evaluated at the end of each year. These individual performance agreements illustrate the key role of school principals for teaching and learning. They provide an opportunity for setting clear expectations, for establishing an ongoing dialogue between municipalities and school principals, and for holding school principals accountable for their work (Radinger, 2014; OECD, 2013b). However, considering the high stakes of performance agreements for individual school principals – failure to achieve set targets and objectives can lead to dismissal – and concerns about a lack of capacity among municipal school providers (more on this below), it is important to evaluate the impact of this new accountability instrument on school principals and schools. School accountability mechanisms can impact the attractiveness of the profession and significantly influence school leaders' practices (Pont et al., 2008).

An evaluation of individual performance agreements is particularly relevant as the education system in Chile already places high accountability demands on school principals which already influence school principals' practices to manage external and internal stakeholders and pressures (Weinstein and Muñoz, 2012b; Weinstein et al., 2012; Weinstein et al., 2011). Schools face pressures to maintain or increase student enrolment, to ensure regular student attendance and to maintain or improve student performance as measured in the SIMCE assessments. This pressure also stems from Chile's school funding mechanism that is based on student enrolments and regular student attendance. In addition, schools can receive additional resources for all-day schooling (*jornada escolar completa*) and through the preferential school subsidy (SEP), but in return for a commitment to improve student achievement (typically as measured by SIMCE). Public schools often face particular challenges in meeting these accountability demands in terms of student enrolments and achievement considering public perceptions and their student intake. And in general, it is difficult for schools to meet their SIMCE targets. As Weinstein et al. (2012) pointed out, the majority of schools have not been able to meet their goals in SIMCE stipulated in their improvement plans for the preferential school subsidy (SEP) between 2008 and 2011. The introduction of the National System for Quality Assurance in School Education has introduced further accountability end evaluation mechanisms through the Agency for Quality Education and the Education Superintendence. In this context, it will be important to ensure that the different accountability and evaluation mechanisms inform each other and communicate consistent messages about the performance of schools and school leaders.

The professional development of school leaders is given considerable importance.

The General Education Law stipulates school leaders' responsibility for developing themselves professionally and the Teacher's Statute both requires school leaders to undertake some form of training relevant for their function and enshrines the right of education professionals for professional development. There is a wide range of training available and the Ministry of Education has been investing in the development of the profession throughout the last years. In 2011, it launched a professional development programme for current and aspiring school leaders (*Plan de Formación de Directores*). Changes to this programme introduced from 2015 onwards have sought to tailor professional development better to the different needs of school leaders at different points at their career and in different geographical areas of the country. As planned at the time of the review visit, the Ministry of Education has also since introduced an induction process for school leaders recruited through the new standardised recruitment process for public

schools. This induction programme was offered for the first time in April 2017. The creation of two national school leadership centres promises to support the development of the school leadership profession further.

A large share of school principals in Chile has participated in training that is specific to their function, and more so than principals in other countries in Latin America (Weinstein et al., 2011). The OECD TALIS 2013 similarly suggests strong participation of school principals in leadership training. According to this survey, 88.9% of lower secondary school principals reported having participated in a school administration or principal training programme or course (TALIS average: 84.8%), and a considerable share of principals had done so before taking up their position (44.8%, compared to a TALIS average of 25.4%). Chile also ranks high in the TALIS leadership training index with 84% of lower secondary principals reporting strong leadership training in formal education, the fifth-highest value among participating countries (OECD, 2014, Tables 3.10 and 3.11).

School leaders have relatively large scope for pedagogical leadership

The distribution of responsibilities between schools and school providers provides good conditions for school principals to dedicate themselves to pedagogical leadership. School providers typically hold responsibility for many administrative and managerial processes, thus freeing school principals and other school leaders for pedagogical leadership, even if this distribution of responsibilities also creates challenges for Chilean schools (more on this below). Within schools, as further described below, the possibility to distribute tasks within a school leadership team also creates favourable conditions for the development of pedagogical leadership practices. Other school leaders like general inspectors may provide administrative support for school principals, thus easing the administrative workload of school principals, and other school leaders like heads of technical-pedagogical units can potentially reinforce school principals' pedagogical leadership.

The empirical evidence base on school leaders' practices suggests that school leaders do engage in pedagogical leadership, but that some pedagogical leadership practices (e.g. goal setting) are more developed than others (e.g. teacher feedback and supervision). In a survey on teachers' perceptions of school leaders' practices that was part of a research project by the Centre for the Study of Education Policy and Practices of the Catholic University of Chile (*Centro de Estudios de Políticas Y Practicas en Educación*, CEPPE) on school leadership and the quality of education in primary schools located in urban areas in Chile, only between 26% and 50% of teachers strongly agreed that school principals engaged in pedagogical leadership practices, such as setting directions, developing people, redesigning the organisation and providing instructional leadership. While teachers were more likely to strongly agree that school principals in primary schools were involved in setting directions, which may also be related to their role for implementing the school's educational project, they were less likely to do so for practices like providing intellectual support and stimulation, giving technical support to teachers, and ensuring that teachers are not distracted from the main focus of their work. These were also areas that school principals themselves reported to spend less time on (Weinstein et al., 2011). Additional national data from the SIMCE assessment in 2010 paint a similar picture. While a larger share of teachers, between 51% and 71%, agreed that principals and other school leaders engage in pedagogical leadership practices related to evaluating and supporting learning, school leaders' practices seem to be strongest in setting clear goals, and weakest in

practices like teacher evaluation, classroom observation, and teacher feedback: 71% of teachers agreed that school leaders define clear goals for the school year, but only 60% of teachers agreed that school leaders systematically observe and supervise teachers' methods in classrooms, and only 51% of teachers agreed that school principals support teachers to improve after a classroom observation (ACE, 2014).

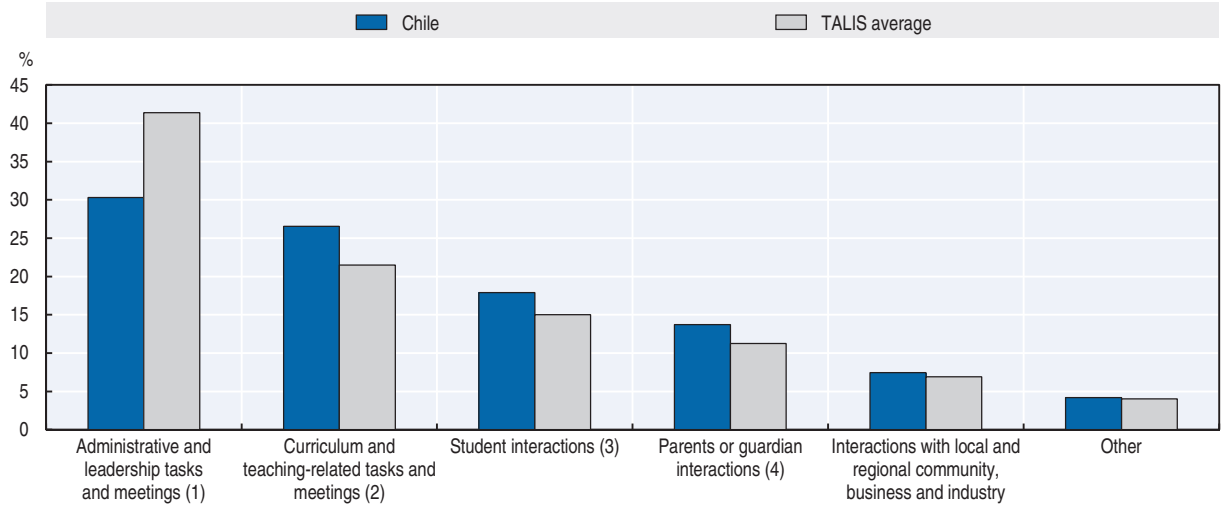
Data from international assessments and surveys provide further insights into principals' practices, even though findings need to be considered with care as some of the answers given by school principals may be coloured by social desirability, particularly those referring to leadership styles that are positively viewed by others. Contextual data from UNESCO SERCE and TERCE assessments provide additional indications that school principals spend relatively little time on teacher feedback and supervision, and less so than school principals in other countries in Latin America (Weinstein, 2015; Murillo, 2012). Interestingly, data from OECD PISA 2015 and TALIS 2013 are somewhat more positive than data from national surveys and assessments and UNESCO. According to data from the OECD, school principals in Chile provide more educational leadership than school principals in many other OECD countries. Data from the OECD, however, coincide with data from other sources in that school principals' leadership in goal-setting is more developed than other pedagogical leadership practices.

The OECD PISA 2015 developed a general index of educational leadership and four sub-indices on school management practices based on school principals' self-reports.[3] In the general index of educational leadership, Chile ranks slightly higher than the OECD average, even if still lower than a number of other countries, such as Australia, Canada and the United States. The sub-index for school principal's self-reported curricular management which consists of practices related to setting and communicating goals indicates that school principals engage in particular relatively often in these practices. The sub-indices for instructional leadership and teachers' professional development suggest that school principals in Chile report to engage in these practices only as often as school principals on average across OECD countries (OECD, 2016, Tables II.3.33, II.3.36, II.3.37, II.3.38, II.3.39 available on line). For TALIS 2013, a comparatively large share of lower secondary school principals reported to often or very often engage in pedagogical leadership practices related to supporting teachers in their main work (Figures 4.2 and 4.3). TALIS data, however, provide no information on the quality of these practices and the usefulness of school principals' classroom observations, for example. Impressions gathered during the review visit and a previous OECD review of teacher evaluation in Chile also suggest that not all school principals are routinely involved in classroom observations and discussions of teaching standards and practices, and that school principals may lack the competencies for providing valuable feedback (Santiago et al., 2013).

When looking at differences in school leadership practices between school sectors, the evidence base is slightly mixed. Data from the CEPPE research project suggest that school leaders in public schools tend to exercise more pedagogical leadership than school leaders in private-subsidised schools, a fact which the authors attribute to a different understanding of the position of school principals as *primus inter pares* in public schools (Weinstein et al., 2011). Data from SIMCE and PISA 2012, however, suggest that school leaders in subsidised private schools provide greater pedagogical leadership in terms of evaluating and supporting learning (SIMCE) and in terms of setting directions (PISA) (ACE, 2014). Data from PISA 2015 provide a similar picture with a higher sub-index of curriculum leadership as reported by school principals in private than in public schools (OECD, 2016,

Figure 4.2. **Principals' working time, lower secondary education, 2013**

Average proportion of time lower secondary education principals report spending on the following activities:



1. Including human resource/personnel issues, regulations, reports, school budget, preparing timetables and class composition, strategic planning, leadership and management activities, responding to requests from district, regional, state, or national education officials.
2. Including developing curriculum, teaching, classroom observations, student evaluation, mentoring teachers, teacher professional development.
3. Including counselling and conversations outside structured learning activities.
4. Including formal and informal interactions.

Source: OECD (2014), *TALIS 2013 Results: An International Perspective on Teaching and Learning*, *http://dx.doi.org/10.1787/9789264196261-en*; OECD (2013c), TALIS 2013 Database, *www.oecd.org/edu/school/talis-2013-results.htm*.

Table II.3.37 available on line). When looking at differences in school leadership practices between schools of different sizes, PISA 2012 data indicate that principals in small and large schools provide greater leadership in terms of setting directions than principals in medium-size schools. Principals in large schools tend to provide most leadership in this area. This matches data from SIMCE that indicate that large schools provide greater leadership in evaluating and supporting learning than small and medium-size schools, which do not differ greatly in this respect (ACE, 2014). PISA 2015 does not provide data for different school sizes.

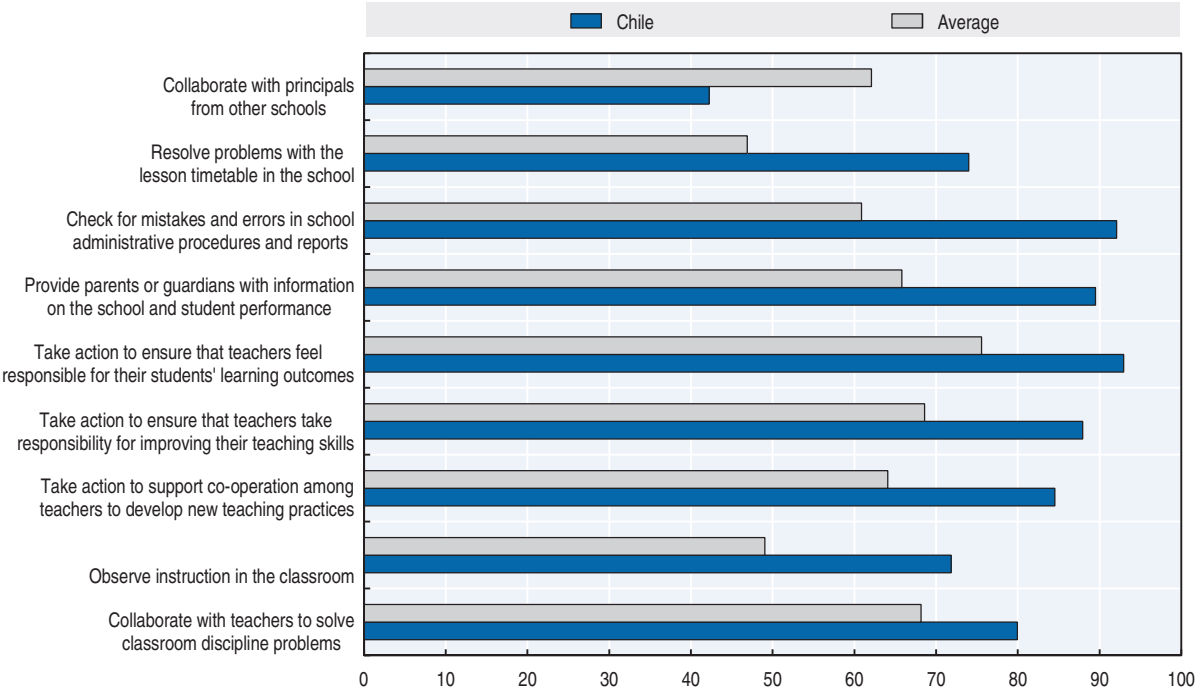
In the analysis of school leaders' practices and exercise of pedagogical leadership, it is important to bear in mind that pedagogical leadership encompasses further practices than setting directions and classroom observations and teacher feedback, such as engagement with the school community. As Weinstein et al. (2012) pointed out, school leaders in Chile need to fulfil a variety of roles as orchestrators between different internal and external stakeholders in a context of multiple accountabilities which do not always allow school leaders to focus on the management of teachers' work in classrooms. It is also necessary to bear in mind the important role of other school leaders, like heads of pedagogical-technical units (see below) that can provide further pedagogical leadership and support principals in this regard.

Distributed school leadership is encouraged and valued

Legislation and professional standards explicitly recognise that leadership is an organisational quality and that distributed leadership and school leadership teams play a

Figure 4.3. **Principals' leadership, lower secondary education, 2013**

Percentage of lower secondary education principals who report having engaged "often" or "very often" in the following leadership activities during the 12 months prior to the survey:



Source: OECD (2014), *TALIS 2013 Results: An International Perspective on Teaching and Learning*, *http://dx.doi.org/10.1787/9789264196261-en*; OECD (2013c), TALIS 2013 Database, *www.oecd.org/edu/school/talis-2013-results.htm*.

key role for school improvement. The General Education Law, for example, sets out not the function of individual school leaders, but the rights and duties of school leadership teams, and the Teacher's Statute refers to school principals, but also to other technical-pedagogical school leaders. The Good School Leadership Framework and the Performance Standards for Schools and School Providers also highlight the strategic role of school leadership teams for school improvement and for effecting change. For example, the Good School Leadership Framework states "leadership is a function that is broader than the work undertaken by the school principal and is shared with others in the institution". As one of the practices set out in the framework, school leaders should build leadership among the staff in their school (Ministry of Education, 2015a).

In most schools of a sufficient size there are some leadership roles in the form of heads of technical-pedagogical units and general inspectors, even though legislation does not specify the nature and composition of school leadership teams. As research suggests, the distribution of leadership, including to teachers and within teams, can help foster change and sustain improvements over time, even if it creates its own challenges at the same time (e.g. the management and organisation of distributed arrangements) (Louis et al., 2010; Mulford, 2008; Pont et al., 2008). General inspectors can play an important role by taking on administrative tasks that allow school principals and other school leaders to dedicate themselves to pedagogical leadership. Heads of the technical-pedagogical units, a role already introduced in Chilean schools in 1978, can strengthen the pedagogical leadership of schools provided that the school principal gives the head of

the technical-pedagogical unit sufficient room for such leadership and that the actions of the head of the technical-pedagogical unit do not replace the pedagogical work of the school principal. The work of the school principal and that of the head of the technical-pedagogical unit can then ideally reinforce each other (Weinstein and Muñoz, 2012b; Ávalos, 2011; Weinstein et al., 2011). The CEPPE research project on school leadership and the quality of education in primary schools located in urban areas in Chile also gathered some data on teachers' perceptions of the practices of these school leaders. These data demonstrate the importance of this role in the Chilean education system. According to the survey, teachers consult pedagogical heads more frequently than principals when there are pedagogical problems and the principal is consulted less frequently than fellow teachers. The same study, however, suggests that heads of technical-pedagogical units could provide even more pedagogical leadership. According to teachers' reports, between 33% and 55% of heads of technical-pedagogical units engaged in pedagogical school leadership practices such as setting high expectations, providing individual attention and support for teachers, providing technical support for teachers, and monitoring teachers' practices and students' learning (Weinstein et al., 2011).

Chile has developed an innovative financial incentive scheme to encourage the distribution of school leadership and the creation of effective school leadership teams (see Box 4.1). As part of the allowance for collective performance scheme (*Asignación de Desempeño Colectivo*), school leadership teams develop collective performance agreements and shared leadership strategies, and receive a financial allowance if they meet the objectives of their performance agreement. Participation is voluntary and open to school leadership teams in public and private-subsidised schools of 250 students or more.

Also, teachers are encouraged to participate in the management of their school and there are channels for teachers to do so. The Teacher's Statute establishes teachers' right for participation in the operation of the school in an advisory role, including in the analysis, planning, implementation and evaluation of the school's activities and relations with the school community. School providers should consult teachers when making proposals to improve the functioning of the school and schools should establish teachers' councils. Teachers' councils are technical bodies that bring together school leaders, technical-pedagogical staff and teachers to exchange and express professional ideas and opinions. They must meet at least once a month and document their reflections and proposals. They should participate in the development of the school educational project (PEI) and the evaluation of the school, school principal and the school leadership team, and contribute to the achievement of national and local educational goals. Teachers' councils may hold decision-making powers in any areas determined by the school and the school's internal regulations. The role of teachers' councils and teacher participation in school management seems to be reflected in contextual data from the OECD PISA 2015: 78.8% of 15-year-olds were in a school whose principal reported to provide staff with opportunities to participate in school decision making at least once a month (OECD average: 72.2%). Similarly, 81.9% of 15-year-old students were in a school whose principal reported to engage teachers to help build a school culture of continuous improvement at least once a month (OECD average: 72.9%). Nevertheless, 13.4% of students were in a school whose principal reported that they did not ask their teachers to participate in reviewing management practices (OECD average: 8.9%) (OECD, 2016, Table II.3.33).

Box 4.1. **Collective Performance Allowance (*Asignación de Desempeño Colectivo*)**

Based on the belief that leadership is an organisational quality, the Collective Performance Allowance system (*Asignación de Desempeño Colectivo*) is designed to encourage school leaders to collaborate and improve the practices and behaviours of leadership teams. Through the setting and evaluation of collective objectives and targets, the system aims to strengthen the organisational leadership and management capacity of schools as a whole, to encourage school leaders' commitment to the improvement of teaching and learning in their school, and to facilitate and encourage successful collaboration of leadership teams. Participation in the Collective Performance Allowance process is voluntary for school leaders in all schools with at least 250 students. First implemented in 2005, an increasing number of school leadership teams are taking part.

The Appraisal of Collective Performance system is built around the development of an institutional objective (*objetivo institucional*) and two to four institutional targets (*metas institucionales*) that results in an agreement of collective performance (*Convenio de desempeño colectivo*). The development of the agreement of collective performance involves the distribution of related tasks and school principals and other technical-pedagogical school leaders taking on mutual responsibilities. The institutional targets are determined by local contexts and priorities, but need to be linked to five areas of school leadership (leadership, pedagogical leadership, school climate, support to students, financial management) and results. At least one of the institutional targets needs to be related to pedagogical leadership, another to results. To align the Collective Performance Allowance process with other measures for improving school leadership, the institutional objective and institutional targets need to be defined with reference to the Annual Development Plan of Municipal Education (*Plan Anual de Desarrollo Educativo Municipal*, PADEM) and the School Development Plan (*Proyecto Educativo Institucional*, PEI).

Once a school leadership team has established an agreement of collective performance, the school leadership team together with its school provider develop strategies to monitor the achievement of the objective and targets and related leadership practices and behaviours. It is, then, subject to further approval or revision by the responsible provincial department of education (*Departamento Provincial de Educación*, DEPROV) to ensure that the agreement complies with legislation and corresponds to national education goals. Ultimately, the school leadership team presents its agreement, institutional objective and targets to the school community. The extent to which the institutional objective and each of the institutional targets have been reached is assessed by the school provider on the basis of an implementation report (*Reporte de Implementación*) and an evidence portfolio (*Carpeta de Evidencias*) compiled by the school leadership team to document progress towards the objective and targets and any challenges and difficulties in the process. The extent to which the overall agreement of collective performance has been reached is calculated from the total sum of the degree of achievement of the individual objective and targets. The results are, ultimately passed on to the provincial department of education for validation. On the basis of four rating levels (0%-49.9%, 50%-74.9%, 75%-89.9%, 90%-100%), school leadership teams that have achieved the two highest rating categories receive a financial allowance of 10% and 20% of the National Minimum Basic Salary (*Remuneración Básica Mínima Nacional,* RBMN). To ensure the sound implementation of this tool, the Chilean Ministry of Education can carry out external audits of the Appraisal of Collective Performance process as implemented by individual school providers.

Source: OECD (2013b), *Synergies for Better Learning: An International Perspective on Evaluation and Assessment*, *http://dx.doi.org/10.1787/9789264190658-en*.

Organisation of the learning environment

School development planning is encouraged and benefits from extra support

Legislation requires all school providers and schools to develop their own school educational project (PEI). In addition, Chile has encouraged schools to develop school improvement planning and self-evaluation with different initiatives. In 2003, the Ministry of Education introduced a System for Quality Assurance in School Management (*Sistema de Aseguramiento de Calidad de la Gestión Escolar,* SACGE), a now discontinued voluntary programme for school improvement based on school self-evaluation, the formulation of an improvement plan, public accountability to the school community, and support through external experts (Santiago et al., 2013). The introduction of the preferential school subsidy (SEP) in 2008 constitutes a further important step towards establishing school development and self-evaluation processes, even if mainly as an accountability tool. School providers and schools receiving additional resources through this subsidy are required to develop school improvement plans (PME) that set out how the additional resources will be used to improve processes and reach targets set out in the school improvement plan.

At the time of writing this report, only schools receiving public funds through SEP were required to develop and implement a school improvement plan (PME). Some available research points to challenges in using school improvement plans to change organisational processes and practices and to tensions between the accountability and development functions (more on this below), but also to some benefits. Research by Falabella and Opazo (2014) on the overall National Quality Assurance System in Education suggests that the requirement to develop school improvement plans and to set targets as part of this process has introduced a greater focus on achievement in schools and brought schools to develop more structured and controlled management processes. Schools taking part in the study described to engage in the following practices: planning work in the school and in classrooms more systematically and in greater detail, monitoring student outcomes more systematically, ensuring that teachers cover the curriculum, school leaders observing and evaluating pedagogical practices, gathering evidence of the initiatives taken to implement the school improvement plan, taking decisions on the basis of evaluations and quantitative information, and monitoring goals. Schools also valued school development planning as an opportunity to set challenging targets and saw school improvement planning as an incentive to make efforts and commit resources to realise the set goals.

To support schools in their school development and improvement planning, the Chilean education system provides schools and school providers with external technical-pedagogical support. Schools and school providers can call on public technical-pedagogical consultants (ATP) to receive advice on a range of issues, such as the planning of improvement strategies and the implementation of their school improvement plan. With the introduction of the National Quality Assurance System in Education, the Ministry of Education has introduced a new school improvement support framework (*Sistema de Apoyo a la Mejora Educativa*) to guide the work of the Ministry's technical support for schools (ATP) for the period 2015-18. This new support system for school improvement seeks to build the capacity of schools and school providers for self-improvement and to make better use of school educational projects (PEI) and school improvement plans (PME). To this end, it also seeks to establish school improvement plans (PME) as a tool that is more independent of the preferential school subsidy (SEP) and related accountability requirements. The new support system for school improvement focuses on capacity building in three areas:

quality school leadership and management; effective curriculum implementation; and school climate, participation, democracy, inclusion and diversity. It works directly with individual schools (*asesoría directa*) as well as with groups of schools through school networks (*redes de mejoramiento escolar*).

In addition to these public technical-pedagogical support services, schools and school providers are encouraged to seek the support of private advisory services (ATE). While there are concerns about the functioning of these services (more on this below), they constitute a potential source of support and can provide an external perspective on school processes. There is also limited evidence that they can have positive effects on school improvement processes and student learning, even if this depends to a large extent on the previous capacity of schools (Osses et al., 2015).

Additional resources are available for the recruitment of teaching assistants and learning support staff

Thanks to targeted funding programmes in the form of the preferential school subsidy (SEP) and the programme of school integration (PIE), schools have additional resources to hire learning support staff who support teachers in their work and provide psychological and social support for students within schools (also see Chapter 3). The preferential school subsidy has led schools to focus on students with learning difficulties, to introduce new pedagogical methods and evaluation and assessment processes, to develop their own innovative projects, and to create multidisciplinary professional teams, something which is greatly appreciated by schools and school leaders. The additional resources have enabled schools to establish psycho-pedagogical assessments of students through educational psychologists and to provide additional support for students with special needs and students showing low performance (Falabella and Opazo, 2014; Weinstein et al., 2012). As the OECD review team noted during its review visit, in international comparison, schools visited had a large number of learning support staff available within their premises and established multidisciplinary teams comprising assistant teachers and other specialists, such as special needs teachers, school psychologists and social workers, among others.

However, while the Chilean education system provides additional resources that school providers and schools can use to hire specialised learning support staff, there may be indications that available staff does not always meet school needs. For the OECD TALIS 2013, a sizeable proportion of lower secondary teachers were in a school whose principal reported a shortage of support personnel (42.6%, against an OECD average of 46.9%) (OECD, 2014, Table 2.19). Also, as some stakeholders pointed out during the review visit there seems to be limited attention to the quality of other professionals and learning support staff in schools, e.g. through staff regulations, although the General Education Law points out the rights and duties of some learning support staff (*asistentes de la educación*). The quality of learning support staff is essential if they are to make a difference to the work of teachers and the educational experience of students. As a mixed evidence base suggests, learning support staff can help create more flexible learning environments (e.g. through flexible creation of groups), establish opportunities for more personalised teaching and learning, and support teachers and students. For example, school psychologists and social workers can help teachers focus on their core role and provide psychological and social support for students, when needed. But this is only the case if learning support staff are prepared well to support students (e.g. one-on-one, in small groups, in whole classes) and to work in teams with other teachers, and if all staff have the time needed for planning,

preparation and co-ordination (Masdeu Navarro, 2015). In this context, the high teaching load of teachers in Chile might be a concern as teachers may have less time available to work together with learning support staff (see Chapter 5).

There are established platforms for community participation in schools and initiatives to foster a positive school climate

Legislation and performance standards in Chile strongly promote the participation and involvement of the whole school community in the education of children and young people. The General Education Law establishes participation and transparency as two of the key principles of the education system. This includes the availability of information about the performance of the education system at different levels (school, municipality, province, region and country). The same law defines the nature of the school community. Accordingly, "a school community is a group of people coming together in a school inspired by the shared purpose of contributing to the development and learning of all the school's students and to their holistic spiritual, ethical, moral, emotional, intellectual, artistic, and physical development. The shared purpose of the school community is expressed in adherence to the school educational project and the school's internal regulations". The law also sets out the rights and duties of the individual members of the school community, including students, parents and guardians, education professionals, teaching assistants, teacher and school leadership teams, and school providers.

The Good School Leadership Framework and the Performance Standards for Schools and School Providers similarly highlight the involvement of the school community in schools as an essential part of school management and leadership. The good school leadership framework communicates "Managing the school climate and the participation of the school community" as one of five key practices of school leaders and school leadership teams. The Performance Standards for Schools and School Providers entail a dimension on "professional development and community". This dimension itself includes a sub-dimension of "participation and democracy" (*participación y vida democratica*) that describes policies, procedures and practices in schools to develop students' attitudes and skills necessary for participation in democratic society. This sub-dimension also emphasises the importance of developing a sense of belonging to the school and the community and the creation of spaces for the different members of the school community to contribute with their ideas and initiatives.

Schools receiving public funding must provide the school community with concrete opportunities to participate in the management of the school. As laid out in the General Education Law, school providers should involve their school community in the development of the school educational project (PEI) and schools should promote the participation of the school community and its different constituents through the creation of specific bodies. This includes a students' council, a parents' council and a teachers' council. Schools should also establish a school council. School councils have a special role as they bring together representatives of the different members of the school community to promote participation in the implementation of the school educational project and the creation of a positive school climate that is free of all forms of physical or psychological violence. Schools that are not legally required to establish a school council should establish a committee for a good school climate (*comité de buena convivencia escolar*). The school funding approach in Chile that is based on student enrolments and attendance encourages schools to reach out to parents and the community to attract students, to create an

attractive school offering that meets local needs (e.g. through extracurricular activities), and to ensure that students come to school (Weinstein et al., 2012).

Data from PISA 2015 suggest comparatively higher participation of parents in local school government and education. As the data indicate, parents in Chile are more likely to participate in local school governance than parents in other countries with available data: the parents of 26.6% of 15-year-olds reported that they had participated in local school government in the previous academic year (average of 12 OECD countries with available data: 15.7%) (OECD, 2016, Table II.3.30). Research carried out in Chile provides some information about the actual functioning of school councils. This research suggests that school councils often constitute a valued source of information for the members of the school community, particularly for those not involved in the leadership and management of the school, even if there is a significant number of schools with school councils that only operate as a formality (De la Fuente and Raczynski, 2010). This was also the impression the OECD review team gained during its review visit. While some school councils seemed to be relatively involved, others did not seem to critically question school operations or to have a strong voice. Concerning the possibility for students to provide feedback on the way they learn and are taught, data from PISA 2012 suggest that a substantial share of students are not being consulted about their learning experience: 46.4% of 15-year-olds were in a school whose principal reported that no written feedback from students regarding lessons, teachers or resources is sought (OECD average: 33.1%) (OECD, 2013a, Table IV.4.33).

Besides promoting community participation in schools, Chile has also paid attention to the importance of creating a positive school climate. Schools need to develop internal school community regulations (*reglamento interno de convivencia escolar*) and appoint a school community co-ordinator (*encargado de convivencia escolar*). The school community co-ordinator is responsible for implementing measures decided in the school council and for developing an action plan to develop a positive school environment. The development of a positive school climate is also a key role of school leaders as the national standards for school leadership highlight. The Ministry of Education has created a national school climate policy (*política nacional de convivencia escolar*) and implemented legislation against violence and discrimination in schools. This seems to be an important initiative – according to the Third Regional Comparative and Explanatory Studies (TERCE), Chile is one of the countries in Latin America where teachers perceive aggressive behaviour by students as occurring more often (Weinstein, 2015). Other institutions and processes related to school evaluation and development also pay attention to the role of a positive school climate. This is reflected in the work of the ATP and the new support system for school improvement (*Sistema de Apoyo a la Mejora Educativa*) and the support offered through ATE consultants. "School climate, participation, democracy, inclusion and diversity" is one of the three focus areas of the support system for school improvement and school climate is one of the domains typically covered through ATE consultants. The Agency for Quality Education also considers a good school climate in its work. School evaluations evaluate the school climate as a performance indicator in the school evaluation framework and the ranking of schools goes beyond student results in national standardised assessments to include other quality indicators (*Otros Indicadores de la Calidad Educativa*). These other quality indicators seek to reflect the importance of the broader personal and social development of students besides students' academic progress. One of the eight other quality indicators relates to school climate (*clima de convivencia escolar*) and

is measured through context questionnaires administered together with standardised student assessments (SIMCE).

The National Quality Assurance System in Education provides opportunities to establish school networks, including among rural schools

Rural school networks (*microcentros rurales*) provide teachers and school leaders with opportunities for collaboration and exchange in small schools in rural and remote areas, contexts in which collaboration and feedback among peers is more difficult (also see Chapter 3). These networks have great potential to facilitate collaboration and peer learning. However, as data from the OECD TALIS 2013 suggest, collaboration between school principals more widely is not yet well-established in Chile. Only 42.2% of lower secondary school principals reported having collaborated with principals from other schools (TALIS average: 62.1%), and only 35% of principals reported having participated in a professional network, mentoring or research activity in the 12 months prior to the survey (TALIS average: 51.1%). Those who participated in such an activity, however, reported having done so for more than twice the amount of time than school principals in other countries participating in the survey (51.2 days, on average, compared to a TALIS average of 20.2 days) (OECD, 2014, Tables 3.2 and 3.14). Also, anecdotal evidence suggests that available platforms for collaboration through rural school networks may sometimes be used more to provide information on administrative issues. There is, then, potential to ensure that school leaders and teachers make the most of existing opportunities for collaboration through rural networks and to encourage collaboration more widely.

While not yet established on a systematic basis, recent initiatives related to the new National Quality Assurance System in Education have the potential to provide further opportunities for schools more generally to collaborate. First, technical-pedagogical support from the Ministry of Education (ATP) and its new approach to school improvement (*Sistema de Apoyo a la Mejora Educativa*) not only work with individual schools but also plan to work with groups of schools and to build school improvement networks in the future (*redes de mejoramiento escolar*). The regional education authorities of one region (SEREMI) visited as part of the review visit outlined their plans to work more in local school networks. Second, the school evaluation system developed and implemented by the Agency for Quality Education (ACE) works with a number of different models, including local visits (*visitas territoriales*) that evaluate municipal school providers and all of the schools that the school provider is responsible for. These evaluation visits seek to improve the management practices of school providers and their schools, and to identify common strengths and weaknesses, but also to establish networks between individual schools.

School evaluation

The approach to external school evaluation is increasingly focused on school development

The creation of an Agency for Quality Education and an Education Superintendence as part of the National Quality Assurance System in Education constitutes a promising step to consolidate the evaluation and assessment framework. School evaluations by the Agency, in particular, may support schools to improve their pedagogical processes and practices. While research on the impact of school evaluations is limited, and while school evaluations can have undesired effects (e.g. preparation for evaluation, compliance, hindering innovation in teaching and curriculum experimentation), there is some evidence showing

that school evaluations can promote improvement through professional support, fair and accurate reporting and informed analysis and comparisons (OECD, 2013b). The distribution of responsibilities between the Agency (which evaluates pedagogical processes and the quality of education in schools) and the Superintendence (which evaluates the compliance with legal requirements of schools and school providers) provides favourable conditions for the implementation of school evaluations that contribute to school improvement.

The impact of school evaluations depends on the form that evaluations take (e.g. the kind of feedback that schools receive, the expectations that are communicated to schools in terms of follow-up, and the reporting of findings to the school community) (OECD, 2013b). The impact of the work of the Agency will, therefore, depend on the shape that school evaluations take and if school evaluations in Chile follow best practices, but also on the capacity and resources available within the Agency as well as the capacity and acceptance of schools, school leaders and teachers. It is, however, already notable that the Agency seeks to establish a formative approach to school evaluation. The Performance Standards for Schools and School Providers clearly state that school evaluation has been conceived as a support process for schools and set out the following objectives of school evaluations: strengthen the capacity of institutions and their ability for self-evaluation; provide guidance for the development of school improvement plans; and promote the continuous improvement of the quality of education on offer. The performance standards also clearly state that they provide guidance only and that, unlike the educational normative, learning standards and other quality indicators, their content do not constitute goals and objectives that schools and school providers need to fulfil (Ministry of Education, 2014).

To support school improvement, the Agency has been developing a wide range of tools, guidance materials and a variety of school visit types, such as school visits to strengthen self-evaluation practices (*visita de fortalecimiento de la autoevaluación*). This attention to the developmental function of school evaluations seems to constitute a notable change since a previous OECD review of teacher evaluation in Chile (Santiago et al., 2013). The team undertaking the previous review visit had gained the impression that the conception of the Agency's activities was emphasising the accountability function of evaluation and that the comprehensive review of school processes by teams of trained reviewers was receiving less attention.

The school evaluation approach that the Agency has developed entails two further promising elements. First, school evaluations follow a proportional approach focussing on low-performing schools. Schools are classified on the basis of their performance in standardised national student assessments (SIMCE) and in other indicators of education quality (*Otros Indicadores de la Calidad Educativa*) in one of four categories (high, average, average-low and unsatisfactory), taking the schools' socio-economic context into account. Student performance in standardised assessments counts for 67%, "other indicators of education quality"[4] make up the remaining 33% of the classification. Schools classified as showing insufficient performance are evaluated at least every two years, schools classified as showing average-low performance at least every four years, and schools classified as average at the Agency's discretion. Schools showing high performance receive learning visits (*visitas de aprendizaje*) to identify and spread good practices.

Second, school evaluations promise to create a greater understanding of school processes and contexts as evaluators should consider a range of school processes and

practices as specified in the Performance Standards for Schools and School Providers. School evaluations should result in an evaluation report that takes into account the school educational project, the school context, and results. And they should describe main strengths and weaknesses and provide guidance for schools to develop voluntary school improvement plans, possibly with the support of external technical-pedagogical support (ATP/ATE). School evaluations should thus help to bring a qualitative dimension to the assessment of schools and the education system, which used to be exclusively based on performance in standardised assessments.

The results of standardised assessments provide detailed information to schools and parents about student achievement, but empirical studies suggest limited capacity for interpreting and using results for school improvement and a number of unintended effects. These include an excessive focus on results as measured by standardised student assessments relegating teachers' professional knowledge of their students to the margins; the ranking and comparison of schools and school types by provider irrespective of their context and particular challenges; failure of schools to take responsibility for their performance, instead blaming others in case of underperformance; and a neglect for other subjects and an impediment for innovative school educational projects (MINEDUC, ACE and ES, 2016; Jiménez and Taut, 2015; Falabella and Opazo, 2014; Weinstein et al., 2012). According to a survey by the Centre for Research and Development of Education (*Centro de Investigación y Desarrollo Educacional*, CIDE) at the Universidad Alberto Hurtado, 58.6% of teachers stated that SIMCE assessments create a more mechanical process of teaching and learning, 67.8% of teachers stated that their school focuses on the subjects assessed in SIMCE, and 70.9% of teachers stated that SIMCE assessments receive excessive attention (Falabella and Opazo, 2014).

Challenges

School leadership

The school leadership profession is not attractive also the result of a lack of a school leadership career that is separate from teaching

Chile has recently introduced a new school principal recruitment process and increased the remuneration of school leaders to make the profession more attractive and to compensate school leaders according to their level of responsibilities. Changes to the structure and amount of the school principal allowance have resulted in a substantial increase of the statutory salaries for principals of large and disadvantaged schools, in particular, both relative to teachers and to heads of technical-pedagogical units. The salary allowance for school principals of large schools corresponds to 100% and 200% of the National Minimum Basic Salary (RBMN) for schools with a low concentration of disadvantaged students and schools with a high concentration of disadvantaged students respectively (see Table 4.2). This compares with a maximum allowance for experience for teachers that rewards length of service with 100% of the RBMN which can be reached after 30 years of experience, and an allowance of 20% of the RBMN for heads of technical-pedagogical units. Principal positions of small and medium schools are financially less attractive compared to experienced teachers and heads of technical-pedagogical units. Principals in small schools with a low concentration of disadvantaged students receive a salary allowance between 25% and 37.5% of the RBMN (see Table 4.2). Teachers receive this amount of additional remuneration with between 7.5 and 11 years of teaching experience. The allowance for difficult working conditions (up to 30% of the RBMN) may provide some

additional remuneration for principals in small rural schools, but it equally applies to teachers in difficult working conditions, and thus does not provide a comparative financial advantage for school principals.

Despite these changes, there are persistent concerns about the attractiveness of the profession and challenges to fill all vacant school leadership positions (Weinstein et al., 2011). Considering that the school leadership profession is ageing and the lack of a stable supply of candidates for school leadership positions, the need to adopt new measures to raise the status of the profession may become more pressing in the future. However, more information is needed to understand the status of the profession and to evaluate the impact of recent measures on the perception of school leadership. This includes the increase of the school principal allowance, the introduction of a new recruitment process, and the introduction of performance agreements and fixed-term contracts. It also includes the lack of sufficient career differentiation between teachers and school leaders which may be one aspect contributing to the low status of school leadership.

School leaders in Chile are part of the teaching profession and do not benefit from a separate career ladder and salary scale, but receive a financial allowance for their responsibility and possibly other allowances that also apply to teachers. This employment structure fails to communicate the important role of school leaders and does not provide school leaders with opportunities for career progression. Possibilities for career development could provide a clearer idea of how to progress from other school leadership positions, such as deputy principals and heads of technical-pedagogical units, into school principal roles and enable school principals to develop further. Diverse career pathways for school leaders could help attract teachers to the school leadership profession and create incentives for high performance. While school leaders can apply for positions with the municipal education administration, for example, opportunities for school leaders to take on further system leadership roles as part of a school leadership career with diverse pathways could also contribute to the improvement of the education system as a whole (Pont et al., 2008).

The quality of school leadership training raise some concerns

School principals are required to undertake training in school leadership, a large range of training programmes is available, and the Ministry of Education has been investing in school leadership training through a professional development programme (*Plan de Formación de Directores*), and the creation of two national school leadership centres. A significant share of school principals have taken part in school leadership training, as, for instance, evidenced by the TALIS 2013 school leadership training index (see above). However, the OECD review team had some concerns about the quality of the training on offer at the time of the review visit.

School leadership training providers and courses were not sufficiently regulated and there was limited attention to quality standards, the accreditation of training providers and programmes and the further education of trainers of school leadership courses. Not all school leadership training may therefore prepare school leaders adequately for their role. In terms of content, school leadership training may not always be sufficiently geared towards the development of pedagogical leadership skills, such as teacher evaluation, feedback, coaching and classroom observation. This may also influence school leaders' willingness and capacity to engage in such practices which appear to be still relatively little developed as analysed above. While considered important by school principals, direct

learning from peers and on-the-job experience has only recently gained some more attention in school leadership courses (MINEDUC, ACE and ES, 2016; Weinstein and Muñoz, 2014; Santiago et al., 2013; Weinstein et al., 2011). As an OECD study on improving school leadership highlighted, school leadership training should focus on competencies in areas that contribute to improving teaching and learning, such as strategies for supporting, evaluating and developing teacher quality; goal setting, assessment and accountability; strategic financial and human resource management; and system leadership, and emphasise teaching methods such as action-research, coaching, mentoring and peer learning (Pont et al., 2008).

There were also some concerns about the structure of school leadership training. Traditionally, school leadership development did not reflect the needs of school leaders at different stages of their career (Weinstein and Muñoz, 2014; Weinstein et al., 2011). There was no tailored support for new school leaders in the form of a systematic induction of mentoring programme, and there was no particular offer for other school leaders, such as heads of technical-pedagogical units. Changes to the Chilean approach to school leadership development implemented since 2015, such as the creation of an induction process and the creation of two national school leadership centres which provide training for other school leaders, for example, may help effectively address these shortcomings.

School principals have limited autonomy in managing their school's human resources, particularly in public schools

Within Chile's fairly decentralised education system, the autonomy of schools depends to a large degree on the ways in which responsibilities are distributed between school providers and schools and on the domain of decision-making that is concerned, as was pointed out at the beginning of this chapter. The level of school autonomy, thus, differs between school providers and is generally lower for decisions about resource use and management. Administrative data from the OECD *Education at a Glance* for 2012 indicate that schools in the public sector have considerable autonomy in the organisation of instruction, but less autonomy for personnel management and planning and structures, and no autonomy for resource management, for which local authorities play a considerable role (see Figure 4.1 and Annex 4.1) (OECD, 2012a). Data from the OECD PISA 2012 provide a similar picture of school autonomy illustrating the strong influence of intermediate levels of governance. As reported by school principals themselves, there is a greater level of decentralisation in questions of resource allocation than in many other countries, but a much greater influence of intermediate authorities like regional and/or national education authorities or school governing boards rather than schools alone. The level of school autonomy over curricula and assessments is more similar to other OECD countries, but again the strong role of regional and/or national education authorities or school governing boards is very clear (OECD, 2013a, Figures IV.4.2 and 4.3).

The nature of decentralisation in Chile has resulted in differences in school autonomy between public and private-subsidised schools (Weinstein et al., 2012; Weinstein et al., 2011), even if public schools recently received greater autonomy for the management of their human resources than was previously the case. While school providers in both sub-sectors tend to hold the main decision-making power for resource management, school leaders in private-subsidised schools tend to have a greater say in such decisions than their peers in public schools. In the public school sector, municipalities are responsible for the operation of schools (including their financial management), administer their teaching

workforce (including the appointment, dismissal and professional development of teachers) and manage the relations to the education community and the general public. Each municipality prepares an Annual Development Plan of Municipal Education (*Plan Anual de Desarrollo Educativo Municipal*, PADEM), covering areas such as the objectives for education within the municipality, the demand and supply of education, and teaching and non-teaching staff needs (Santiago et al., 2013). As Weinstein et al. (2011) thus pointed out, there is no empowerment of public schools as decision-making that has been devolved to the local level tends to operate at the intermediate level rather than at the school level.

The distribution of responsibilities between school providers and schools entails some benefits as school providers can take over administrative and managerial tasks and thus free school leaders to concentrate on their pedagogical role, as has been stated above. But it also creates challenges, particularly for public schools that tend to be less involved in their school provider's decisions. The Chilean approach to decentralisation may make it difficult to align resource management decisions with the needs of schools and their pedagogical processes if schools are not adequately involved and consulted in these decisions. It was, for example, not clear to the OECD review team how school-level processes, such as improvement plans, link with wider strategic planning and the school provider's PADEM. Schools' limited responsibility for human resource management is a further area of concern. School leaders of public schools do have some powers for human resource management, especially so with the changes introduced through the Quality and Equality of Education Law in 2011, but these changes still need to take ground and there seems to be scope to further increase school leaders' autonomy for human resource management decisions. As specified in the Teacher's Statute, school principals of public schools must be involved in the selection of teachers which is organised by municipal education authorities but the ultimate decision is of the municipality's mayor. And since 2011, school principals appointed under the new recruitment system hold the authority to select the members of their school leadership team and to suggest the dismissal of up to 5% of their teachers with poor performance in the teacher performance evaluation system. As some research has pointed out, however, school principals are not yet always responsible for the selection of their school leadership team (UDP, 2014b, cited in MINEDUC, ACE and ES, 2016). The still rather limited involvement of schools in human resource management reduces school leaders' scope to select teachers to shape their school's profile, to encourage improvement and to respond to underperformance among their teachers. Schools thus need to develop their own coping strategies. One school principal interviewed during the review visit, for example, had moved a teacher with difficulties in the classroom to the school library.

The planned reform of the governance of public schools and the envisaged recentralisation of public schools through the creation of Local Education Services (*New Public Education*) provides an opportunity for rethinking the nature of decentralisation in Chile and the relationship between an intermediate level and the school level. This would also be appropriate considering the recent introduction of further evaluation and accountability mechanisms with the development of school evaluation processes through the Agency for Quality Education and the Education Superintendence and changes to the recruitment and employment of school principals which include very strong accountability tools such as individual performance agreements. As the OECD review team, however, noted during its country visit, discussions about school autonomy did not seem to receive great attention as part of the current plans to create new local education services.

The management of school principals faces considerable challenges, particularly in the public school sector

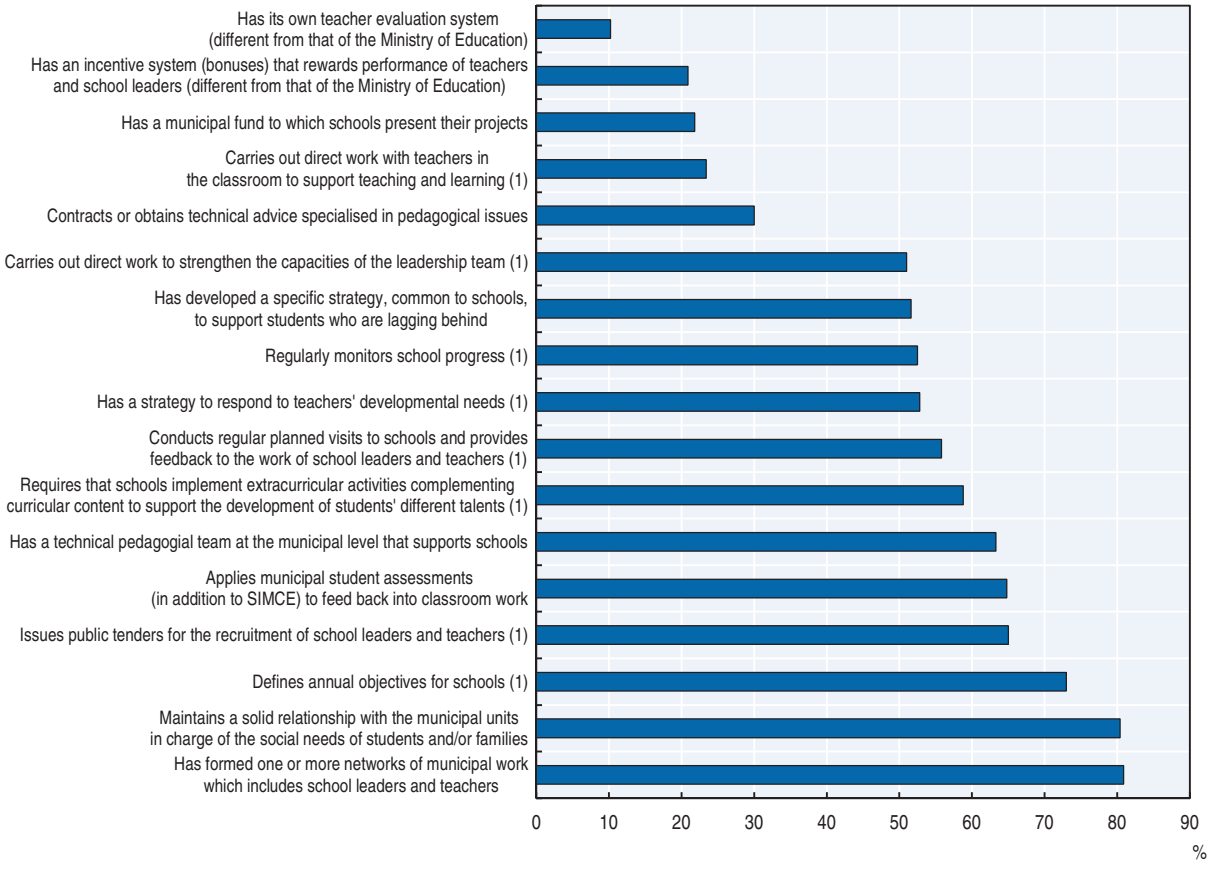
Considering the importance of school leadership for teaching and learning, it is essential that the school leadership profession is managed effectively, from recruitment, training and professional development, to performance management and ongoing support (Darling-Hammond and Rothman, 2011). Within the present Chilean model of education governance, local school providers play a key role for the operation of their school, as has already been described above, including for the management of school principals. Public school providers play an important role in the recruitment process of school principals to ensure that the selected candidate matches local needs (e.g. through the definition of local competency profiles and participation in the recruitment panel) and for the ongoing evaluation of individual performance agreements as part of school principals' contracts, for example. And owing to their close contact with schools, school providers could play an important role in supporting principals in their professional learning and in facilitating exchange and collaboration between their schools and principals.

Similar to the level of school autonomy, the quality of the management of school principals depends on the school provider. Not all school providers, however, devote enough attention to this area or have the capacity to do so. This is particularly the case in the public school sector. While school providers tend to take responsibility for the management of their schools' financial, human and physical resources, they tend to leave the pedagogical management of their schools to school leaders alone and to rely on the Ministry of Education to provide technical-pedagogical support through their dedicated services within the provinces. School providers do take an interest in the performance of their schools in terms of student results in standardised national student assessments and enrolment and attendance, and hold their school principals accountable for such results, but without providing sufficient support (Weinstein and Muñoz, 2014; Weinstein and Muñoz, 2012a; Weinstein et al., 2012). A recent survey of municipalities reveals that only a small proportion of municipalities was involved in evaluating and improving pedagogical processes in their schools and in supporting school leaders to manage their schools on a daily basis (see Figure 4.4). Only 55.8% of heads of municipal education departments and corporations reported to conduct regular planned visits to schools and to provide feedback on the work of school leaders and teachers, only 52.5% reported to regularly monitor school progress, only 51% reported to carry out direct work to strengthen the capacity of the school leadership team, and only 20.9% reported to have an incentive scheme to reward the performance of teachers and school leaders (Raczynski and Salinas, 2009). The introduction of external school evaluations through the Agency for Quality Education may encourage school providers further to focus on managerial and administrative issues only and to leave oversight and support of pedagogical processes to the Ministry of Education.

There are also concerns about the capacity of public school providers to fulfil their responsibilities in this area. Chile's municipalities are highly heterogeneous in terms of their size, level of urbanisation and economic development. In 2002, the smallest 10% of municipalities catered to an average of 445 students while the largest 10% of municipalities enrolled an average of 21 300 students (Larrañaga et al., 2009). Municipalities also vary significantly in the socio-economic composition of their population, with smaller municipalities having a higher probability of catering to low-income populations than medium-sized and large municipalities. Given these differences, it is not surprising that

municipalities also vary widely in the human resources they have to manage the local education system. While large municipalities like the capital Santiago have substantial financial and human resources available, some smaller municipalities may have only one staff in charge of the entire local education system. A recent survey of Chilean municipalities found that 20% of municipalities did not have a position of a head of the municipal education department or corporation. Moreover, 39% of the municipalities did not have any staff responsible for the pedagogical support of schools and 49% did not have dedicated staff for the area of diagnostics and evaluation of students. At the same time, almost half of the municipalities (47%) themselves mentioned the lack of capacities and professional/technical resources within the municipalities as an obstacle to effective educational management at the local level (Raczynski and Salinas, 2009).

Figure 4.4. **Technical-pedagogical management of public schools in municipalities**



Note: The survey asked heads of municipal education departments and corporations about their engagement in a list of actions identified by the case studies of the research project. In the majority of questions, respondents had the option to answer "yes" or "no". In a few number of items, respondents had the option to indicate "with all", "with some", or "with none" of the school providers' schools. In this case, the percentage of respondents for "with all schools" was registered.

1. Identifies indicators based on responses for which respondents could choose between three options.

Source: Survey of Heads of municipal education departments and corporations in Raczynski, D. and D. Salinas (2009), "Prioridades, actores y procesos en la gestión municipal de la educación" ["Priorities, actors and processes in the municipal management of education"], in M. Marcel and D. Raczynski (eds.), *La Asignatura Pendiente: Claves para la Revalidación de la Educación Pública de Gestión Local en Chile [The Pending Task: Keys for the Recognition of Locally-managed Public Education in Chile*], Colección Cieplan, Santiago, Chile, pp. 135-177.

This indicates that a substantial proportion of municipalities do not have the technical expertise and human resources to support schools and to manage school principals. This is also apparent in recent evaluations of the new school principal recruitment process that indicated a lack of capacity of municipalities to define the competency profiles of the school principal positions of their schools (Grupo Educativo, 2015, cited in MINEDUC, ACE and ES, 2016). The lack of capacity of school providers is also of concern considering municipalities' power over their school principals through individual performance agreements. It remained unclear to the OECD review team how school providers used school leadership standards in the evaluation of their school principals and what efforts school providers undertook to build their capacity in this area.

Organisation of the learning environment

Both the effectiveness of school improvement plans as well as the functioning of public and private external technical-pedagogical support services for schools raise concerns

There is some evidence that the use of school improvement plans could be further developed. School improvement plans as part of Chile's overall standards-based accountability framework do not always help schools and school leaders to engage in professional reflection and to improve their practices. School improvement plans predominantly still function as an accountability tool to justify additional resources through the preferential school subsidy (SEP) and are often strongly geared towards the achievement of targets in national standardised student assessments. As a result, school improvement plans may lead to a number of unintended and negative consequences. School improvement planning as an accountability process tends to turn into a bureaucratic process that is based on gathering information and documenting processes and achievements to meet external accountability demands rather than as a process that contributes to the improvement of school-internal processes. The strong focus on the achievement of specific targets linked to student performance in national assessments often leads schools to take decisions with SIMCE in mind rather than through a broader professional reflection that takes values and contexts into account (Weinstein et al., 2012; Falabella and Opazo, 2014).

External technical-pedagogical support services (ATP and ATE) may reinforce the accountability function of school improvement planning, create additional pressures on schools, and steer schools to focus on narrow areas of their operation, such as SIMCE results and curriculum coverage, rather than lasting changes in school processes and the capacity of teachers and school leaders. Interventions may, for instance, focus on a few members of staff, a few aspects of school operation or some instrumental tactics to improve scores in student national assessments rather than real changes to school culture and practice (Osses et al., 2015; Falabella and Opazo, 2014). As Earl et al. (2003) warned, reliance on a heavy test-based accountability system may threaten professional development and result in a culture of dependence.

There are further concerns about the ways in which technical-pedagogical support services operate, which also raise questions about the effectiveness of the resources invested in these services, particularly for private providers (Osses et al., 2015). As far as public technical-pedagogical support (ATP) within the Ministry's provincial departments of education (DEPROV) is concerned, it is not totally clear to the OECD review team how these services fit within the broader National Quality Assurance System in Education. The Ministry of Education and the Agency for Quality Education have signed a protocol to

articulate their collaboration in the external school evaluations undertaken by the Agency (MINEDUC and ACE, n.d.). This protocol specifies the involvement of SEREMIs, DEPROVs and the relevant school supervisors in the external evaluations carried out by the Agency. Essentially, DEPROVs, through their technical-pedagogical support (ATPs), participate in the initial and final meetings of the visit, receive the school evaluation report and contribute to the Guidance Workshop which discusses strategies for school improvement in light of the report's conclusions (MINEDUC and ACE, n.d.). However, the extent to which ATPs follow up on the recommendations of the Agency and support the improvement of the school in light of the results of external evaluation is unclear.

An evaluation of the Centre for Public Policies and Centre for the Study of Education Policy and Practices of the Catholic University of Chile (CPP-CEPPE-UC, 2014) identified a number of positive aspects of the work of the ATPs, also compared to previous models of technical-pedagogical support. This includes a focus on school leadership teams and distributed leadership as well as the work of technical-pedagogical advisors in teams of two. But it also identified a number of challenges, including the difficulty for external advisors to move from a summative function of supervision to a formative one of support as well as a tension between school autonomy and external intervention. Provincial departments of education could also target technical support better at schools with the greatest need of support and better adjust the support provided and the methods that are used to specific contexts. This was also the impression of the OECD review team that suggested that provincial departments do not always have a strategic vision of their work. As the study of the Catholic University of Chile (CPP-CEPPE-UC, 2014), furthermore, suggests, it is necessary to establish better channels of communication and information between the different levels and actors, from the central to the regional to the school provider and school level, also to ensure that external support fosters the implementation of programmes and policies. External support could also be more effective if it was directed at long-term change – external advisors typically work with schools for the period of one year only while school development plans typically cover a four-year period.

Regarding private providers (ATE), there are concerns in terms of the demand, the supply as well as the actual process. As far as demand is concerned, not all schools and school providers have the capacity to make an informed choice to select a service of high quality that meets their actual needs and to monitor the implementation and the effects of the intervention. The school community, including teachers and other staff, may not be fully involved in the decision-making process to use external services and equally lack involvement in monitoring and follow-up (Osses et al., 2015). Where school providers choose to contract external technical-pedagogical support without involving their school in the choice of the provider and the method used, schools and school leaders may feel a lack of engagement and responsibility (Weinstein et al., 2012).

In terms of the offer, private providers are required to seek admission to a public register. Schools should provide information about their satisfaction with the services they use and sanctions can be applied. If a school fails to meet its improvement target, for instance, private providers may even be eliminated from the register. But despite these measures, the sector lacks sufficient quality control and oversight as well as impact evaluation and monitoring. The supply of private providers is unbalanced across the country with a strong geographical focus on the metropolitan region and the capital Santiago. And it is unclear how private services complement the public offer of technical-pedagogical support (ATP) or how they create synergies in their interaction with schools.

As the study of the Catholic University of Chile (CPP-CEPPE-UC, 2014) highlighted, collaboration between ATE and ATP advisors is often very weak. And private providers, in fact, risk replacing public knowledge and expertise.

Regarding the process, some research indicates positive effects on teaching and learning, but the impact depends on previous school capacity and is often limited in the long-run. The services provided may not meet the school's needs and be adjusted to the particular context. And the effects of the external intervention ultimately depend on the ability of schools and external service providers to develop a productive working relationship. The use of external support also risks to alienate school leaders and teachers from their profession and to de-professionalise schools if external providers discourage self-reflection and take over pedagogical tasks and responsibilities (Barrera et al., 2014; Falabella and Opazo, 2014; Osses et al., 2015).

School evaluation

The introduction of external school evaluations faces some challenges

While the introduction of school evaluations as part of the National Quality Assurance System in Education creates considerable potential to help schools improve, there are also some challenges. First, the creation of two different institutions (the Agency and the Superintendence) and evaluation processes enables the Agency to focus on pedagogical processes, but it also entails the risk of overloading schools with further external processes, pressures and expectations in an already complex environment of multiple accountabilities. Since the Education Superintendence evaluates the use of resources by schools and school providers, it may also be difficult to connect resource use decisions with pedagogical considerations, even if there are some links between the two processes as evaluations of the Superintendence should be taken into account as one element in the Agency's evaluation reports. There are also open questions about the ways in which the new school evaluations are aligned with other processes, such as public and private pedagogical-technical support (ATP/ATE) and the teacher performance evaluation system under the leadership of the CPEIP. As Santiago et al. (2013) pointed out, links between teacher evaluation and school evaluation are important to provide effective feedback on the quality of teaching and learning in schools.

Second, it will be important to ensure that school evaluations contribute to real improvements in school processes. There is some evidence that other elements of the quality assurance system, such as school improvement plans and technical-pedagogical support services have failed to instil long-term changes to institutional practices and processes. Instead of building capacity for self-evaluation and professional analysis, existing processes have rather encouraged schools to focus on meeting external accountability demands and expectations (Falabella and Opazo, 2014). School evaluations are intended to focus on processes and to provide formative feedback to schools, but there is some tension with accountability demands as evaluations pay significant attention to results and school classifications (*categorías de desempeño*). While the classification of schools in different performance categories should primarily serve to determine the frequency of school evaluations, it is also communicated to schools, school providers and the school community as part of the evaluation report. It involves high stakes as continued underperformance can result in loss of official recognition for the school and it bears a risk of stigmatising schools with low performance. The ranking of schools also did not yet envisage taking more qualitative information on the quality of education in schools

gathered in school evaluations themselves into account. It is predominantly based on results in SIMCE, even if "other indicators of education quality" also play a role. The category of "results" also constitutes an important element of the school evaluation report, thus also introducing a potential accountability dimension.

Third, the proportional approach to school evaluation concentrates resources on low-performing schools, but it entails the risk that high-performing schools do not receive the support they need to improve even further if learning visits do not pay sufficient attention to identifying potential areas for improvement.

Policy recommendations

School leadership

Sustain efforts to strengthen school leadership

School leadership can have a strong impact on teaching and learning, the transformation of low-performing disadvantaged schools as well as the successful implementation of education policies (OECD, 2012b; Louis et al., 2010; Day et al., 2009; Pont et al., 2008). In Chile, like in other countries, pedagogical leadership has been found to be an important characteristic of effective schools, especially so in schools in disadvantaged areas (Raczynski and Muñoz-Stuardo, 2007). It is, thus, essential to build a strong school leadership profession, which can constitute a highly cost-effective measure for improving education considering the potential impact of a relatively small, but central, group of actors in the education system (Louis et al., 2010). As some evidence suggests, school leaders in Chile exercise pedagogical leadership, but pay more attention to some pedagogical leadership practices (e.g. setting goals and directions) than others (e.g. providing valuable feedback to teachers, encouraging collaboration between teachers). It is, thus important to further develop pedagogical leadership in schools. Chile has already invested considerably in the development of the school leadership profession.

The OECD review team encourages Chile to continue with these efforts based on a reflection about the relationships between support, autonomy, and accountability. While Chile has already put in place strong accountability mechanisms, school leaders could benefit from greater support and autonomy. Some of the key areas that Chile should, therefore, address include: i) the local management of school leaders, including effective recruitment, performance appraisal and ongoing support, to ensure a good balance between accountability and development; ii) the quality of initial training and professional development; and iii) the relationship between intermediate levels of governance and schools to enable school leaders to shape the learning environment of their school.

A further concern that should be addressed concerns the attractiveness of the profession and the development of a school leadership career structure. In the future development of school leadership policies, Chile should involve school leaders themselves through the new school leadership councils and pay greater attention to the ways in which different initiatives relate to each other.

Improve the attractiveness of school leadership as a profession

Considering the importance of school leadership for teaching and learning in all schools, it is important to attract high-quality candidates to the profession and to ensure that the best school leaders work in the most disadvantaged schools (OECD, 2012b; Pont et al., 2008). It is therefore important to make school leadership an attractive profession.

Chile has already undertaken first steps to do so with the introduction of a new school principal recruitment process and an increase of the salaries of school principals working in public schools. The salary increase also provides financial incentives for working in disadvantaged contexts. But Chile could implement further initiatives to increase the profile of school leadership, particularly considering that the profession is ageing and that there is already a shortage of interested candidates to fill all positions.

Initiatives should be informed by a greater understanding of the factors that would attract new and high-quality candidates of different backgrounds to school principal roles and the issues that currently prevent candidates from applying. For example, more information is needed to evaluate the impact of recent measures on the perception of school leadership, such as the increase of the school principal allowance, the introduction of a new recruitment process, and the introduction of performance agreements and fixed-term contracts. It could also be relevant to assess the different perceptions of teachers and other schools leaders, such as heads of technical-pedagogical units, and differences by gender. Research suggests that female school principals earn on average less than their male counterparts, and that gender differences in remuneration are higher in the private-subsidised sector than in the public one. The newly established national school leadership centres will play a key role in extending the knowledge base about the attractiveness of the profession.

It is also important to gain further insights into differences between schools types (public and private-subsidised schools) and contexts (e.g. rural schools, urban schools, disadvantaged schools). For instance, the employment frameworks for school leaders differ between public and subsidised private schools which may affect the attractiveness of school leadership in public schools. Since the introduction of the Quality and Equality of Education Law in 2011, school principals in public schools must pass a standard competitive recruitment process to access their position. They must sign an individual performance agreement are required to reapply for their position every five years. By contrast, the employment of school principals in subsidised private schools is at the discretion of school providers and tends to be less formal and competitive.

One step that could help increase the status of the profession is the development of a distinct career structure that is separate from teaching (Pont et al., 2008). A distinct career structure with its own salary scale could ensure adequate levels of remuneration that are significantly above those of teachers and similar to other professionals in the public sector with similar levels of responsibility. The introduction of a school leadership career structure would also provide an opportunity for introducing more system leadership roles that allow school leaders to develop in their career and to contribute to the improvement of the wider education system (Pont et al., 2008). System leadership roles could be created through opportunities in institutions that make up the National Quality Assurance System in Education, such as the Agency for Quality Education and the technical-pedagogical support services (ATP) within the Ministry of Education. Recruitment for such system leadership roles could be facilitated through a process similar to the one recently introduced for school principals that involves the High Public Service. It will, however, also be important to ensure that high-quality school leaders remain in schools (e.g. by encouraging school leaders to return to schools after having gained some experience as a system leader).

There is also scope for creating further teacher leadership roles in addition to the already existing roles of heads of technical-pedagogical units and general inspectors

(Santiago et al., 2013). The further distribution of school leadership would strengthen the school leadership capacity overall and also help build a sustainable supply of candidates for principal positions. The development of distributed leadership could be based on a broader strategy to foster potential school leaders (e.g. through taster courses that help teachers and potential school leaders to self-evaluate their interest and strengths and weaknesses, or through teacher education courses that cover school leadership issues) (Pont et al., 2008).

Ensure school leadership development meets the needs of school leaders with different needs, support the participation of school leaders in training, and ensure high-quality provision standards

It is also important to further develop the skills of school principals and other school leaders, including for their ability to implement effective self-evaluation and school improvement planning. Chile recognises the importance of school leadership training through requirements for school leaders to undertake training for their position and through a programme to encourage the professional development of school leaders (*Plan Formación de Directores*). However, the OECD review team had some concerns about the quality of school leadership training.

Chile should ensure that recent changes to the professional development programme for school leaders and the creation of an induction process meet the needs of school leaders with different levels of experience and working in different contexts. Courses should provide sufficient opportunities for mutual coaching and mentoring. The impact of the recent changes should be evaluated to assess the need for further changes. The new school leadership centres will play a key role here as well as for the further general direction of Chile's approach to school leadership development.

To improve the quality of training on offer, education authorities should ensure that providers and courses meet high-quality standards, e.g. by reviewing current accreditation and quality assurance mechanisms. The Good School Leadership Framework and the Performance Standards for Schools and School Providers could serve as the basis for accreditation and quality assurance. School leadership training should focus on competencies in areas that contribute to improving teaching and learning, such as strategies for supporting, evaluating and developing teacher quality; goal setting, assessment and accountability; strategic financial and human resource management; and system leadership.

School leaders influence the quality of teaching and learning through the management of their teachers. Human resource management should therefore be an important part of training, also in light of the need to increase school leaders' autonomy in this area (more on this below). School leaders should have the opportunity to learn about aspects such as how to facilitate professional learning as part of everyday teaching practice, how to build a collaborative culture so teachers learn from each other and address their day-to-day challenges together, and how to give meaningful feedback. They should be equipped to focus on the quality of teaching and learning and help set up the trusting work environment necessary to embed a focus on continuous evaluation and improvement in the everyday work of teachers (more on this in Chapter 5).

As the OECD (2013b) highlighted, school evaluation processes are hugely dependent on school leadership's capacity to stimulate engagement, to mobilise resources and to ensure appropriate training and support. School leadership training should thus pay adequate

attention to school self-evaluation and improvement planning and engagement with external evaluation and support provided by the Agency and external public and private technical-pedagogical support services (ATP and ATE). This could also help facilitate the implementation of more formative school evaluation processes.

As some data from national and international surveys and assessments indicates, school leaders tend to engage in practices that focus on meaningful teacher feedback and management less often. Such practices could, therefore, be an important part of professional development courses. In terms of teaching methods, training programmes should emphasise approaches such as action-research, coaching, mentoring and peer learning. It is also important to pay sufficient attention to the further education of trainers of school leadership courses (Pont et al., 2008).

School leaders in Chile should participate periodically in professional development to further develop their competencies and to learn about new practices. For the OECD TALIS 2013, school principals of lower secondary schools identified a lack of incentives, high financial costs, conflicts with the work schedule and a lack of employer support as some of the key barriers to participation in professional development (OECD, 2014). School providers thus have a key role to play to facilitate school leaders' professional learning and should take greater responsibility for doing so (e.g. by providing guidance, incentives, time and financial means for participation). Both the Agency for Quality Education and the Education Superintendence as well as the new school leadership councils should provide feedback on the training needs of school leaders, both nationally to education authorities and to individual school providers.

Strengthen local capacity to manage and support school leadership

To improve the leadership of schools, school providers should take more responsibility for the ongoing management of individual school principals, from recruitment to performance appraisal and professional support and development. As Weinstein and Muñoz (2012a) highlighted, the work of school principals does not happen independently in schools, but depends on school providers that set goals and objectives and that provide or do not provide the resources for the management of the school. As Weinstein and Muñoz elaborated further, it is difficult to imagine ongoing success of school principals if they cannot count on the necessary guidance and technical-pedagogical, financial and political support of their school provider. Raczynski and Salinas (2009) thus suggested that school providers should facilitate and foster good school leadership through initiatives such as the creation of networks between school principals and schools, the assessment and monitoring of teaching and learning in schools, and support and incentives for professional development.

The implementation of a new school principal recruitment and employment framework has strengthened the role of school providers in the management of school principals. School providers have the important role of matching the recruitment of new school principals to the needs of their schools and ensuring that the best school principals work in the most challenging contexts (Weinstein et al., 2011). And they have the responsibility to manage principals through individual performance agreements and evaluations, which hold great potential to set clear expectations, to provide school leaders with formative feedback, and to hold principals accountable for their performance. It is, however, not yet clear how school providers take on their new role in the recruitment and performance management of school principals and how the new measures affect schools

and school principals' practices. Performance agreements and evaluations, in particular, should not only strengthen the accountability of school principals, but provide the necessary support for school principals to fulfil their role and to meet agreed goals and objectives. Accountability also requires support and autonomy. It should, therefore, be closely monitored and evaluated how school providers implement performance agreements and evaluations.

Also, school providers need the capacity to fulfil their role in the recruitment process, to develop individual performance agreements and to carry out a sound performance appraisal in relation to the Good School Leadership Framework and the Performance Standards for School Leaders and School Providers. As appraisal processes can increase school principals' workload and stress levels, it is important that school principals experience appraisal as a meaningful exercise that helps them improve their practice. Performance evaluations should provide school principals with external feedback, identify areas of needed improvement and offer targeted support to improve practice (see Box 4.2 for best practices of school leader personnel appraisal) (OECD, 2013b; Radinger, 2014). School providers should receive sufficient guidance and training in these areas and have opportunities to share their experiences and practices.

Considering the expertise and knowledge of the Agency for Quality Education and the Education Superintendence of Education of individual schools and their leadership, both institutions could provide valuable input in the recruitment process and the evaluation of school principals' performance. Staff of both institutions could be represented in the school principal selection panel. This would help to address concerns about the transparency and objectivity of the process. School providers could be required to take into account the school evaluation report of the Agency for Quality Education that also includes the results of the evaluation by the Education Superintendence. The Agency for Quality Education itself should consider municipal approaches to the evaluation of school principals and the general management of school principals as part of its evaluations of school providers. Chile should also consider a greater involvement of school councils in both the recruitment of school principals and the evaluation of their performance. While there are risks considering the political nature of school principals' jobs, it would have the potential to empower school councils and strengthen their overall role for horizontal accountability and school improvement. In Victoria, Australia, for example, school councils or committees add a community criterion to a list of five central selection criteria for the recruitment of school principals.

However, school providers themselves require capacity to manage their schools and school principals effectively and to sustain improvements across schools within their remit. This is particularly relevant for the municipal school providers of public education. Chile has already put into place some measures to strengthen the professional competencies of staff in municipal education authorities. This includes the introduction of a new recruitment process and evaluations through the Agency for Quality Education and the Education Superintendence. But more could be done to strengthen the capacity of local education management. This is also relevant even in the case of a successful governance reform that transfers responsibility for public schools to Local Education Services.

A previous OECD review suggested some possible options (Santiago et al., 2013). These entail the promotion of strategic partnerships between municipalities and opportunities and incentives for municipalities to work together and learn from each other (e.g. through

Box 4.2. **OECD recommendations on procedures for school leader appraisal**

1. **Promote the appraisal of pedagogical leadership together with scope for local adaptation**

A focus on pedagogical leadership is essential to encourage school leaders to take direct responsibility for the quality of learning and teaching in their school. However, a focus on pedagogical leadership in appraisal must:

- **Be manageable and relevant:** local selection of criteria in line with central guidance that emphasise the importance of pedagogical leadership; focus on priority areas relevant to a particular school and the leadership required in that context; promote individual as well as school needs, e.g. through the mandatory use of a range of reference standards and documents, such as individual job descriptions and school development plans; recognise that successful school leadership requires choices on time investment and management and administration-oriented tasks may at times be equally important as pedagogical leadership tasks.
- **Recognise the need for and promote professional development:** ensuring access to high-quality, targeted and relevant professional development opportunities to develop pedagogical leadership; embedding appraisal for pedagogical leadership within a comprehensive leadership development framework; providing an opportunity for feedback and identifying areas for school leader's development.

2. **Promote the appraisal of school leaders' competencies for monitoring, evaluation and assessment**

School leaders play a key role for the effectiveness of evaluation and assessment, particularly for teacher appraisal and school evaluation. Therefore, school leader appraisal should address their ability to:

- **Manage internal teacher appraisal processes**, e.g. through evaluating school leaders' competencies to manage staff; to authentically evaluate teaching and learning; to understand, observe and recognise good teaching; and to give developmental feedback to teachers.
- **Lead the school's self-evaluation processes**, e.g. ensuring their school's collaboration during external evaluations, and communicating external evaluation results to their school community.

It should also lead to opportunities to improve these competencies. For example, with professional development in how to observe classrooms and interview teachers; how to analyse data; how to use school evaluation results; how to develop school improvement plans; how to involve teachers, students and parents in school self-evaluation.

3. **Promote shared leadership via school leader appraisal**

The OECD Reviews of Evaluation and Assessment in Education underlined the role that school leader appraisal could play in promoting a more effective sharing of management responsibilities. School leader appraisal could consider how leadership responsibilities are shared within the school and beyond the school by:

- **Examining the ways in which school leaders foster distributed leadership in their schools** (e.g. school leaders' competencies for building structural capacity, school leaders' efforts to create opportunities for teacher leadership, school leaders' ability to enhance their teaching staff's capacity to lead, school leaders' ability to foster succession planning).

Box 4.2. **OECD recommendations on procedures for school leader appraisal** *(cont.)*

- **Providing feedback on the arrangements of distributed leadership.** It may help inform professional development and wider support structures. It may also provide an opportunity to provide feedback to school leaders on their efforts to enhance teacher leadership in their schools.
- **Reflecting the growing importance of leadership tasks beyond school borders** as a way of sharing expertise for system-wide improvement.

4. **Promote the use of multiple instruments and sources of evidence**

Research has increasingly stressed the benefits of using multiple tools to form a fair, valid and reliable picture of a school leader's performance from a comprehensive perspective. Limited research has provided some insights into the benefits of different tools and the caution needed when using others:

- The use of school leader portfolios, if embedded within wider support structures, may ensure a school leader's views are adequately represented in the appraisal process and help strengthen the formative dimension of appraisal.
- The use of stakeholder surveys requires an awareness among evaluators of the politics that appraisal may involve. Teachers' views may add most value to an appraisal process considering their close insights into a school's daily routine.
- Given the wide range of factors that influence student outcomes within and outside schools, and persistent evidence that the impact of school leaders on student learning is mainly indirect and mediated through others, holding school leaders directly accountable for improved student test scores or the value added by the teachers in their school faces serious challenges and risks.

Source: OECD (2013b), *Synergies for Better Learning: An International Perspective on Evaluation and Assessment*, *http://dx.doi.org/10.1787/9789264190658-en*.

regular meetings or workshops). This could also involve the collaboration between municipalities and other key sources of support, including universities and professional institutes in each region. To meet the needs of smaller and more rural municipalities, Chile could consider building larger scale "shared service" approaches offering regional support to a larger group of municipalities and schools (e.g. through coaching and consultancy for groups of municipalities and schools within a region).

Some countries have put considerable resources into facilitating such forums of exchange and capacity building for local education providers. Germany, for example, launched a programme called "*Lernen vor Ort*" (Learning on the Local Level) in 2009. The programme supported local governments in building capacities for education monitoring and management as well as creating sustainable networks between local administrations and civil society actors. The programme ran from September 2009 until August 2014 and provided a total of EUR 100 million to support local districts and municipalities in setting up network structures and developing capacities. Districts and municipalities had to compete for funding and their participation was entirely voluntary (Busemeyer and Vossiek, 2015). Following the end of this programme, the German Federal Ministry of Education and Research established eight regional transfer agencies across the country as part of the transfer initiative local education management ("*Transferinitiative Kommunales Bildungsmanagement*"). These transfer agencies provide advice to local authorities, support

their education management, and spread best practices. They help local authorities analyse their current situation, facilitate local dialogue between different actors and stakeholders, offer advice about relevant tools and instruments, and offer capacity building and professional development.

Envisaged changes to the current system of governance of public schools through the creation of Local Education Services could help improve the supervision of schools and the management of school principals, if they have the support, capacity and financial means required to do so. The new Local Education Services should devote adequate attention to the management, development and support of their school principals, and co-ordinate their activities in this area with other relevant actors, including the Agency for Quality Education and the technical-pedagogical support services (ATP) provided through the provincial departments of education (*Departamentos Provinciales de Educación*, DEPROV). The integration of technical-pedagogical support services in the new Local Education Services, as currently planned, should ensure coherent support for schools and school leaders.

Consider extending school autonomy, particularly for public schools

The extent of school autonomy in Chile largely depends on the relationship between schools and their school provider. While school autonomy thus differs between schools and school providers, it is generally rather limited. This is particularly the case for public schools and their ability to manage their own resources, including decisions about their staff, even if their autonomy in these areas has increased with the implementation of the Quality and Equality of Education Law. The distribution of responsibilities between school providers and schools also entails some benefits. It can reduce the administrative and organisational burden on schools and help school leaders focus on their pedagogical role. But, depending on the relationship between schools and school providers, it also makes it difficult to align resource management decisions with pedagogical needs.

Chile should, thus, assess the need to provide public schools with greater autonomy, in particular for the management of schools' human resources. This could provide better conditions to align resource management decisions with the pedagogical needs of schools. Schools could, for instance, be more systematically involved in the selection of their staff and in planning the professional development of their staff. The current process of reforming the governance of public schools with the creation of a national system of public education and Local Education Services provides an important opportunity and should be used to reflect about the distribution of responsibilities between schools and the new institutions that are planned to take over responsibilities from municipalities. Such reflections did not seem to be present at the time of the review visit.

The strengthening of school accountability with the introduction of external school evaluations through the Agency for Quality Education and the Education Superintendence and individual performance agreements between school principals and school providers already provides conditions for extending further autonomy to schools. As pointed out above, research in Chile suggests that greater autonomy does not necessarily result in pedagogical leadership as the situation of private-subsidised schools shows. Greater school autonomy should thus be a gradual process, also to avoid and monitor any unintended effects (e.g. in terms of equity between schools). It could involve the certification of schools (possibly of a sufficient size) through the Agency for Quality Education as part of the school evaluation process to ensure that schools have the capacity to exercise their new autonomy. And it would need to go hand in hand with the further development of the

school leadership profession, which should include a reflection if current administrative and pedagogical support for school leaders is sufficient or needs to be expanded (e.g. through further distributed leadership structures).

Organisation of the learning environment

Strengthen the developmental function of school improvement planning and self-evaluation and rethink the role and operation of external pedagogical-technical support services for schools

While there are more pressing areas for reform that need to be addressed, such as improving teacher professionalism, creating better working conditions and raising the quality of initial teacher education (see Chapter 5) (Osses et al., 2015), some changes could be made to school development planning and pedagogical-technical support for schools. Following the introduction of formative school evaluations through the Agency for Quality Education as well as the current reform plans for reforming the local governance of public schools, Chile should rethink its current approach to providing public pedagogical-technical support for schools (ATP). External support should have strong links to the Agency's work and the different methodologies and tools that are used should work together to support internal school improvement (CPP-CEPPE-UC, 2014). The application of the protocol between the Ministry and the Agency on the involvement of the ATP in the external school evaluation activities of the Agency needs to become more systematic and the use of results of such evaluations by ATP needs to be made clearer. External pedagogical-technical support also requires support from and collaboration with school providers.

If Local Education Services assume the responsibilities of the municipalities, there is a strong case to integrate public pedagogical-technical support within the new Local Education Services. This could address concerns about clarity of communication and alignment of technical-pedagogical support with policies and programmes. And it could ensure that the knowledge generated as part of technical-pedagogical support feeds into the broader management of schools and local education systems through the school provider. Integrating pedagogical-technical support for public schools in the new Local Education Services would not have to mean that services are only available to public schools. Support could still be offered to private-subsidised schools by DEPROVs. This would also be important considering a limited supply of private technical-pedagogical advisory services (ATE) in some areas of the country.

It is also necessary to improve the potential of external technical-pedagogical support (ATP) to improve internal school processes and to contribute to system-wide improvement. Technical-pedagogical support should be independent of accountability goals and requirements and focus on effecting real change to school processes. The ministry's new school improvement support framework (*Sistema de Apoyo a la Mejora Educativa*) for the period 2015-18 points in the right direction by supporting schools to make better use of school educational projects (PEI) and school improvement plans (PME).

External support should pay greater attention to building teacher professionalism and schools' capacity for reflection and self-improvement. This could, for example, involve supporting schools to establish roles among teachers within schools with responsibilities for self-evaluation and assessment, providing support for these professionals, and establishing professional learning communities in schools that discuss complex challenges that are hard to solve individually, share and critique practice and foster a sense

of common direction. External support could also play a greater role in working with groups of schools, in establishing school-to-school collaboration and in spreading good practices (also see Box 4.3). External support should, furthermore, be better targeted at the specific needs of schools (e.g. through clearer criteria for targeting).

To ensure that technical-pedagogical support services do not provide an incentive to take professionals out of schools and classrooms, staff could be hired on a temporary basis only or fulfil their role as technical advisors on a part-time basis and continue working in their school. This is, for example, the case in Denmark which has introduced a learning consultant corps to support schools and municipalities (Nusche et al., 2016) or in England (United Kingdom) which has introduced local and national leaders of education roles. Such models have the added benefit that they develop the knowledge and skills of professionals that they bring back to schools.

The Ministry of Education, furthermore, needs to consider the role of private technical-pedagogical support (ATE) within its education system and how private providers can supplement the work of public pedagogical-technical support services and school providers (or Local Education Services) rather than replacing them. The sector should, therefore, be further regulated to address specific needs. This would also ensure that private providers offer high-quality services (e.g. through stronger accreditation, quality assurance, training requirements, etc.) The Agency for Quality Education could play a key role in this (e.g. through an evaluation or certification of ATE). Since the impact of external support also depends on the capacity of schools and school providers to identify their needs, to select external providers, to monitor and evaluate the service that is offered, and to involve the school community in these tasks, school leaders and local officials should receive sufficient training in these areas as part of their preparation or professional development. School providers (or Local Education Services) should also provide sufficient guidance in this area to schools and discuss needs with their schools (e.g. as part of individual performance agreements and evaluations).

Ensure strong school-community relations

Legislation and performance standards in Chile strongly promote the participation and involvement of the whole school community in education. There are concrete platforms for stakeholders to participate (through student, parent, teacher and school councils). And there are initiatives and mechanisms to foster a positive school climate. But some research indicates that platforms for community participation at times only function as a formality and that their impact on the organisation of schools can be limited. The impact of the different stakeholder councils on schools depends on how their role is defined, how they are involved in practice, and if they have the capacity to fulfil their role.

Chile should, therefore, consider providing greater support to students and parents on how to become involved, but also for schools on how to involve their stakeholders. The members of the student, parent and school councils, in particular, should receive more guidance, training and support on their responsibilities, rights and duties so they can fulfil their role effectively. School leaders should receive guidance and information on how to involve different stakeholders (e.g. in school self-evaluation), for example as part of individual performance agreements and school evaluations. Chile should also monitor the involvement of Indigenous communities in local school governance and possibly implement steps to strengthen their participation in school and parent councils so schools

meet the needs of all social and cultural groups. This could also involve greater support to schools to reach out to these communities (also see Chapter 3).

The new Local Education Services and the Agency for Quality Education could play key roles in supporting schools to involve parents and students from all backgrounds and in spreading and disseminating good practices (e.g. through the Agency's learning visits). The recentralisation of the governance of public schools bears a certain risk for increasing the distance between schools and their local communities. Chile should, therefore, reflect on how to ensure strong links under the new governance arrangements. The involvement of municipal counsellors in the new Local Education Services and in school councils, for instance, could facilitate the continuous involvement of local stakeholders.

Provide all schools with opportunities to learn from each other

There are some opportunities for networking for schools through rural school networks in Chile (also see Chapter 3). However, there is a lot of potential to further facilitate peer learning and collaboration between schools and school leaders in different contexts, also considering that exchange between schools tends to be more common among private-subsidised than public schools and that the large majority of school providers are only responsible for one single school. Peer learning and collaboration can be instrumental in spreading good practices and in improving teaching and learning more broadly across the education system. And it can provide vital support and feedback for school leaders who may lack sources of external feedback and whose role can be a lonely one (OECD, 2013b; OECD, 2012b; Weinstein et al., 2011; OECD/SSAT, 2008; Pont et al., 2008).

As other countries have demonstrated, various models can be used to promote peer learning and collaboration. Coaching programmes that pair new and experienced school principals can be one way to increase support and to facilitate school principals' start in their new role. Formal or informal school networks that build on individual school leaders' commitment, that involve regular and constructive communication, and that are supported through the educational administration can foster improvement over time at a larger scale (OECD, 2012b). And performance evaluations that involve peer-evaluators and school self-evaluations that involve critical friends can provide opportunities for school leaders to learn from each other as long as school leaders are prepared and trained for such roles (OECD, 2013b). New Zealand and England in the United Kingdom provide some concrete examples for how schools and school leaders can collaborate and contribute to the improvement of the wider education system (see Box 4.3).

In Chile, a variety of actors and institutions could play an important role to encourage collaboration between schools and to help school principals learn from each other, including the Agency for Quality Education, the technical-pedagogical support services (ATP) within the provincial departments of education (DEPROV), and individual school providers (or the new Local Education Services). Promising initiatives such as the Agency's local visits (*visitas territoriales*) and the new approach to technical-pedagogical support to also work with groups of schools should be pursued further. School providers or Local Education Services can play an important role in facilitating collaborative inquiry and practice by providing time and opportunities for schools and school leaders to engage with one another in teams. And they can also help schools and school leaders make the most of these opportunities and platforms, something which is not always the case for existing rural school networks.

Box 4.3. **School networks**

Learning and Change Networks in New Zealand

New Zealand has initiated "Learning and Change Networks" to establish a web of knowledge-sharing networks among schools, families, teachers, leaders, communities, professional providers and the Ministry of Education. Network participants work collaboratively to accelerate student achievement in Years 1 to 8 and to address equity issues. Learning and Change Networks address three big agenda items – school improvement, blended learning and digital technologies, and cultural responsiveness – holistically instead of creating projects that deal with those agendas separately. Design work on the strategy commenced in October 2011 and 5 pilot networks representing 55 schools/*kura* were established. The strategy went live in October 2012 with 57 networks established involving 373 schools/*kura* (approximately 15% of New Zealand schools/*kura*), with an average of 6 to 7 schools per network. There is a particular focus on priority groups traditionally under-served by the system – Māori, Pasifika, those from lower socio-economic groups, and those with special educational needs – along with their families/*whānau*, teachers, school and community leaders. As some of its distinctive features, Learning and Change Networks put an explicit and prominent focus on an applied theory of making professional learning communities and networks work so as to achieve outcomes that individual schools and teachers cannot readily do by themselves and on a sophisticated set of leadership and management arrangements that puts the onus for action and change on the networks and their members, while embedding these in regional and national structures of support. A central role is given to evaluation, generating learning evidence at school, network, regional and system levels and a strong connection to international experience and networks. Learning and Change Networks also recognise the importance of engaging learners, their parents, families/*whānau* and communities in powerful learning-focused partnerships.

London Challenge and City Challenge in England, United Kingdom

In England, the Department for Education and Skills introduced London Challenge, a programme to improve education in London. While the programme focused on supporting secondary schools in London between 2003 and 2008, it was expanded as City Challenge to work with primary schools and in two further geographical areas, Greater Manchester and the Black Country, between 2008 and 2011. The two programmes included a number of elements, but they did not promote a single view of what schools needed to do to improve. All interventions were based on local decisions involving key stakeholders, including school principals and local authority officials. The various activities and interventions were, however, built around a belief that school-to-school collaboration has a central role to play in school improvement; the recognition of the importance of school leadership; and a belief in the usefulness of data-rich approaches to tackling issues and sharing learning. As an evaluation of the City Challenge programme by Hutchings et al. (2012) suggests, arrangements that enabled school leaders and teachers to share effective practice proved to be extremely beneficial. These included conferences at which practice was shared; a stronger school supporting a weaker one; groups of three schools led by the principal of a more successful school; "Families of Schools" which had similar intakes; hub schools or knowledge centres; and the Improving and Outstanding Teacher Programmes. Both principals and teachers argued that they learned most effectively from seeing good practice or hearing about it from those who had undertaken it. The most effective strategies to improve teaching and learning took place in schools, and involved observing excellent teaching; opportunities to reflect with colleagues; and coaching in the teacher's own classroom. This sector-led approach to school improvement was of benefit not only to the recipient schools, but also to home schools since the partnership relationships created an enhanced environment for reflection on school effectiveness.

Box 4.3. **School networks** *(cont.)*

However, as Baars et al. (2014) suggest, school-to-school support requires careful management. In particular, local and national leaders of education as consultant leaders needed very careful selection, training and quality assurance, as there is no guarantee that a good principal will make for a good consultant leader.

Source: OECD (2015b), *Schooling Redesigned: Towards Innovative Learning Systems*, *http://dx.doi.org/10.1787/9789264245914-en*; Baars, S. et al. (2014), *Lessons from London Schools: Investigating the Success*, *http://centreforlondon.org/publication/lessons-london-schools*; Hutchings, M. et al. (2014), *Evaluation of the City Challenge Programme*, *www.gov.uk/government/publications/evaluation-of-the-city-challenge-programme*; Kidson, M. and E. Norris (2014), *Implementing London Challenge*, *www.instituteforgovernment.org.uk/sites/default/files/publications/Implementing%20the%20London%20Challenge%20-%20final_0.pdf*.

School evaluation

Further strengthen the capacity of the Agency for Quality Education and ensure that school evaluations contribute to school improvement

The activities of the Agency for Quality Education have considerable potential to support schools to improve their teaching and learning and the OECD review team encourages Chile to further support the Agency's capacity to support school improvement. However, the OECD review team also identified some areas for potential improvement or further engagement of the Agency.

The Ministry of Education should reflect further on how the different elements of the National Quality Assurance System in Education and other school accountability and improvement initiatives work together to improve teaching and learning processes and outcomes in schools, to provide coherent feedback to schools on how they can improve, and to avoid an overload of external interventions which require time and effort of school staff. Splitting responsibilities between the Agency for Quality Education and the Education Superintendence enables the Agency to focus on pedagogical aspects, but it also means that these may not be looked at together with resource management issues which are the focus of the Superintendence. There should also be strong links with the public technical-pedagogical support services (ATP) and their new school improvement framework (*Sistema de Apoyo a la Mejora Educativa*) as well as private technical-pedagogical consultancies (ATE). The Agency's school evaluations should be sufficiently connected to teacher evaluation (Santiago et al., 2013 and Chapter 5) and the evaluation of individual school leaders by school providers (or Local Education Services) as part of individual performance agreements (OECD, 2013b). The Agency could become involved in other processes, like the central recruitment and selection of school principals.

Concerning the school evaluation process itself, the Agency should continue to focus on the formative dimension of school evaluations that leads to lasting changes to practice, as was pointed out in a previous OECD review of teacher evaluation in Chile (Santiago et al., 2013). A recent OECD study on evaluation and assessment highlighted that school evaluations must go beyond compliance with regulations and focus directly on the quality of teaching and learning to contribute towards school improvement. The quality of teaching is central to the quality of student learning and the key variable which a school can influence. School evaluation that is meaningful should involve: an accurate assessment of the effectiveness of schools; an assessment of strengths and areas for development, followed by feedback, coaching, support and opportunities for development; an opportunity to celebrate,

recognise and reward the work of schools and to identify best practice; and an opportunity to identify underperforming schools. The school community should be engaged in the process and make use of the results to continually strive for improvement. External school evaluation should work in tandem with the support provided by school providers and school providers should take up the feedback from school evaluations carried out by the Agency and support their schools in using this feedback for improvement (OECD, 2013b).

School self-evaluation should be central in any national approach to school improvement and as school systems mature schools should take on a greater role for driving their own improvement. Self-evaluation is integral to continuous improvement which is not solely reliant on the impact of external school evaluation and self-evaluation and external evaluation should be complementary and mutually reinforcing processes (OECD, 2013b). The Agency's formative approach to school evaluation has made it an explicit goal to foster school's capacity for self-evaluation and the review team encourages the Agency to further pursue this direction. School evaluations should support the capacity of schools and education professionals to work with school evaluation results and to engage in meaningful collaborative self-evaluation that leads to better practice rather than to meet external accountability demands. External evaluations may then change the culture in schools towards extended processes of evaluating teaching and learning.

New Zealand and Scotland (United Kingdom) provide two examples that have put self-evaluation at the heart of their school evaluation framework. In New Zealand, the evaluation and assessment system is characterised by strong collaborative work and a reciprocal learning process. A school's capacity for self-review together with the school's performance also affect the frequency with which a school is externally reviewed (Nusche et al., 2012). Also in Scotland, schools are expected to take responsibility for their quality and demonstrate a clear commitment to continuous improvement. The Scottish approach to external school evaluation therefore includes a specific evaluation and report on the evaluated school's capacity to improve and schools have specific tools at their disposal that provide guidance for their self-evaluation processes (OECD, 2013b).

A change of culture in school evaluation will naturally take time and requires initiatives to train and acquaint professionals working in the Agency, in school providers and in schools, and steps to build a common understanding of the new approach to evaluation among the broader public. With a more important role for school self-evaluation within the school evaluation framework, external school evaluators need to update their skills to be able to validate school self-evaluation and possibly to work collaboratively with schools on their school self-evaluations. The impact of the Agency's approach to school evaluation and the quality of the evaluation processes should be evaluated regularly to ensure it remains fit for purpose and to guide decisions on how to allocate resources for external school evaluation most effectively. Importantly, there should be mechanisms to seek feedback from key stakeholders on their experience with the external school evaluation. Such information can form the basis of identification and analysis of ways to improve the external school evaluations (OECD, 2013b).

As pointed out above, school evaluations could involve school leaders as peer evaluators to build capacity and facilitate peer learning. In the classification of schools to identify which schools to focus on, the Agency should consider also drawing on the qualitative information gathered through school evaluations and ensure that the ranking of schools does not stigmatise schools with low performance.

Notes

1. The four domains of decision-making defined by the OECD (2012) comprise the following areas: **Organisation of instruction:** student admissions; student careers; instruction time; choice of textbooks; choice of software/learningware; grouping of students; additional support for students; teaching methods; day-to-day student assessment. **Personnel management:** hiring and dismissal of principals, teaching and non-teaching staff; duties and conditions of service of staff; salary scales of staff; influence over the careers of staff. **Planning and structures:** opening or closure of schools; creation or abolition of a grade level; design of programmes of study; selection of programmes of study taught in a particular school; choice of subjects taught in a particular school; definition of course content; setting of qualifying examinations for a certificate or diploma; accreditation (examination content, marking and administration). **Resource management:** allocation and use of resources for teaching staff, non-teaching staff, capital and operating expenditure, professional development of principals and teachers.
2. TALIS is the OECD Teaching and Learning International Survey, which was implemented in 2008 and in 2013, covering lower secondary education and with the participation of 24 and 34 countries respectively. TALIS 2013 enabled countries to also conduct the survey in their primary and upper secondary schools. Chile participated in the 2013 edition of TALIS with a sample of teachers restricted to lower secondary education. The results derived from TALIS are based on self-reports from teachers and directors and therefore represent their opinions, perceptions, beliefs and their accounts of their activities. Further information is available at *www.oecd.org/edu/school/talis.htm*.
3. PISA 2015 asked school principals to report how frequently ("did not occur", "1-2 times during the year", "3-4 times during the year", "once a month", "once a week", or "more than once a week") 13 actions and behaviours related to school management occurred in the previous academic year. These actions and behaviours are combined to create the index of educational leadership; they are also divided into four groups to create four sub-indices of educational leadership: curricular, instructional, professional development and teachers' participation. The sub-index of curricular leadership includes the following: "I use student performance results to develop the school's educational goals"; "I make sure that the professional development activities of teachers are in accordance with the teaching goals of the school"; "I ensure that teachers work according to the school's educational goals"; and "I discuss the school's academic goals with teachers at faculty meetings". The sub-index of instructional leadership includes the following: "I promote teaching practices based on recent educational research"; "I praise teachers whose students are actively participating in learning"; and "I draw teachers" attention to the importance of pupils' development of critical and social capacities". The sub-index of professional development includes the following: "When a teacher has problems in his/her classroom, I take the initiative to discuss matters"; "I pay attention to disruptive behaviour in classrooms"; and "When a teacher brings up a classroom problem, we solve the problem together". The sub-index of teachers' participation include the following: "I provide staff with opportunities to participate"; "I engage teachers to help build a school culture of continuous improvement"; and "I ask teachers to participate in reviewing management practices".
4. Other indicators of education quality encompass the following dimensions: academic self-esteem and motivation; school climate; participation and citizenship education; habits for a healthy life; school attendance; year repetition; gender equity; and graduation in a technical-professional field.

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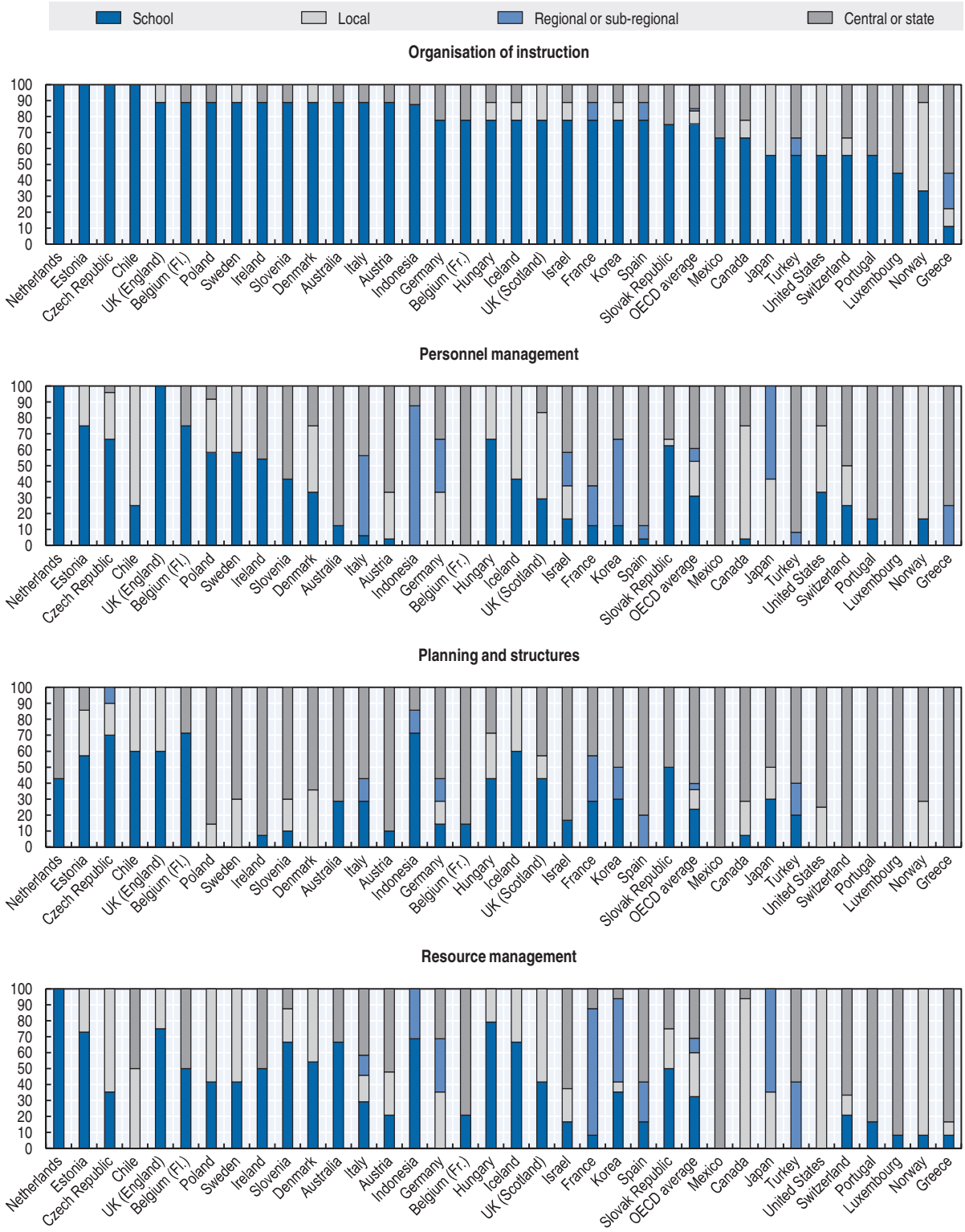
ANNEX 4.A1

Decision-making across levels of school governance

Figure 4.A1.1. **Distribution of decision-making by domain, lower secondary education, 2011**

Percentage of decisions taken at each level of government in public lower secondary education



Source: OECD (2012a), *Education at a Glance 2012: OECD Indicators*, *http://dx.doi.org/10.1787/eag-2012-en*, Tables D6.2a and D6.2b. See Annex 3 for notes.

ANNEX 4.A2

Good school leadership framework (Marco para la buena dirección y el liderazgo escolar)

Table 4.A2.1. **Good School Leadership Framework**

A. Practices

Constructing and implementing a shared strategic vision	Developing professional competencies	Leading processes of teaching and learning	Managing the school climate and the participation of the school community	Developing and managing the school
Define or revise, together with the school community, the school educational and curricular project, with a focus on the improvement of learning outcomes of all students and the promotion of values of equality, inclusion and respect to diversity	Develop and implement, together with the school provider, effective strategies to identify, select, induct and retain teachers and learning support staff	Ensure the articulation and coherence of the curriculum with teaching and assessment practices and of the different levels of education and subjects	Develop and implement policies that ensure an inclusive school culture and conditions that ensure that people treat each other in an equitable and just way with dignity and respect, safeguarding the rights and duties of the school community	Structure the institution, organise processes and define roles in function of the school educational project and the improvement priorities of the school
Translate the institutional goals and objectives into improvement plans and short-term and medium-term goals through participatory planning processes	Identify and prioritise the competence development needs of teachers and learning support staff and develop diverse models of continuous professional development	Monitor the holistic implementation of the curriculum and learning outcomes in all areas of learning to improve teaching and pedagogical management	Build and promote a climate of trust among actors in the school community, building dialogue and a collaborative work culture among teachers and among students, with the goal of continuous improvement	Ensure the functioning of the school in line with legal normal and national and local education policies
Share and explain the institutional objectives, plans and goals and institutional progress to the whole school community	Acknowledge and celebrate individual and collective achievements of school staff	Systematically accompany and evaluate teaching and assessment practices of teachers and give feedback in these areas	Implement and monitor norms and strategies that ensure a healthy together with a focus on development and participation, promoting collective responsibility for the achievement of a positive school climate	Systematically gather and analyse information and data on school processes and results that facilitate informed and timely decision-making
Actively promote and build an inclusive school culture and high expectations of achievement and performance of all members of the school community	Support and demonstrate personal needs and the wellbeing of all staff of the institution	Identify the strengths and weaknesses of all teachers to allocate teachers to the educational level, subject and course in which they can make the most of their competencies	Create opportunities for participation and collaboration between actors of the school community through formal spaces with the objective of consolidating the achievement of a positive school climate and of the objectives defined in the school educational project	Together with the school provider, ensure the availability of the resources required by the school and manage these resources efficiently to maximise their use for pedagogical processes and the achievement of institutional objectives
Develop effective and strategic communication and coordination with the school provider to reach institutional objectives and to put into practice local policies	Demonstrate trust in the capacities of the school leadership team and promote the development of leadership within the school community	Avoid teachers from getting distracted from focussing on teaching and learning and avoid disruptions to classrooms and an overload of projects in the school	Anticipate conflicts and mediate between actors to find solutions in a timely and effective manner	Link the school with institutions, organisation and actors in the community that contribute to the achievement of institutional goals and objectives and the objectives of the education system as a whole
	Create conditions and space for reflection and technical work, in a systematic and ongoing manner, to develop a community of professional learning	Ensure the implementation of temporary strategies to identify and support students who show learning difficulties or difficulties in behavioural, affective or social domains	Develop and maintain permanent communication and collaboration with parents with the objective of involving parents in students' learning and development	Inform and explain in an ongoing and comprehensible fashion the school's processes and results to the different members of the school community
		Identify and spread internal and external good practices of teaching and learning and pedagogical management that meet the needs of students among teachers and school leaders		

Table 4.A2.1. **Good School Leadership Framework** *(cont.)*

B. Personal resources

Principles	Behavioural and technical competencies	Professional knowledge
Ethics	Strategic vision	School leadership
Trust	Teamwork	Inclusion and equity
Social justice	Communication	School change and improvement
Integrity	Negotiation	Curriculum
	Continuous development	Evaluation and assessment
	Flexibility	Teaching and learning processes
	Empathy	Professional development
	Self-efficacy	National education policy and national and local regulations
	Resilience	Project management

Source: Ministry of Education (2015a), *Marco para la Buena Dirección y el Liderazgo Escolar* [*Framework for Good Leadership and School Leadership*], *http://portales.mineduc.cl/usuarios/cpeip/doc/201511131613560.MBD&LE_2015.pdf*.

Chapter 5

The teaching workforce in Chile

This chapter is about policies to improve the effectiveness of the teaching workforce. It deals with teacher preparation, recruitment, career development and use of time. Furthermore, it discusses how teachers are incentivised to perform at a high level. The chapter places particular emphasis on areas of priority for Chile such as the low status of the profession, the heavy workload of teachers, shortcomings in teacher preparation and the challenges in addressing teacher underperformance. The chapter also reviews the coherence and consistency of the teacher evaluation framework and the operation of professional development for teachers.

The statistical data for Israel are supplied by and under the responsibility of the relevant Israeli authorities. The use of such data by the OECD is without prejudice to the status of the Golan Heights, East Jerusalem and Israeli settlements in the West Bank under the terms of international law.

This chapter addresses policies to improve the effectiveness of the teaching workforce. Among other things, it analyses the size of the teaching workforce; how teachers are prepared and improve their skills while in the profession (e.g. initial preparation, professional development); how teachers are recruited and distributed across individual schools; how teacher resources and teaching time are allocated to students so that they optimally respond to improvement priorities (e.g. class size, teacher-student ratios, use of teachers' time); and how teachers are incentivised to perform at a high level (e.g. teacher appraisal, recognition and compensation).

Context and features

In April 2016, the Law that creates the System for Teacher Professional Development (*Sistema de Desarrollo Profesional Docente*) was enacted (Law 20.903). This law, whose gradual application starts in 2016 and whose full application is expected by 2026, establishes significant modifications to the management of the teaching workforce in Chile. It is planned that all teachers in all publicly-subsidised schools will gradually become part of the System for Teacher Professional Development. The only teachers who are given the option of not joining the new system are those who are ten years from retirement as of 2016. The new law covers four main areas:

1. Initial Teacher Education: new requirements to enter initial teacher education; mandatory accreditation of initial teacher education programmes; and external assessment of student teachers before their graduation to inform the improvement of teacher education programmes.
2. New Career Structure: launch of the National Induction System for beginning teachers; creation of a multistage career structure; and development of a teacher evaluation process to determine progression in the career structure.
3. New Working Conditions: improvement of teacher compensation; creation of incentives to work in disadvantaged schools; and regulation of non-teaching time as part of contract hours.
4. Training for Development: Entitlement to free and pertinent professional development; individual professional development plans informed by the needs of both the teacher and the school; and school principals empowered to define professional development plans for their teaching bodies.

The description below considers the situation at the time of the visit by the OECD review team as well as the new policies resulting from the creation of the System for Teacher Professional Development.

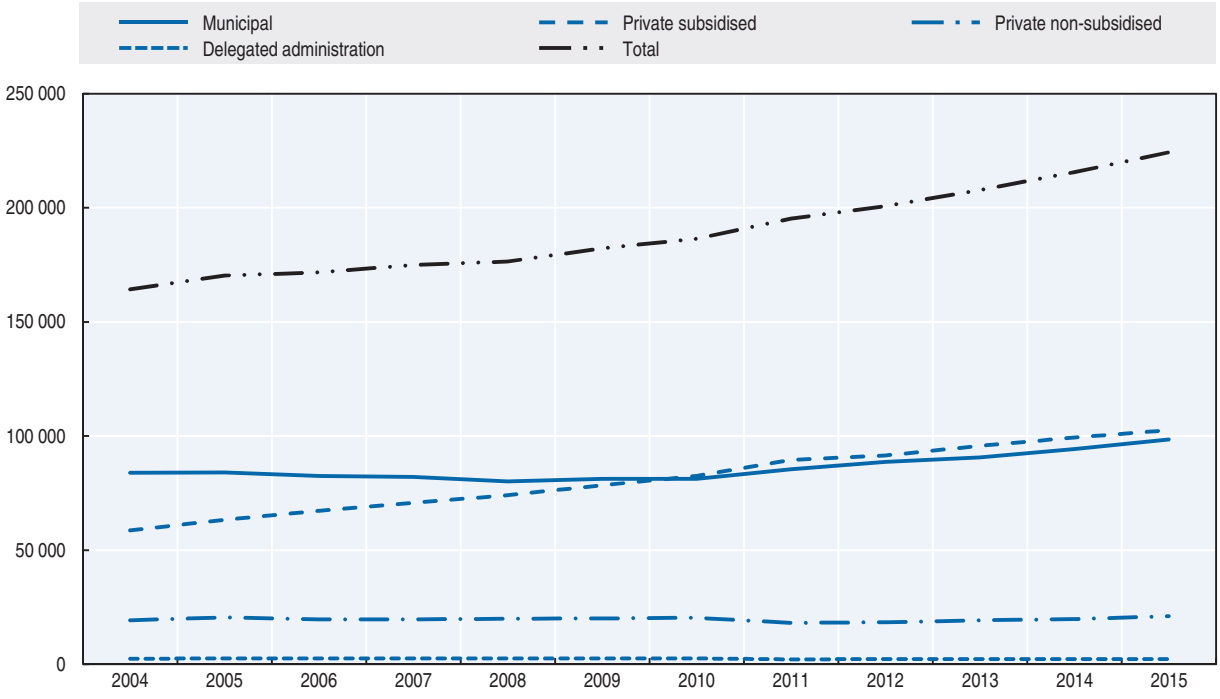
Profile of the teaching workforce

Size of the teaching workforce and its main characteristics

In 2015, there were 224 236 teachers working in pre-primary, basic and upper secondary education in Chile (excluding provision by JUNJI (*Junta Nacional de Jardines*

Infantiles – National Board of Kindergartens), Integra Foundation and private providers with no official recognition), an increase of 36.6% relative to 2004. These were performing a range of duties as described in Table 5.1. The distribution of teachers by type of school provider in 2015 was as follows: 43.9% in municipal schools, 45.7% in private-subsidised schools, 9.4% in private non-subsidised schools and 1.0% in schools with delegated administration (the equivalent shares in 2004 were 51.1%, 35.7%, 11.7% and 1.5% respectively). Between 2004 and 2015 the number of teachers increased in the 3 largest sectors and most notably in the private-subsidised sector (rise of 74.8%), followed by the municipal sector (growth of 17.4%) and the private non-subsidised sector (rise of 9.4%) (see Figure 5.1).

Figure 5.1. **Number of teachers by type of provider, 2004-15**



Note: Data refer to pre-primary, basic and upper secondary education. Data exclude provision by JUNJI, Integra Foundation and private providers with no official recognition. Data include classroom teachers, staff with technical-pedagogical duties, staff in senior management, school directors, teachers with other duties at the school, teachers with other duties outside the school (work for respective education provider on service commission), heads of technical-pedagogical units, general inspectors and counsellors.
Source: Ministry of Education (2016), *Estadísticas de la Educación 2015* [Education Statistics 2015], *http://centroestudios.mineduc.cl* (accessed on 31 August 2017).

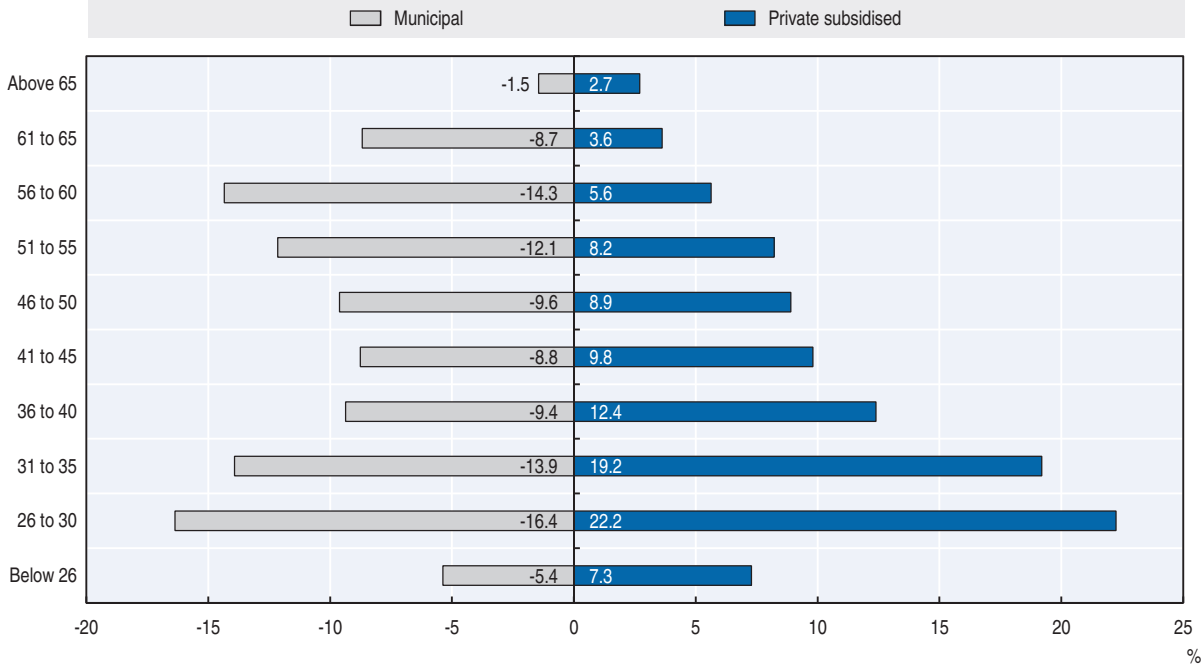
In 2015, the large majority of teachers (92.9%) worked in a single school but some teachers worked in two schools (6.2%) or three or more schools (0.8%) (Ministry of Education, 2016). A longitudinal survey of teachers also suggested that in 2005 about 10% of teachers had an additional remunerated job outside teaching (Bravo et al., 2006).

The degree of feminisation of the teaching profession in Chile is slightly below the OECD average: the proportion of females in 2014 reached 99% in pre-primary education (against an OECD average of 97%), 81% in primary education (OECD average of 82%), 68% in lower secondary education (68% within the OECD), 57% in general upper secondary

education (OECD average of 62%) and 50% in vocational upper secondary education (OECD average of 54%) (OECD, 2016).

The age distribution of the teaching profession in Chile reveals a somewhat younger workforce than in the OECD average country. In 2014, the proportion of teachers aged less than 30 was 23%, 22% and 21% in primary, lower secondary, and upper secondary education respectively, against OECD averages of 13%, 11% and 8% (OECD, 2016). The proportion of teachers aged 50 and over was 27%, 30% and 30% in primary, lower secondary, and upper secondary education respectively, against OECD averages of 30%, 34% and 38% (OECD, 2016). The proportion of secondary teachers aged 50 and over decreased from 33% to 30% between 2005 and 2014 (OECD, 2016). Interestingly, the age distribution of teachers varies across school providers, with the teaching workforce somewhat older in the municipal sector than in the private-subsidised sector (see Figure 5.2).

Figure 5.2. **Age distribution of teachers, municipal and private-subsidised schools, 2015**



Note: Data refer to pre-primary, basic and upper secondary education. Data exclude provision by JUNJI, Integra Foundation and private providers with no official recognition. Data on teachers include classroom teachers, staff with technical-pedagogical duties, staff in senior management, school directors, teachers with other duties at the school, teachers with other duties outside the school (work for respective education provider on service commission), heads of technical-pedagogical units, general inspectors and counsellors.
Source: Ministry of Education (2016), *Estadísticas de la Educación 2015* [Education Statistics 2015], *http://centroestudios.mineduc.cl* (accessed on 31 August 2017).

In 2015, around 82% of teachers were performing classroom teaching duties in schools with the remaining teachers performing a variety of other duties as depicted in Table 5.1.

In 2015, there were 183 706 teachers with classroom duties working in pre-primary, basic and upper secondary education in Chile (excluding provision by JUNJI, Integra Foundation and private providers with no official recognition). The large majority was

Table 5.1. **Distribution of teachers according to their function (%), 2015**

Function	Municipal schools	Private-subsidised schools	Private nonsubsidised schools	Delegated administration	**Total**
Classroom teacher	80.85	81.73	87.66	84.22	**81.92**
Technical-pedagogical duties	1.28	1.93	1.70	1.29	**1.61**
Senior management	0.81	1.91	3.19	3.33	**1.56**
School director	3.32	5.15	2.12	2.93	**4.04**
Another function in the school	5.36	3.60	2.33	1.91	**4.24**
Another function outside the school	0.57	0.38	0.38	0.62	**0.47**
Head of technical-pedagogical unit	2.13	2.16	0.73	2.13	**2.01**
General inspector	2.27	1.46	0.85	2.27	**1.77**
Counsellor	1.13	0.84	0.62	1.20	**0.95**
School deputy director	0.15	0.24	0.09	0.04	**0.19**
Teacher in charge of the school	2.04	0.51	0.04	0.04	**1.13**
Traditional educator	0.10	0.08	0.28	0	**0.11**

Note: Data refer to pre-primary, basic and upper secondary education. Data exclude provision by JUNJI, Integra Foundation and private providers with no official recognition. See Chapter 3 regarding the role of "traditional educator".
Source: Ministry of Education (2016), *Estadísticas de la Educación 2015* [Education Statistics 2015], *http://centroestudios.mineduc.cl* (accessed on 31 August 2017).

working in basic education (56.1%), followed by upper secondary education (26.8%), pre-primary education (9.3%), special education (5.6%) and education for adults (2.2%) (see Table 5.2).

Table 5.2. **Number of classroom teachers, 2015**

Level of education	Municipal schools	Private-subsidised schools	Private non-subsidised schools	Delegated administration	Total
Pre-primary education	6 277	7 863	2 933	0	17 073
Special education	2 404	7 909	7	0	10 320
Basic education	48 806	44 418	9 866	26	103 116
Upper secondary education	19 843	21 967	5 509	1 868	49 187
Scientific-humanistic programmes	12 313	16 334	5 501	326	34 474
Technical-professional programmes	7 530	5 633	8	1 542	14 713
Education for adults	2 234	1 633	141	0	4 008
Total	79 566	83 790	18 456	1 894	183 706

Note: Data exclude provision by JUNJI, Integra Foundation and private providers with no official recognition.
Source: Ministry of Education (2016), *Estadísticas de la Educación 2015* [Education Statistics 2015], *http://centroestudios.mineduc.cl* (accessed on 31 August 2017).

Qualifications of teachers

According to data from the Ministry of Education, in Chile the vast majority of teachers have a qualification to teach. In 2015, 94.4% of the teachers in pre-primary, basic and upper secondary education had a qualification in education (with similar qualification levels across the main education providers, see Table 5.3); 3.8% had a qualification in other areas; and only 1.7% of the teachers had no qualification (see Table 5.3).

Data from TALIS[1] revealed that, in 2013, 85.7% of lower secondary teachers in Chile had completed a teacher education programme (against a TALIS average of 89.8%) (OECD, 2014a). A different picture, however, emerges for upper secondary education. International data collected by PISA 2012 reveal that a high proportion of upper secondary teachers are not certified for the profession according to school principals' perceptions (in Chile, 95% of

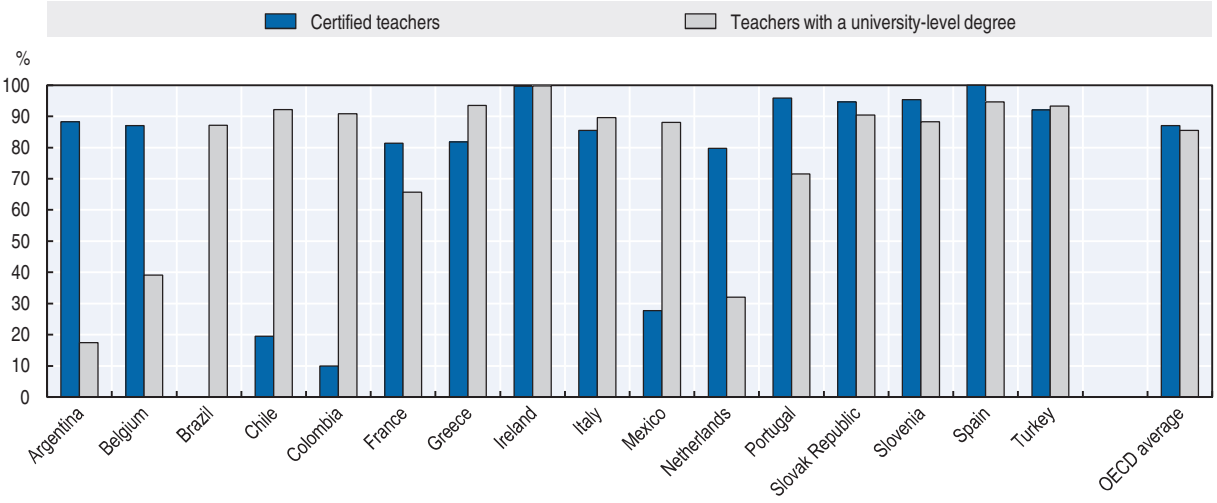
Table 5.3. **Distribution of teachers according to their qualification status (%), 2015**

Qualification status	Municipal schools	Private-subsidised schools	Private non-subsidised schools	Delegated administration	**Total**
Qualification in education	94.5	94.6	94.7	78.8	**94.4**
Qualification in other areas	4.1	3.4	3.1	18.6	**3.8**
Not qualified	1.4	2.0	0.8	2.6	**1.7**
Missing information	0.0	0.0	1.3	0.0	**0.1**

Note: Data refer to pre-primary, basic and upper secondary education. Data exclude provision by JUNJI, Integra Foundation and private providers with no official recognition. Data refer to all teacher functions listed in Table 5.1.
Source: Ministry of Education (2016), *Estadísticas de la Educación 2015* [Education Statistics 2015], *http://centroestudios.mineduc.cl* (accessed on 31 August 2017).

students in the PISA sample were attending Year 9 to Year 12). As shown in Figure 5.3, in Chile, the percentage of certified teachers according to reports from principals of schools attended by 15-year-olds is only about 20% against an OECD average of 87% (the figure for Chile is the 2nd lowest among PISA participating countries). However, according to principals of schools attended by 15-year-olds, about 92% of teachers had a university-level degree against an OECD average of 86%.

Figure 5.3. **Teacher certification status and educational level based on reports by school principals for PISA 2012, selected countries**



Note: Data are based on the perceptions of the principals of the schools attended by the 15-year-olds who took the PISA assessment and therefore refer to lower and upper secondary education. Data refer to averages across the PISA 2012 sample.
Source: OECD (2013a), *PISA 2012 Results: Excellence through Equity (Volume II): Giving Every Student the Chance to Succeed*, *http://dx.doi.org/10.1787/9789264201132-en*.

Class size and student-teacher ratio

In 2014, class size was relatively high in Chile at 30 and 31 for primary and general lower secondary education respectively (the OECD average was 21 and 23 for the same educational levels, OECD, 2016). This hides some variation across sectors, as the respective averages were: 29 and 30 for municipal schools; 32 and 33 for the private-subsidised sector; and 24 and 25 for the private non-subsidised sector (see Table 5.4). Maximum class size is

regulated. In pre-primary, basic and upper secondary education, it cannot exceed 45 students per class. Exceptions are a maximum of 35 students per class in rural schools and a maximum class size of 15 in special education (MINEDUC, ACE and ES, 2016).

Table 5.4. **Class size in Chile and selected countries, 2014**

	Chile	Brazil	Colombia	Mexico	Portugal	Spain	OECD average
Primary education	**30**	**23**	**22**	**19**	**21**	**22**	**21**
Public institutions	29	25	24	19	21	21	21
Private institutions	31	18	19	19	21	24	20
Government-dependent private	32	x	x	x	24	25	..
Independent private	24	18	19	19	20	22	..
Lower secondary education	**31**	**27**	**29**	**28**	**23**	**25**	**23**
Public institutions	30	28	30	28	23	25	23
Private institutions	31	24	25	24	24	26	21
Government-dependent private	33	x	x	x	25	27	..
Independent private	25	24	25	24	22	22	..

x: not applicable
.. : missing data
Note: Calculations are based on number of students and number of classes. Data for Colombia refer to 2013.
Source: OECD (2016), *Education at a Glance 2016: OECD Indicators*, *http://dx.doi.org/10.1787/eag-2016-en*; for data on Colombia, OECD (2015), *Education at a Glance 2015: OECD Indicators*, *http://dx.doi.org/10.1787/eag-2015-en*.

Similarly, student-teacher ratios in Chile are also above those of the average OECD country. In 2014, the average student-teacher ratio was 21, 23 and 24 in primary, lower secondary and upper secondary education respectively, which compare to the following OECD country averages: 15, 13 and 13 (see Table 5.5). Student-teacher ratios are highest in the subsidised private sector (see Table 5.5).

National data reveal that student-teacher ratios have been decreasing steadily within the last decade. Between 2004 and 2015, the student-teacher ratio decreased by about 41% and 28% in the municipal and subsidised private sectors respectively (see Figure 5.4). This results from both the decrease in student numbers (see Figure 1.6 in Chapter 1) and the increase in teacher numbers (see Figure 5.1) during this period. While the overall student-teacher ratio stood at 15.8 in 2015 (for all levels of education and considering both teachers with classroom duties and teachers with other duties), it was 16.6 in urban areas and 10.3 in rural areas (Ministry of Education, 2016). In rural areas of some regions, the student-teacher ratio was below 10: La Araucanía (9.9); Los Lagos (9.9); Maule (9.8); Coquimbo (9.4); Bío bío (9.0); Valparaíso (8.3); Aysén (7.1); and Magallanes (5.7) (Ministry of Education, 2016).

Initial preparation

Initial teacher education is a requirement to enter the teaching profession and, as of 2014, can only be provided by universities – which confer qualifications for all levels and areas of education. The following programmes are offered: pre-primary education teacher; basic education teacher; upper secondary education teacher; and special education teacher. Prior to 2014, professional institutes (*Institutos Profesionales*), non-university tertiary education institutions, were also authorised to grant qualifications to pre-primary and basic education teachers. The number of initial teacher education programmes grew significantly in the last 15 years, from 229 in 1999 to 1 213 in 2015. The latter were provided by 16 public universities, 8 private universities which are part of the Rectors' Council (*Consejo de Rectores de las Universidades Chilenas*, CRUCH), 15 professional institutes and

Table 5.5. **Student-teacher ratios in Chile and selected countries, 2014**

	Chile	Brazil	Colombia	Mexico	Portugal	Spain	OECD average
Primary education	**21**	**21**	**24**	**27**	**14**	**14**	**15**
Lower secondary education	**23**	**18**	**26**	**33**	**10**	**12**	**13**
Public institutions	20	19	30	36	10	11	13
Private institutions	26	12	17	18	13	15	12
Government-dependent private	27	x	..	x	13	16	..
Independent private	21	12	..	18	12	9	..
Upper secondary education	**24**	**15**	**22**	**21**	**9**	**11**	**13**
Public institutions	23	17	26	23	9	11	13
Private institutions	25	10	15	15	8	14	12
Government-dependent private	27	x	..	x	11	14	..
Independent private	16	10	..	15	7	13	..

x: not applicable
.. : missing data
Note: Calculations are based on full-time equivalents.
Source: OECD (2016), *Education at a Glance 2016: OECD Indicators*, *http://dx.doi.org/10.1787/eag-2016-en*.

Figure 5.4. **Student-teacher ratio by type of provider, 2004-15**

Note: Data refer to pre-primary, basic and upper secondary education. Data exclude provision by JUNJI, Integra Foundation and private providers with no official recognition. Data on teachers include classroom teachers, staff with technical-pedagogical duties, staff in senior management, school directors, teachers with other duties at the school, teachers with other duties outside the school (work for respective education provider on service commission), heads of technical-pedagogical units, general inspectors and counsellors.
Source: Ministry of Education (2016), *Estadísticas de la Educación 2015* [Education Statistics 2015], *http://centroestudios.mineduc.cl* (accessed on 31 August 2017).

32 private universities which are not part of CRUCH. In 2010, in a total of 107 725 students in initial teacher education, 86% were attending universities while the remaining 14% were attending professional institutes (Santiago et al., 2013).

Until 2016, teacher education institutions used to define the criteria to select their students. In 2015, about 21% of teacher education programmes required a minimum score in the university selection test (*Prueba de Selección Universitaria*, PSU). However, the 2016 Law that creates the System for Teacher Professional Development stipulates new

requirements to enter any initial teacher education programme. As of 2017, the requirement is to reach a minimum score in the PSU (500) or to be in the top 30% of the marks' ranking or to have passed a programme to access higher education that is licensed by the Ministry of Education. Requirements to enter initial teacher education programmes will become stricter in 2020 and 2023. Students of initial teacher education are typically not drawn from the top secondary graduates. Beyer et al. (2010) indicate that more than half of the student teachers are drawn from below the 50th percentile in terms of scores in the PSU. However, there is evidence that the average PSU scores of students entering initial teacher education have increased in recent years, possibly as a result of initiatives to improve the attractiveness of teaching (Santiago et al., 2013).

Initial teacher education programmes are required to undergo accreditation in the context of quality assurance processes in higher education organised by the National Accreditation Commission (*Comisión Nacional de Acreditación*). Until 2016, in case a given programme was not accredited, it could not receive any public resources but it could still provide a qualification. By 2015, only about 51% of initial teacher education programmes offered were accredited (MINEDUC, ACE and ES, 2016). However, the 2016 Law that creates the System for Teacher Professional Development establishes that all initial teacher education programmes will need to be accredited in order to provide qualifications for teaching.

Initial teacher education programmes are organised in the context of the pedagogical autonomy granted to higher education institutions. However, in order to be accredited, they need to cover four key training areas: general (social and cultural factors; the education system; ethics and responsibilities); specialised (disciplinary knowledge; curricular content); professional (learning and teaching methods; tools for teaching) and practical (practice in schools). The 2016 Law that creates the System for Teacher Professional Development further specifies that in order to be accredited teacher education programmes will need to meet given requirements in terms of infrastructure, academic staff, improvement plans, and links to schools, among others. On average, the duration of a teacher education programme is of nine semesters. Programmes include mandatory practice in schools and typically a research project (MINEDUC, ACE and ES, 2016).

In addition, the Ministry of Education, through the Centre for Pedagogical Training, Experimentation and Research (*Centro de Perfeccionamiento, Experimentación e Investigaciones Pedagógicas*, CPEIP), has developed Graduating Teacher Standards specifying what teacher education graduates should know and be able to do as they enter the teaching profession. These standards have been developed for pre-primary education, basic education, upper secondary education and special education. They include both pedagogical standards and disciplinary standards (Santiago et al., 2013). The 2016 Law that creates the System for Teacher Professional Development requires that these standards are used in the accreditation of teacher education programmes.

The 2016 Law that creates the System for Teacher Professional Development also introduces the assessment of student teachers as a new instrument for quality assurance in initial teacher education. Two assessments of student teachers will be introduced as of 2017: i) an assessment conducted by the respective university of its students as they enter an initial teacher education programme in view of organising further support for those who need it so they become adequately prepared for their programme; and ii) an assessment organised by the Ministry of Education at least one-year prior to the students'

graduation whose results will be provided to the National Accreditation Commission in view of providing feedback to teacher education institutions and generating improvements in the delivery of initial teacher education programmes.

In the municipal sector, there is no compulsory probation period associated with an induction programme for beginning teachers even if it might be in place at the initiative of some municipalities. Similarly, such processes might exist in the private sector at the discretion of school owners. However, the new 2016 Law establishes the National Induction System for Beginning Teachers (*Sistema Nacional de Inducción para Docentes Principiantes*) as a mandatory component of the System for Teacher Professional Development. This involves an induction process for all beginning teachers which includes mentoring at the school by an experienced teacher with a proven record of quality teaching. The induction process will take place either in the 1st or 2nd year of professional experience and have a duration of up to ten months. The induction process – both the additional hours for the beginning teacher and the hours of the mentor – is funded by the Ministry of Education. The induction process has a formative function and is not associated with a probationary period.

Recruitment into teaching

The major prerequisite for entering the teaching profession is having teacher education qualifications from an institution recognised by the state, being qualified in vocational subjects by an accredited institution, or having an equivalent degree from a foreign institution. Exceptions to this are possible when a qualified teacher is not available. Also, teacher education qualifications are not needed to teach practical vocational subjects in upper secondary education. In this case, all that is required is professional experience and a certificate of specialised training in the relevant area (MINEDUC, ACE and ES, 2016). As of 2016, the CPEIP offers pedagogical training to teachers of practical subjects in vocational education. Also, in order to work as a teacher, there is no need to take a qualifying examination following graduation from an initial teacher education programme.

In the municipal school sector, the recruitment of teachers is organised by municipal education authorities and regulated by the Teacher's Statute (*Ley Estatuto de los Profesionales de la Educación, Estatuto Docente*). Open public recruitment processes are organised at least once a year with vacancies published in a national circulation newspaper. A selection commission is formed by the Head of the municipal Education Administration Department or the municipally controlled non-profit corporation which runs education within the municipality, the principal of the school associated with the job vacancy and a teacher randomly selected among peers of the concerned discipline/speciality. Applicants are rated according to professional performance, seniority and training taken and are ranked in a list. The municipality's mayor then appoints the teacher ranked at the top of the list. In the private school sector, schools have discretion in organising their recruitment processes. Hiring processes in the private school sector are regulated by the general Labour Code (Santiago et al., 2013).

As of 2014, the Ministry of Education defined, in its Indicative Performance Standards for Schools and School Providers (*Estándares Indicativos de Desempeño para Establecimientos Educacionales y sus Sostenedores*), performance standards concerning human resources management which includes specific guidance on personnel selection (standard 10.3, "The school implements effective strategies to attract, select and retain competent personnel").

However, these are not mandatory for schools and school providers to follow but are simply provided as a reference of good practice (MINEDUC, ACE and ES, 2016).

Employment status, career structure and remuneration

Teachers in Chile have salaried employee status both in the municipal and private school sectors. Municipalities and private school owners are the employers of teachers in their respective sectors. Teachers can be hired on a permanent contract (*Titular*) or on a fixed-term contract (*Contrata*). Most teachers have permanent employment contracts. In 2005, according to a survey of teachers, 86% and 11% had a permanent contract and a fixed-term contract respectively (Bravo et al., 2006). According to TALIS data, in 2013, about 63% of Chilean lower secondary teachers were permanently employed while 18.6% had a fixed-term contract of more than one year and 18.5% had a fixed-term contract of one year or less (OECD, 2014a).

Conditions of service in the municipal sector are set out in the Teacher's Statute and other general national labour regulations. The Teacher's Statute regulates the requirements, duties and rights of teaching professionals working in the municipal sector, including their career structure. Within this framework, municipalities and school principals define the specific service conditions at the school. Private school owners have more flexibility in defining teachers' conditions of service, observing the general Labour Code (Santiago et al., 2013).

As of 2016, in municipal schools, teaching was organised with a unique career stage with a single salary scale. No promotion opportunities within teaching were available. Roles involving promotion were limited to head of technical-pedagogical units, senior management posts and school principal. Private schools have full discretion in organising their teachers' career structures (Santiago et al., 2013). As of 2017, this situation will be gradually modified as the new career structure is introduced following the adoption of the 2016 Law that creates the System for Teacher Professional Development (see below).

Teachers' salaries in the municipal sector consist of a basic component (the National Minimum Basic Salary – *Remuneración Básica Mínima Nacional*, RBMN) and a set of salary allowances. The RBMN differs between pre-primary, basic education and special education teachers (in 2015, CLP 12 293 per hour [USD 18.6 at the exchange rate of 1 August 2016]) and upper secondary teachers in both scientific-humanistic and technical-professional programmes (in 2015, CLP 12 935 per hour [USD 19.6 at the exchange rate of 1 August 2016]). The RBMN is indexed to the salary in the public service. In the private-subsidised sector, employers also need to guarantee the RBMN for teachers but can establish higher pay levels at their discretion. In the private non-subsidised sector, salary levels are fully at the discretion of employers provided they comply with the Labour Code. All teachers in the country are covered by the national pension scheme. Men and women can retire at the age of 65 and 60 respectively (Santiago et al., 2013). However, a significant proportion of teachers remain in the profession beyond this age as the level of pensions is low compared to total teacher compensation. The government occasionally incentivises teachers who have reached retirement age to actually retire, as in 2015 with the bonus for voluntary retirement of CLP 21.5 million (over USD 30 000) given to 10 000 teachers (MINEDUC, ACE and ES, 2016).

Teachers benefit from a large set of salary allowances, as listed in Table 5.6. Some of these cover teachers in the municipal sector only (as noted in the table). There are also

special allowances awarded in the context of school- or municipality-level initiatives to reward the merit of teachers.

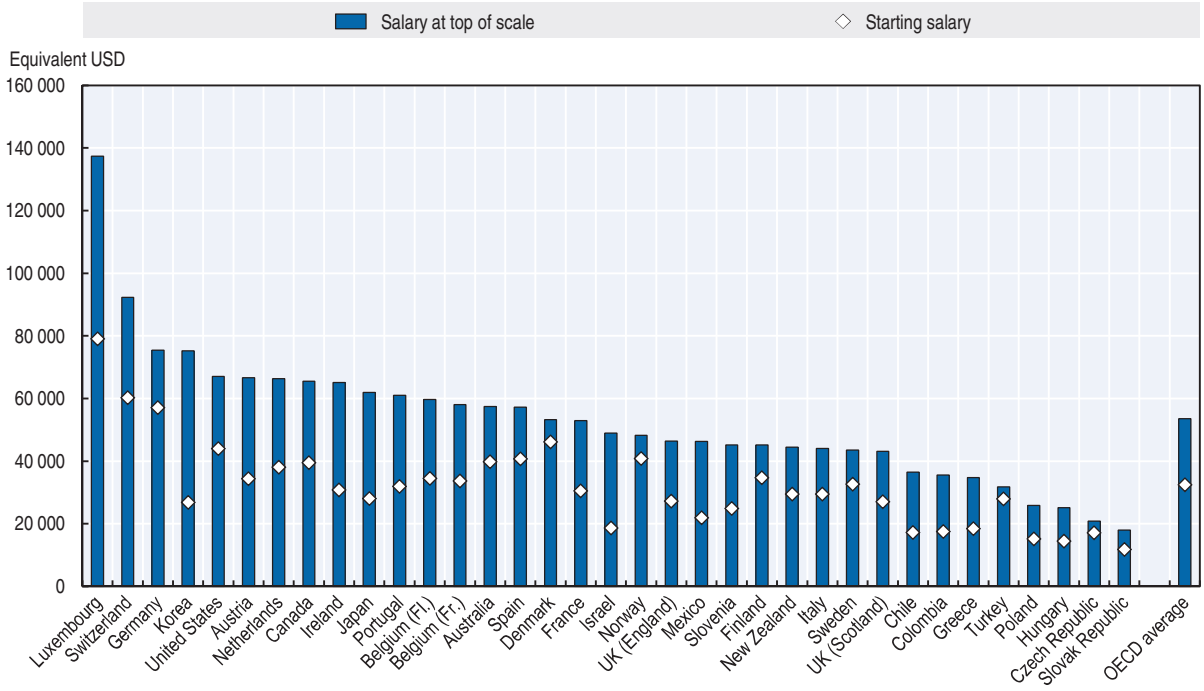
Table 5.6. **Salary allowances for teachers**

Allowance	Description	Schools covered
Experience allowance [*Asignación por experiencia*]	Corresponds to salary increment every 2 years to a maximum of 15 2-year periods [maximum additional amount corresponds to 100% of RBMN]. Rewards length of service.	Municipal
Training allowance [*Asignación por perfeccionamiento*]	This allowance, which can reach 40% of the RBMN, is provided to teachers who undertake professional development activities registered in the National Public Training Registry (*Registro Público Nacional de Perfeccionamiento*, RPNP).	Municipal
Difficult conditions of work allowance [*Asignación por desempeño en condiciones difíciles*]	This allowance, which can reach 30% of the RBMN, is given to teachers in isolated, rural, culturally-diverse and disadvantaged schools.	Municipal and private-subsidised
Responsibility allowance [*Asignaciones por responsabilidad directiva y técnico-pedagógica*]	Given to teachers who serve in senior management and technical-pedagogical positions. It corresponds to 25% of the RBMN for school principals, 20% of the RBMN for other management positions and heads of technical-pedagogical units, and 15% of the RBMN for other professionals of the technical-pedagogical units.	Municipal
Performance of Excellence allowance [*Bonificación de Excelencia Académica, Asignación determinada por el Sistema Nacional de Evaluación del Desempeño de los Establecimientos Subvencionados, SNED]*	Collective reward for teachers in schools demonstrating high performance in SIMCE (see below).	Municipal and private-subsidised
Variable Individual Performance allowance [*Asignación Variable por Desempeño Individual,* AVDI]	Individual reward to teachers with high performance in the teacher performance evaluation system and who succeed in the voluntary AVDI test (see below).	Municipal
Accreditation of pedagogical excellence allowance [*Asignación de Excelencia Pedagógica,* AEP]	Individual reward to teachers who succeed in their voluntary accreditation of pedagogical excellence (see below).	Municipal and private-subsidised
Special allowance for teachers who manage rural schools [*Bonificación especial de profesores encargados de escuelas rurales*]	Given to teachers who manage a rural school with no school principal.	Municipal and private-subsidised
Professional recognition allowance [*Bonificación de Reconocimiento Profesional*]	Allowance to reward the qualifications of teachers, with amounts increasing as the level of the degree increases.	Municipal and private-subsidised
Zone supplement [*Asignación de zona*]	Allowance given to teachers who work in localities where subsidies for education were increased as a result of the characteristics of those localities.	Municipal and private-subsidised
Supplementary salary [*Planilla complementaria*]	Supplementary amount given to some teachers to guarantee teachers receive a minimum salary.	Municipal and private-subsidised
Proportional allowance [*Bonificación proporcional*]	Extra amount given to all teachers in proportion to their contract hours by education providers from a public fund to supplement basic salaries.	Municipal and private-subsidised

Note: SIMCE: *Sistema de Medición de Calidad de la Educación* – System to Measure the Quality of Education.
Source: MINEDUC, ACE and ES (2016), *OECD Review of Policies to Improve the Effectiveness of Resource Use in Schools (School Resources Review): Country Background Report for Chile*, *www.oecd.org/education/schoolresourcesreview.htm*; Santiago, P. et al. (2013), *Teacher Evaluation in Chile 2013*, *http://dx.doi.org/10.1787/9789264172616-en*.

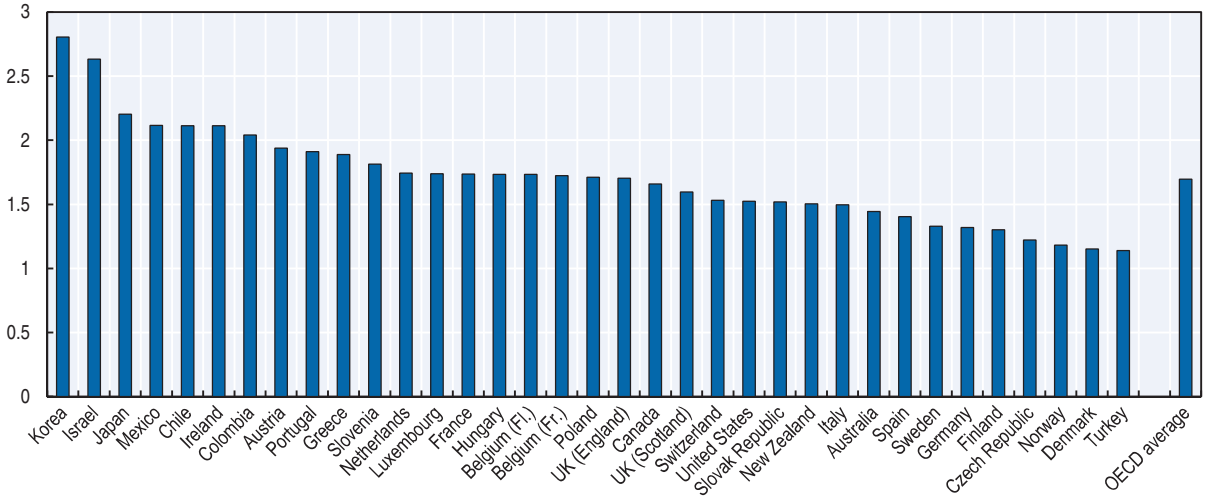
The salaries of Chilean teachers remain among the lowest within the OECD area, both at the start of the career and at the top of the scale (see Figure 5.5). Also, as can be seen in Figure 5.6, the ratio of salary at top of scale to starting salary is high in international comparison (2.11 against an OECD average of 1.70). There is good salary progression throughout the teaching career. However, reaching the top of the scale takes 30 years, considerably above the OECD average (25 years) (OECD, 2016).

Figure 5.5. **Teacher annual salaries at start of career and at top of the scale, lower secondary education, public institutions, 2014**



Note: Salaries are in equivalent USD converted using PPPs for private consumption. Data refer to statutory salaries for teachers with typical qualifications. Data for France Include average bonuses for overtime hours. For Denmark, Finland, Japan and Luxembourg statutory salaries include the part of social security contributions and pension-scheme contributions paid by the employers. For Australia and Finland, statutory salaries do not include the part of social security contributions and pension-scheme contributions paid by the employees. For France, data include the average of fixed bonuses for overtime hours for lower and upper secondary teachers. For the United States, data refer to actual base salaries. For Sweden, data refer to actual base salaries for 2013.
Source: OECD (2016), *Education at a Glance 2016: OECD Indicators*, *http://dx.doi.org/10.1787/eag-2016-en*.

Figure 5.6. **Ratio of salary at top of scale to starting salary, lower secondary education, 2014**



Note: Data refer to statutory salaries for teachers with typical qualifications. For the United States, data refer to actual base salaries. For Sweden, data refer to actual base salaries for 2013.
Source: OECD (2016), *Education at a Glance 2016: OECD Indicators*, *http://dx.doi.org/10.1787/eag-2016-en*.

The new career structure

The 2016 Law that creates the System for Teacher Professional Development introduces a new multistage career structure, with a salary scale for each career stage. All schools receiving public funding will have to gradually adhere to the new career structure. Municipal schools will have to be integrated in the new system by July 2017, with the process of assigning a career stage to current teachers to be completed in 2016. Private-subsidised schools and schools with delegated administration will initiate their certification processes (for the Recognition of Teacher Professional Development) and be integrated in the new system as of 2018. Teachers in early childhood development institutions will be integrated in the system between 2020 and 2025.

The career structure has five stages:

- Three mandatory stages which seek to ensure competencies for good teaching:
  - Initial (*Inicial*).
  - Early (*Temprano*).
  - Advanced (*Avanzado*).

The *Initial* stage corresponds to the immersion in the teaching profession during which the teacher receives guidance and support. The teacher is expected to transition to the *Early* stage of the career at his or her fourth year of professional experience and it is assumed he or she will not stay longer than eight years in the *Initial* stage. Teachers will have at most two opportunities to access the *Early* stage (the second opportunity occurs two years after the first attempt) – in case they fail both attempts, they are removed from the education system. In case the teacher is rated as "outstanding" in the evaluation process to access the *Early* stage, he or she may be given immediate access to the *Advanced* stage. Access to the *Advanced* stage grants the teacher the opportunity to access remunerated functions such as mentor teacher, team leader, among others.

- Two voluntary stages to retain effective teachers in the classroom while giving them development opportunities with specific career paths:
  - Expert I (*Experto I*).
  - Expert II (*Experto II*).

Teachers in both these career stages will have preferential access to roles of pedagogical leadership and guidance.

The multistage career structure is associated with a certification system to determine career progression, the System for the Recognition of Teacher Professional Development (*Sistema de Reconocimiento del Desarrollo Profesional Docente*). Teachers need to undergo this evaluation process to access a new stage of the career. Reaching a given career stage is valid for the rest of the teacher's career, there is no need for re-certification to stay in a given career stage. The certification system is described below as part of teacher evaluation.

New teachers enter the career structure in its *Initial* stage. Current teachers are assigned a specific stage in the new career structure on the basis of years of experience and their previous results in teacher evaluation processes (Teacher performance evaluation system [*Sistema de Evaluación del Desempeño Profesional Docente*]; the Variable Individual Performance Allowance [*Asignación Variable por Desempeño Individual*, AVDI]; and the Accreditation of Pedagogical Excellence Allowance [*Asignación Excelencia Pedagógica*, AEP], see below). Access to the Early, Advanced, Expert I and Expert II stages requires the

following minimum years of teaching experience: 4, 4, 8 and 12 respectively. Conditional on years of experience, a teacher is granted access to the different stages as follows:

Table 5.7. **Assignment of career stages to current teachers, 2016**

Result in Portfolio instrument (of either the teacher performance evaluation system or AEP)	Result in the test to assess the disciplinary knowledge of teachers of AVDI or AEP			
	Outstanding (*Destacado*)	**Competent** (*Competente*)	**Sufficient** (*Suficiente*)	**Insufficient** (*Insuficiente*)
Outstanding (*Destacado*) [3.01 to 4 points]	Expert II	Expert II	Expert I	Advanced
Competent (*Competente*) [2.51 to 3 points]	Expert II	Expert I	Advanced	Early
Higher Basic (*Básico superior*) [2.26 to 2.50 points]	Expert I	Advanced	Early	Early
Lower Basic (*Básico inferior*) [2 to 2.25 points]	Advanced	Early	Early	Early
Insufficient (*Insuficiente*) [1 to 1.99 points]	Initial	Initial	Initial	Initial

Source: Ministry of Education (n.d.), Política Nacional Docente [National Teacher Policy], *www.politicanacionaldocente.cl/*.

The introduction of the new career structure goes alongside a new remuneration system. The objective is to increase the overall compensation of teachers and reduce the number of components of teacher compensation. Teacher remuneration at the start of the career is expected to be about 30% higher than 2016 salaries of beginning teachers and, as the teacher progresses in the career, he or she will be granted additional allowances associated with additional functions performed. The transition between career stages will involve a salary increase in the form of a Stage Allowance of the System for Professional Development (*Asignación por Tramo del Sistema de Desarrollo Profesional*).

A special allowance to work in schools with more vulnerable students is also introduced (*Asignación de Reconocimiento por Docencia en establecimientos de Alta Concentración de Alumnos Prioritarios*), whose amount increases the higher is the teacher's career stage. The current number of salary allowances is reduced with the introduction of the new career structure. For example, the AEP and the AVDI are discontinued as their functions are captured by the certification processes associated with advancement in the new career structure. Salary allowances which are kept include the Experience allowance, the Performance of Excellence allowance and the Professional Recognition allowance.

Workload and use of teachers' time

In Chile, teacher employment is conceived on the basis of a workload system, i.e. regulations stipulate the total number of working hours and define the range of tasks teachers are expected to perform beyond teaching itself. In 2016, the Teacher's Statute stipulated that teachers should work a maximum of 44 hours a week and that 25% of the hours stipulated in the work contract should be devoted to non-classroom activities. This is being adjusted with the 2016 Law that creates the System for Teacher Professional Development. In 2017, time devoted to non-classroom activities will increase to 30% of contract hours. This will be further increased to 35% in 2019. Also, as of 2019, primary school teachers (Year 1 to 4) employed in schools with over 80% of disadvantaged students will benefit from 40% of contract hours devoted to non-classroom activities. As displayed in Table 5.8, more than 60% of Chilean teachers have a total of 38 contractual hours or

more. This proportion is higher in municipal schools even if the distribution of contractual hours across teachers does not differ greatly among education providers (see Table 5.8).

Table 5.8. **Distribution of teachers according to number of contractual hours per week per education provider, 2015**

Total number of contractual hours per week	Municipal schools	Private-subsidised schools	Private non-subsidised schools	Schools with delegated administration	Distinct types of providers	**Total**
Less than 30 hours	7.6	16.0	19.1	20.0	8.7	**12.6**
30 hours	11.2	7.0	7.4	4.5	1.5	**8.6**
From 31 to 37 hours	16.4	19.6	23.9	17.2	11.1	**18.4**
From 38 to 43 hours	28.3	23.2	25.0	22.0	16.8	**25.3**
44 hours or more	36.5	34.3	24.6	36.3	61.9	**35.0**

Note: The number of contract hours for each teacher corresponds to the sum of the hours contracted at each of the schools where the teacher works. Data refer to pre-primary, basic and upper secondary education. Data exclude provision by JUNJI, Integra Foundation and private providers with no official recognition. Data refer to all teacher functions listed in Table 5.1. "Distinct types of providers" account for those teachers who work in several schools and whose providers are of a different type.
Source: Ministry of Education (2016), *Estadísticas de la Educación 2015* [*Education Statistics 2015*], *http://centroestudios.mineduc.cl* (accessed on 31 August 2017).

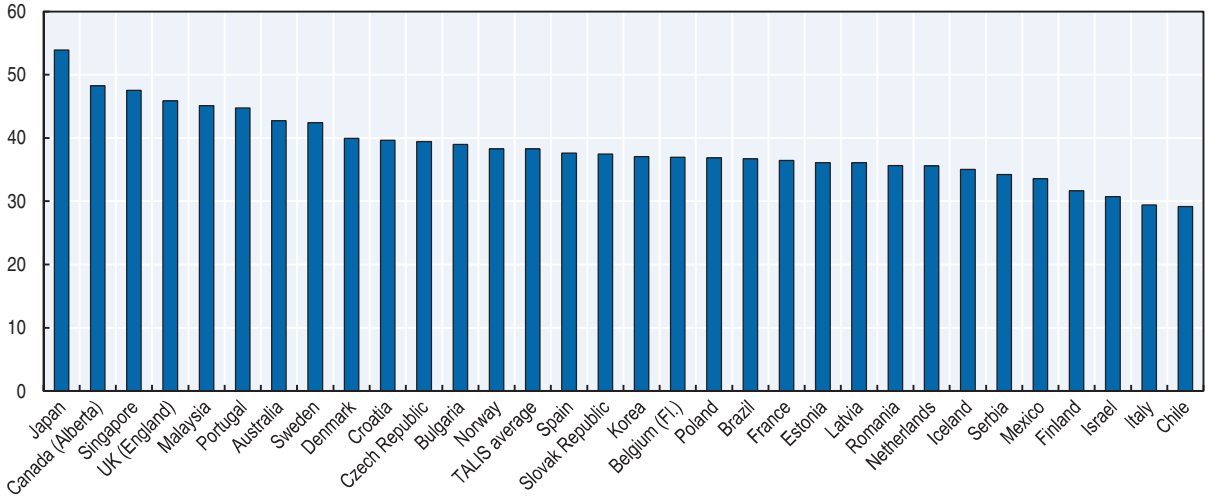
In 2014, the total annual number of statutory working hours was 2 006 for all education levels, above the OECD averages of 1 577 (pre-primary education), 1 585 (primary education), 1 609 (general lower secondary education) and 1 588 (general upper secondary education) (see Table 5.9) (OECD, 2016). Figure 5.7 reflects self-reports of lower secondary teachers regarding actual hours worked during a week, surprisingly positioning Chilean teachers below the TALIS average (29.2 hours for Chilean lower secondary teachers, against a TALIS average of 38.3 hours). However, another picture emerges when Chilean teachers are asked how many hours they spend per activity (see Figure 5.8).

Regulations stipulate that, for all educational levels, in addition to teaching, the following tasks are expected to be undertaken at the school by teachers with schools having discretion in defining the specified associated required time (OECD, 2014b):

- Individual planning or preparing lessons.
- Teamwork and dialogue with colleagues.
- Marking student work.
- Supervising students during breaks.
- Providing counselling and guidance to students.
- Participating in school management.
- General administrative communication and paperwork.
- Communicating and co-operating with parents or guardians.
- Engaging in extracurricular activities after school.
- Engaging in professional development activities (fully at the discretion of the school).

Figure 5.8 shows the average number of hours lower secondary teachers report having spent on a variety of tasks for both Chile and the average among TALIS countries. It highlights the fact that Chilean teachers spent relatively more time than teachers in other countries on teaching itself while they spent relatively less time in other tasks such as preparation of lessons, marking students' work, team work and extracurricular activities

Figure 5.7. **Average number of hours teachers report having worked during the most recent complete calendar week, lower secondary education, 2013**



Note: Includes teaching, planning lessons, marking, collaborating with other teachers, participating in staff meetings and other tasks related to the teacher's job at the school. A "complete" calendar week is one that was not shortened by breaks, public holidays, sick leave, etc. Also includes hours worked during weekends, evenings or other off-classroom hours. The sum of hours spent on different tasks (shown in Figure 5.8) may not be equal to the number of total working hours because teachers were asked about these elements separately. It is also important to note that data presented represent the averages from all the teachers surveyed, including part-time teachers.
Source: OECD (2014a), *TALIS 2013 Results: An International Perspective on Teaching and Learning*, *http://dx.doi.org/10.1787/9789264196261-en*.

(OECD, 2014a). This information also provides a different picture about the total actual working hours of Chilean teachers vis-à-vis the information provided in Figure 5.7.

Teaching standards

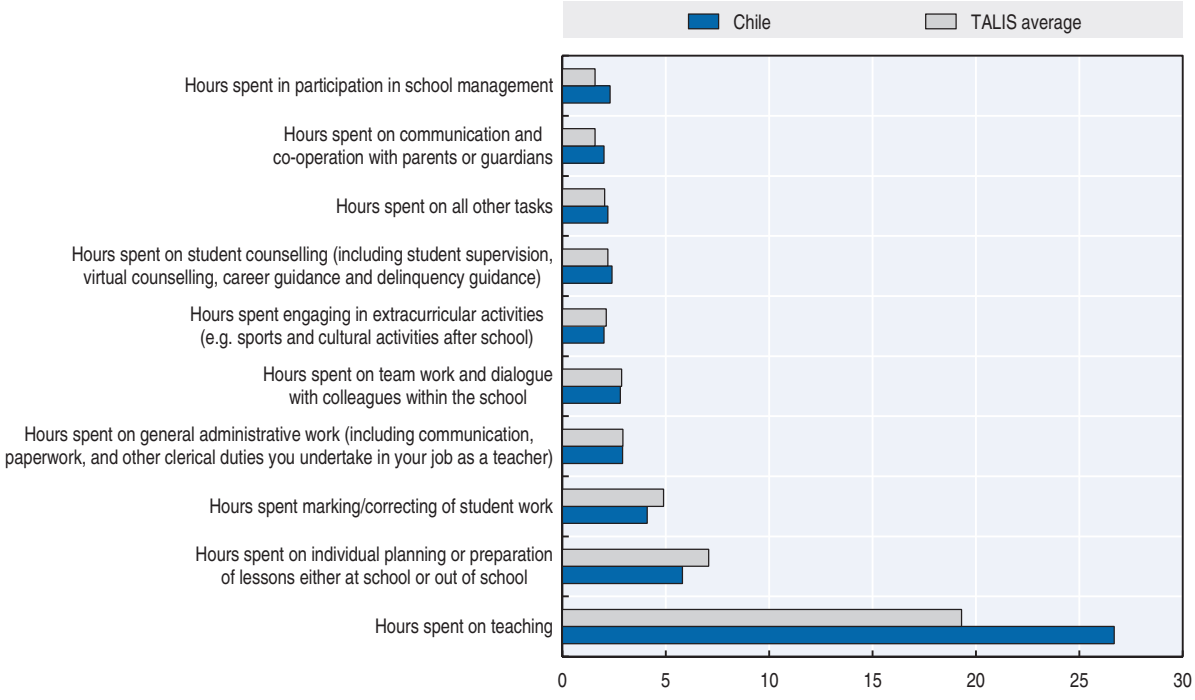
Chile has developed a national framework defining standards for the teaching profession, the Good Teaching Framework (*Marco para la Buena Enseñanza*, MBE), as of 2003. The MBE provides a clear and concise statement or profile of what teachers are expected to know and be able to do (Santiago et al., 2013). At the time of the writing of this report, the MBE was being revised. In 2016, a revised version of the MBE was released for public discussion, including with individual teachers. It is expected that the revised MBE will be in use in either 2017 or 2018. The Ministry also intends to develop a version of the MBE adjusted for the specificities of pre-primary teaching.

The MBE specifies the following:

- Domains (4 of them).
- Criteria within domains (20 in total).
- Descriptors for each criterion.
- Performance levels for descriptors.

The four domains are: i) Preparation for teaching; ii) Creation of an environment favouring the learning process; iii) Teaching that allows the learning process of all students; and iv) Professional responsibilities (Santiago et al., 2013). The MBE provides the foundation for each of the criteria and an explanation of each of the descriptors. Rubrics are used to construct performance levels by descriptor (see Santiago et al., 2013, for further details).

Figure 5.8. **Average number of hours lower secondary education teachers report having spent on the following activities during the most recent complete calendar week, Chile and TALIS average, 2013**



Note: A "complete" calendar week is one that was not shortened by breaks, public holidays, sick leave, etc. Also includes tasks that took place during weekends, evenings or other off-classroom hours. The sum of hours spent on different tasks may not be equal to the number of total working hours (shown in Figure 5.7) because teachers were asked about these elements separately. It is also important to note that data presented represent the averages from all the teachers surveyed, including part-time teachers.
Source: OECD (2014a), *TALIS 2013 Results: An International Perspective on Teaching and Learning*, *http://dx.doi.org/10.1787/9789264196261-en*.

Teacher evaluation

Formal teacher evaluation in Chile comprises a range of programmes. Comprehensive mandatory teacher evaluation is organised through the teacher performance evaluation system, covering the municipal school sector only. This system is complemented by a range of reward programmes which involve some type of evaluation: the Programme for the Variable Individual Performance Allowance (municipal sector only) (AVDI); the Programme for the Accreditation of Pedagogical Excellence Allowance (covering the entire subsidised school sector) (AEP); and the National System for Performance Evaluation (SNED), which provides group rewards for teaching bodies of given publicly-subsidised schools. These programmes are described below and additional detail can be found in Santiago et al. (2013).

A recent addition is the certification process associated with the transition of stages in the new career structure: the System for the Recognition of Teacher Professional Development (*Sistema de Reconocimiento del Desarrollo Profesional Docente*). This system will be implemented as of 2017 and will lead to the discontinuation of the AVDI and the AEP. This certification process is described below.

In addition to the formal programmes outlined above, private schools (both subsidised and non-subsidised) autonomously organise their own performance teacher evaluation

systems and any school is free to organise extra internal systems of teacher evaluation. The latter tend to be informal processes of feedback for improvement but can also be part of internal management tools established by the school principal in the context of the 2011 Quality and Equality Education Law.

Teacher performance evaluation system

The teacher performance evaluation system (also referred to in Chile as *Docentemás*) was established in 2003 following a tripartite agreement between the Ministry of Education, the Chilean Association of Municipalities (*Asociación Chilena de Municipalidades*, AChM) and the Teachers' Association (*Colegio de Profesores*) and consists of a formal system of external teacher evaluation in the municipal school sector (see Avalos and Assael, 2006, for an account of its implementation).

The teacher performance evaluation system is aimed at improving teachers' practice and promoting their continuing professional development in view of improving student learning. It covers all classroom teachers in municipal schools (as well as those in schools with delegated administration) who have at least one year of professional practice. Teachers are assessed every four years, unless their previous evaluation identified poor performance (in which case, they are evaluated more often, see below). The CPEIP, within the Ministry of Education, co-ordinates the whole teacher performance evaluation while the implementation has been undertaken since the inception of the system by the *Docentemás* team of the Measurement Centre of the *Pontificia Universidad Católica de Chile*.

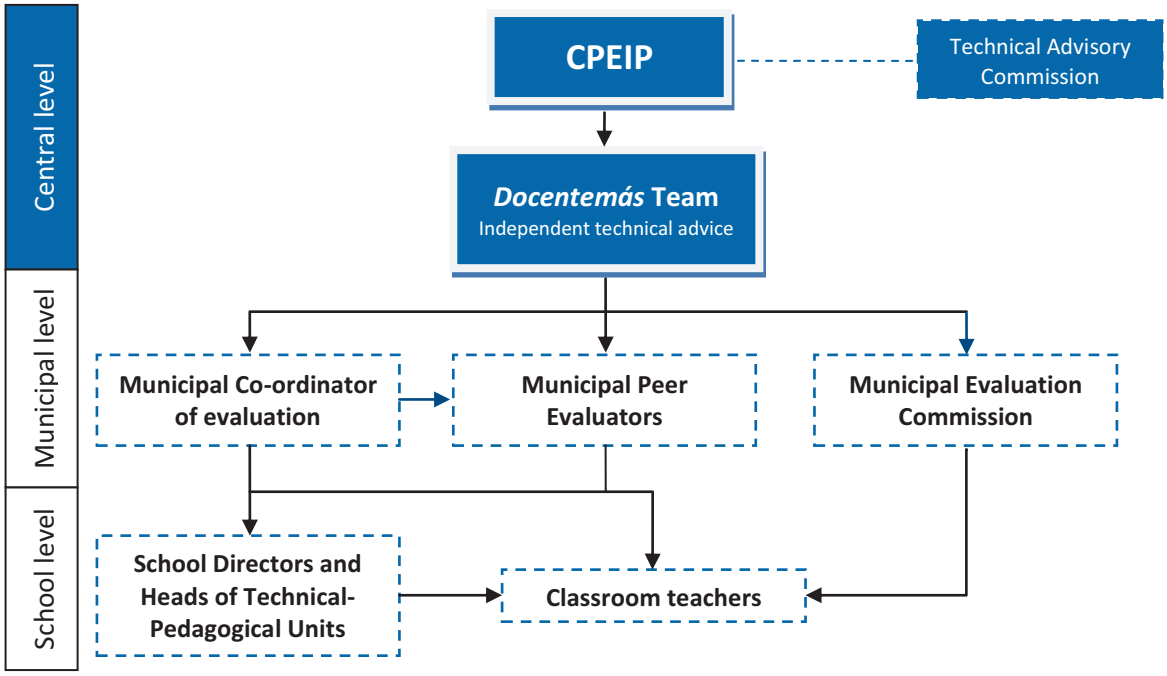
The following instruments and information sources are used in assessing the performance of a teacher: i) Self-evaluation (teacher rates his or her performance across 12 areas proposed in a questionnaire, with no open-ended questions); ii) Peer evaluator interview (peer evaluator rates the answers of the teacher to a pre-established set of questions); iii) Third-party reference report (rating of the teacher by both the school principal and the head of the technical-pedagogical unit of the school across a range of performance areas); and iv) Teacher performance portfolio (trained markers rate a portfolio composed of a set of pedagogical materials prepared by the teacher and a video recording of a class). The weights of each of the instruments for the final evaluation rating are 10%, 20%, 10% and 60% respectively. Teachers are evaluated against reference standards established by the Good Teaching Framework (*Marco para la Buena Enseñanza*) (Santiago et al., 2013).

The final decision on each teacher's performance rating is taken by the Municipal Evaluation Commission. The commission brings together the municipality's peer evaluators and is typically co-ordinated by the Head of the municipal Education Administration Department or the municipally controlled non-profit corporation which runs education within the municipality. For each evaluated teacher, the commission's decision is based on a review of the results obtained by the teacher in each of the assessment instruments as well as background information on the concerned teacher. Figure 5.9 summarises the organisational structure of the teacher performance evaluation system:

Teachers are rated into four distinct performance levels:

- Outstanding (*Destacado*).
- Competent (*Competente*).
- Basic (*Básico*).

Figure 5.9. **Organisation structure of the teacher performance evaluation system**



Source: Manzi, J., R. González and Y. Sun (eds.) (2011), *La Evaluación Docente en Chile* [*Teacher Evaluation in Chile*], Facultad de Ciencias Sociales, Escuela de Psicología, MIDE UC, Centro de Medición, Pontificia Universidad Católica de Chile, Santiago, Chile.

- Unsatisfactory (*Insatisfactorio*).

The more formal consequences of the teacher performance evaluation system are as follows (other consequences exist for the certification process associated with the new career structure, see below):

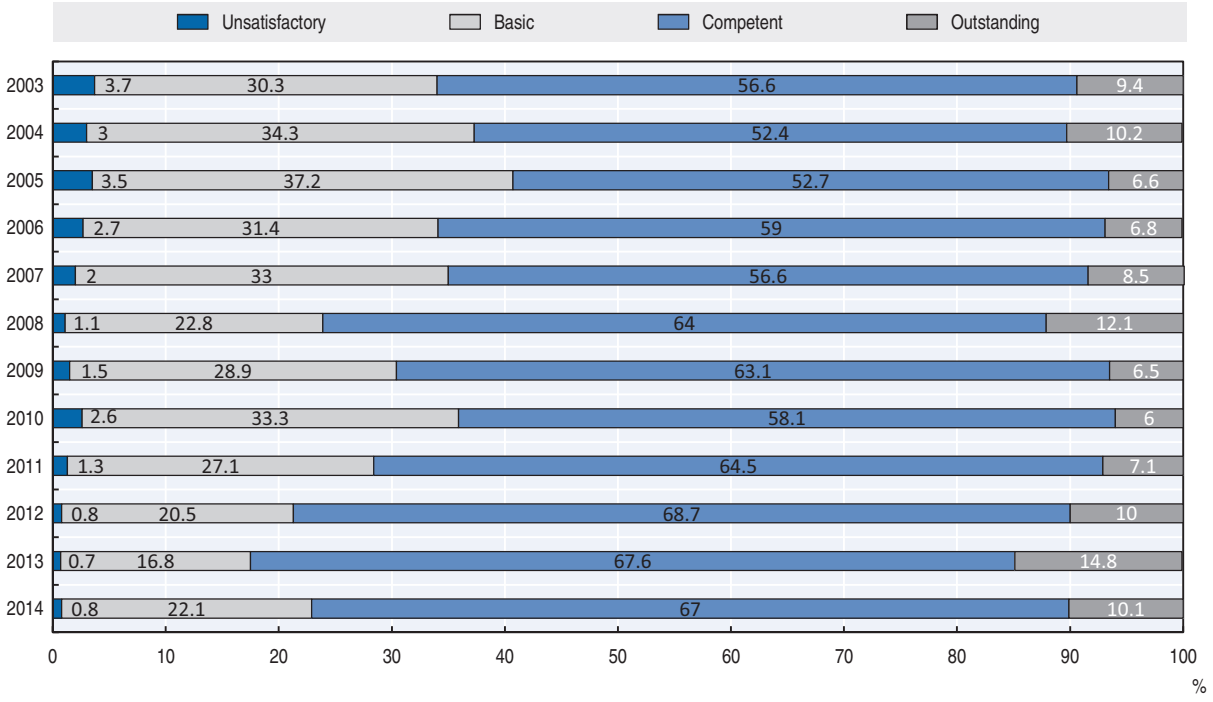
- Teachers who are rated *Outstanding* or *Competent* are eligible to voluntarily apply to the Variable Individual Performance Allowance programme (*Programa Asignación Variable por Desempeño Individual*, AVDI), a programme requiring an extra national test to assess the disciplinary and pedagogical knowledge of teachers and which confers monetary rewards based on the results of both the teacher performance evaluation and the AVDI test (see below for further details). Teachers rated as *Outstanding* or *Competent* also have priority access to certain professional development opportunities such as internships abroad, professional workshops or academic seminars.
- Teachers who are rated *Basic* are required to participate in Professional Development Plans (*Planes de Superación Profesional*, PSP) specifically designed and implemented for them by municipal education authorities and which are supposed to address the development opportunities identified in the evaluation. As of 2011, a *Basic* rating requires a new evaluation two years later.
- Teachers who are rated *Unsatisfactory* are also required to participate in targeted Professional Development Plans (*Planes de Superación Profesional*, PSP) developed by municipal authorities. This rating also entails a new evaluation the following year. As of 2011, if a second consecutive *Unsatisfactory* rating is given to the teacher, he or she is removed from the teaching post. Also, following the Quality and Equality of Education

Law of 2011, school directors are able to annually dismiss up to 5% of the teaching's staff among those teachers who were rated as *Unsatisfactory* at their most recent evaluation.

The professional development plans targeted at teachers who obtain a *Basic* or *Unsatisfactory* rating are funded by the Ministry of Education through earmarked resources transferred to municipal education authorities. The design and implementation of Professional Development Plans (PSP) by municipal education authorities require the annual approval by the CPEIP. The CPEIP directly or through Education Regional Secretariats (SEREMI) and Education Provincial Departments (*Departamentos Provinciales de Educación*, DEPROV) inspects and reviews the relevance, timeliness and effectiveness of PSPs, including through surveying the concerned teachers (Santiago et al., 2013).

The teacher performance evaluation system, as of 2014, had covered 83% of municipal teachers (Ministry of Education, 2014). Figure 5.10 displays the distribution of teacher ratings in the teacher performance evaluation system since its inception. The proportion of teachers rated as *Unsatisfactory* or *Basic* has fluctuated between about 24% and 40% while the proportion of teachers rated as *Outstanding* is typically below 10% (Santiago et al., 2013; Ministry of Education, 2014).

Figure 5.10. **Distribution of teacher ratings in the teacher performance evaluation system, 2003-14**



Source: Santiago, P. et al. (2013), *Teacher Evaluation in Chile 2013*, *http://dx.doi.org/10.1787/9789264172616-en*; Ministry of Education (2014), *Resultados Evaluación Docente 2014* [*Results Teacher Evaluation 2014*], *www.docentemas.cl/docs/Resultados_Evaluacion_Docente_2014.pdf*.

Programme for the Variable Individual Performance Allowance

The Variable Individual Performance Allowance programme (*Programa Asignación Variable por Desempeño Individual*, AVDI), created in 2004, is a voluntary annual reward programme accessible only to those municipal teachers who obtained the classification of

either "Competent" or "Outstanding" in the teacher performance evaluation system. The AVDI aims at strengthening the quality of education through rewarding the strongest performers among those identified as high performing by the teacher performance evaluation system. Eligible teachers can apply only once within the three years that follow a "Competent" or "Outstanding" rating in the teacher performance evaluation system (Santiago et al., 2013).

The single instrument used for the AVDI is an annual national standardised test to assess the disciplinary and pedagogical knowledge of teachers. The test is designed in reference to the MBE and the national curricular framework. AVDI test results are provided into four distinct performance levels: outstanding (*Destacado*); competent (*Competente*); sufficient (*Suficiente*); not approved (*No tiene AVDI*). Results of the AVDI programme are used to award monetary rewards to teachers who succeed in their application. The amount of the monetary reward depends not only on the AVDI rating but also on the teacher's rating in the performance evaluation system. A teacher granted an ADVI reward receives an extra annual amount of between 5% and 25% of his or her annual national minimum basic salary, paid in four instalments. The duration of the AVDI reward varies between two and four years (Santiago et al., 2013). With the introduction of the certification process associated with the new career structure in 2017, the AVDI will be discontinued.

Programme for the Accreditation of Pedagogical Excellence Allowance

The programme for the accreditation of pedagogical excellence allowance (*Programa de Acreditación para la Asignación de Excelencia Pedagógica*, AEP), introduced in 2002, is a voluntary annual programme to recognise the pedagogical excellence of teachers and reward them with one dedicated allowance. Teachers in both municipal and private-subsidised schools are eligible to apply for the programme. The objective of the AEP is to strengthen the quality of education through the recognition of the pedagogical excellence of classroom teachers (Santiago et al., 2013).

The AEP is based on two main instruments: i) a test to assess the disciplinary and pedagogical knowledge of the teacher (weight of 30%); and ii) a portfolio to demonstrate the extent to which the teacher meets standards (weight of 70%). The portfolio has five distinct components: planning and implementation of a learning unit; student assessment strategy; class (video recorded); analysis of videotaped class; and reflection about teaching practice. The AEP is designed in reference to the MBE and the national curricular framework (Santiago et al., 2013).

Teachers who succeed in their application to the AEP are provided with a monetary reward (Excellent Teacher Allowance) and the possibility to apply to the "Maestros" Teacher Network. The monetary reward is broadly equivalent to an extra monthly salary per year for ten years (distributed in two annual instalments). The names of the teachers who obtain the Excellent Teacher Allowance are publicly disclosed. To keep the reward, accredited teachers must be practising classroom teachers in either a municipal or a private-subsidised school and be rated as "Outstanding" or "Competent" by the teacher performance evaluation system during the corresponding period (Santiago et al., 2013). With the introduction of the certification process associated with the new career structure in 2017, the AEP will be discontinued.

National System for Performance Evaluation

The National System for Performance Evaluation (*Sistema Nacional de Evaluación de Desempeño*, SNED), which started operating in 1996, is a system for evaluating school performance which rewards teachers and education assistants within a school for their performance in the System to Measure the Quality of Education (*Sistema de Medición de Calidad de la Educación*, SIMCE), the full-cohort national standardised assessment of student performance across the country. The SNED is organised every two years and covers the subsidised sector, i.e. municipal schools, private-subsidised schools and schools with delegated administration (Santiago et al., 2013).

The SNED reward is based on the SNED performance index which is determined, for each individual school, as a weighted average of the following factors (weight indicated in parentheses) (Santiago et al., 2013):

- Effectiveness: SIMCE performance level (37%).
- Progress: Growth of SIMCE results over time (28%).
- Initiative: Ability of the school to introduce educational innovations and draw the support of external agents to their teaching activities (6%).
- Improvement of working conditions and adequate functioning of the school: compliance with regulations and statistical processes (assessment by inspection of the Ministry of Education) (2%).
- Equality of opportunities (22%).
- Participation of teachers and parents in the development of the school's educational project (5%).

In order to ensure greater fairness, in each region, schools are ranked according to the SNED performance index within *homogeneous* groups, i.e. groups of schools which are broadly comparable in terms of the socio-economic characteristics of their student populations and other school-level characteristics. The variables used to define the groups are the following: region; geographical area (urban or rural); level and type of education (primary education only; secondary education with or without primary education, special education); Schooling Vulnerability Index (*Indice de Vulnerabilidad Escolar*, IVE); average household income of students' families (SIMCE questionnaire to parents); and average schooling of parents (SIMCE questionnaire to parents) (Santiago et al., 2013).

Schools within the top 35th percentile (of student population within each homogeneous group) receive the "Subsidy for Performance of Excellence", with the level of the subsidy depending on the position in the ranking: 100% of the subsidy if the school is within the top 25th percentile; and 60% otherwise. Rewards are distributed among teachers and education assistants within each rewarded school. Regulations specify that 90% of the Subsidy for Performance of Excellence is to be distributed to teachers in proportion to the number of individual contract hours. The remaining resources may be distributed according to special incentives programmes designed by individual schools (Santiago et al., 2013).

Certification as part of the new career structure

Progression in the new career structure is associated with a certification process, the System for the Recognition of Teacher Professional Development (*Sistema de Reconocimiento*

del Desarrollo Profesional Docente). This evaluation process, to be implemented as of 2017, will take into account the following dimensions:

- Disciplinary and pedagogical competencies and knowledge.
- Experience.
- Activities other than teaching such as collaborative work with other teachers and interaction with students and parents.
- Pedagogical innovation and the development of teaching materials.
- Pertinent professional development activities.

Two evaluation instruments will be used:

- *An instrument to evaluate pedagogical and specific knowledge* (test), to be organised by the Agency for Quality in Education. If the teacher reaches one of the two top rates, he or she will no longer need to take this test during his or her career.
- *A professional portfolio of pedagogical competencies*, which will evaluate classroom teaching; the teacher's responsibilities in and outside the classroom; collaborative work with other teachers; pedagogical innovation; and professional development activities. If a teacher reaches a high rate in this instrument, it may not need to undergo the same portfolio evaluation at the next evaluation process.

Teacher evaluation internal to the school

Education providers (municipalities, delegated administrations and private owners) are free to design and implement teacher evaluation processes that complement the formal evaluation processes described previously. Many municipal schools (and schools with delegated administrations) organise extra evaluation procedures, which tend to be more informal processes of feedback for improvement. To a great extent there is an expectation that school leaders in all schools undertake regular internal evaluations of the teachers in their school. Private schools also organise their own performance teacher evaluation systems (Santiago et al., 2013).

Teacher professional development

Teachers in Chile have access to a variety of professional development activities with more traditional forms, such as courses, subject specialisations and seminars coexisting with other forms that are provided in schools or municipalities, such as municipal workshops and internship projects as well as postgraduate studies provided in institutions of higher education. Professional development activities are typically chosen individually by the teacher. The CPEIP co-ordinates the supply of professional development in the country, defines priority areas, and supplies key offerings. It also accredits professional development courses for teachers, which are then listed in the National Public Training Registry (*Registro Público Nacional de Perfeccionamiento*, RPNP). The RPNP functions as a large database with information on accredited offerings. A variety of providers exists: the CPEIP, autonomous higher education institutions and providers accredited by the CPEIP such as labour associations, education consulting companies and municipal training centres. Municipal teachers benefit from a training allowance for attending courses in this Registry, which requires approval by the municipal educational authority. Participation in such activities typically occurs outside of term time (Santiago et al., 2013).

A significant initiative in relation to professional development was the creation in 2002 of the "Maestros" Teacher Network. The principle is to benefit from the expertise and experience of teachers who received the accreditation of pedagogical excellence (AEP, see above). In order to be members of the "Maestros" Teacher Network, AEP teachers need to go through a selection process which requires giving evidence, through the submission of a portfolio, that they have the skills to work well with their peers. The Network members design projects aimed at working with other teachers outside school hours (Santiago et al., 2013). The "Maestros" Teacher Network operates an Internet platform where its members can share their experiences. Members of the network are certified to provide pedagogical advisory services to individual schools. As of 2014, 1 222 teachers were part of this network (MINEDUC, ACE and ES, 2016). Another example of collaborative learning among Chilean teachers is the set of networks of English teachers co-ordinated by the "English Opens Doors" Programme (*Programa Inglés Abre Puertas*, PIAP) of the Ministry of Education which aim to promote effective English teaching practices (MINEDUC, ACE and ES, 2016).

An important opportunity for collaborative learning in rural areas is provided by the rural micro-centres (*Microcentros Rurales*), which are local networks of teachers from multigrade schools. The objective is to share experiences and develop teaching and learning strategies that meet local socio-cultural conditions. As of 2015, there were 374 rural micro-centres with teachers from 2 400 multigrade rural schools developing teaching and learning strategies pertinent for their specific context with the support from the Ministry of Education.

The 2016 Law that creates the System for Teacher Professional Development (*Sistema de Desarrollo Profesional Docente*) introduces significant adjustments to the provision of professional development for teachers. It guarantees the availability of free and pertinent professional development activities to assist teachers in their career progression. The CPEIP will co-ordinate these activities and be the main provider in collaboration with other organisations licensed to provide professional development for teachers. The offer of professional development activities as well as the choice for individual teachers will be informed by both the System for the Recognition of Teacher Professional Development and school improvement plans (*Plan de Mejoramiento Educativo*, PME). In addition, schools will be incentivised to develop own development plans for their teaching bodies to promote collaborative work and pedagogical feedback within the school. These plans should become part of the school improvement plan (PME). By the end of 2017, the CPEIP will organise a unit within each DEPROV called Local Committee for Teacher Professional Development (*Comité Local de Desarrollo Profesional Docente*) in view of identifying teacher professional needs within each province.

Strengths

Clear standards of practice provide a solid reference for teacher policy

The Good Teaching Framework (*Marco para la Buena Enseñanza*, MBE) provides a clear definition of what constitutes good teaching, based on a solid research foundation. It encompasses all the important aspects of teaching such as planning, creating a classroom environment conducive to learning, effective teaching, and professional responsibilities. The MBE is intended to be used as the common benchmark for understanding teaching practice and align the different components of teacher policy. The shared understanding of the MBE, if it is truly shared, enables a common language to develop around the definition

of good teaching, and, with that, professional conversation. None of this is possible without clear standards of practice, which are widely understood and whose underlying values are shared by both academics and practitioners (Santiago et al., 2013).

The establishment of teaching standards that provide a clear and concise profile of what teachers are expected to know and be able to do is a major source of strength. Teaching standards are essential mechanisms for clarifying expectations of what systems of teacher education and professional development should aim to achieve, offering the credible reference for making judgements about teacher competence, guiding teacher professional development, and providing the basis for career advancement. Clear, well-structured and widely supported teaching standards are a powerful mechanism for aligning the various elements involved in developing teachers' knowledge and skills (OECD, 2005).

A positive development is the ongoing revision to the MBE. The revised MBE, which should be in place in 2017 or 2018, reviews the criteria and performance levels to ensure they reflect the most recent research regarding good teaching practice. It is essential that the MBE reflects the specific aspects of teaching which show the highest correlations with student learning as reflected by recent educational research. Important innovations of the draft revised MBE undergoing public discussion at the time of writing of this report include the integration of student assessment into instruction and student active engagement in learning. Also, an important step in aligning initial teacher education to the MBE was the development of the Graduating Teacher Standards. These were developed to guide the content and structure of initial teacher education programmes and define the set of competencies and knowledge all graduates should acquire as part of their initial teacher education.

A new competency-based career structure is being introduced and teachers have opportunities to diversify their roles at schools

A multistage career structure based on the acquisition of competencies is being introduced. This is a positive move to get away from the previous single stage career structure with no promotion opportunities within teaching. The new competency-based career structure presents a range of advantages.

The multistage career structure provides opportunities for recognition

The existence of a multistage career structure accomplishes the important function of recognising experience and advanced teaching skills with a formal position and additional compensation. As teachers demonstrate further competencies, they are given access to new stages of the career in which they make better use of their competencies while remaining in the classroom. The new career structure conveys the important message that the guiding principle for career advancement is merit and has the benefit of rewarding teachers who choose to remain in the classroom. However, the career structure does not include a probationary process upon entrance into the teaching profession, a typical process in other countries before full certification or a permanent teaching post is awarded. The career structure model, as currently designed, allows an underperforming teacher to remain in the profession for eight years before removal can be considered (see below).

Career stages are associated with formally recognised roles and tasks within schools

The new career structure provides greater potential to better match teachers' skills to the roles and responsibilities needed in schools. As teachers access the *Advanced* stage, the teacher is granted the opportunity to access functions such as mentor teacher, team leader, among others. As teachers access the voluntary stages of *Expert I* and *Expert II*, they are given preferential access to roles of pedagogical leadership and guidance. Hence, as they access higher stages of the career structure, teachers are expected to have deeper levels of knowledge, demonstrate more sophisticated and effective teaching, take on responsibility for curricular and assessment aspects of the school, assist colleagues and so on. Given the potential greater variety of roles in schools as the teacher goes up the career ladder, the career structure has the potential to generate greater career diversification. These roles, which do not necessarily involve differentiated pay but instead release time from classroom teaching, provide more opportunities and recognition for teachers and meet school needs (OECD, 2005).

Career progression is achieved through a certification process

Progression in the career structure involves an evaluation of the teacher through a certification process, the System for the Recognition of Teacher Professional Development (*Sistema de Reconocimiento del Desarrollo Profesional Docente*). It is a competency-based process, i.e. it directly assesses whether a teacher has acquired the competencies needed to perform at the different stages of the career, using as a reference teacher professional standards (Good Teaching Framework).

It is adequate that access to higher stages of the career structure involves a formal certification process. Such certification processes that are linked to career development can help provide incentives for teachers to perform at their best, bring recognition to effective teachers, support professional learning, and help recognise and spread good practice more widely. Given the high stakes of teacher certification, it is appropriate to use a national framework and standards procedures as well as an external component (external markers of a professional portfolio and a standardised written assessment) to ensure objectivity and fairness (Santiago and Benavides, 2009). The teacher certification model also intends to have good links to teaching practice, in particular through the analysis of a teacher portfolio which will include classroom observation. The certification model also intends to cover the broad responsibilities of teachers beyond classroom teaching.

However, it is less clear why certifying a teacher as fit to perform at a given career stage should be valid for the rest of the teacher's career. As currently planned, there is no need for re-certification to stay in a given career stage. This can be problematic as the teacher will lack incentives to update his or her knowledge and skills continuously. This might be a source of concern particularly for teachers not progressing beyond the *Advanced* stage as many years with no challenge to his or her competencies might result in non-identified underperformance.

Induction into the profession becomes an integral part of teacher development

Another positive feature of the new career structure is that beginning teachers are supposed to benefit from an induction process which includes a mentoring process with duration of up to ten months. This will provide teachers with support and additional

training as they enter the profession. Beginning teachers are to be assigned a more experienced colleague as a mentor during this period. TALIS 2013 data seem to indicate that this practice is indeed not yet widely spread across Chilean schools. In TALIS 2013, 59.9% of Chilean lower secondary teachers were in schools where the principal reported that no formal induction programme was available for new teachers, compared to the international average of 34.2% (OECD, 2014a). There is ample evidence suggesting that there are benefits beginning teachers gain from mentoring while mentors also derive substantial benefits from the mentoring experience (OECD, 2005).

The new career structure simplifies teacher compensation

The new career structure provided an opportunity to simplify teacher compensation in Chile. The teacher incentive system, in addition to the basic salary, includes a large set of salary allowances. It results in a rather complex and fragmented system of incentives for teachers. It seems that the various incentive mechanisms were created at different times for different reasons, but such a scattered approach dilutes the focus on identifying and rewarding Chile's best teachers (Santiago et al., 2013). Given that advancement in the career structure goes alongside greater compensation (through the Stage allowance) which recognises good performance, the rationale for keeping certain salary allowance was reduced. The AEP and the AVDI will be discontinued as their functions are replaced by those associated to the certification process to access the higher career stages. In the end, the set of salary allowances will be considerably reduced resulting in a teacher compensation system which sends clearer incentives to teachers.

Further recognition is given to activities other than teaching

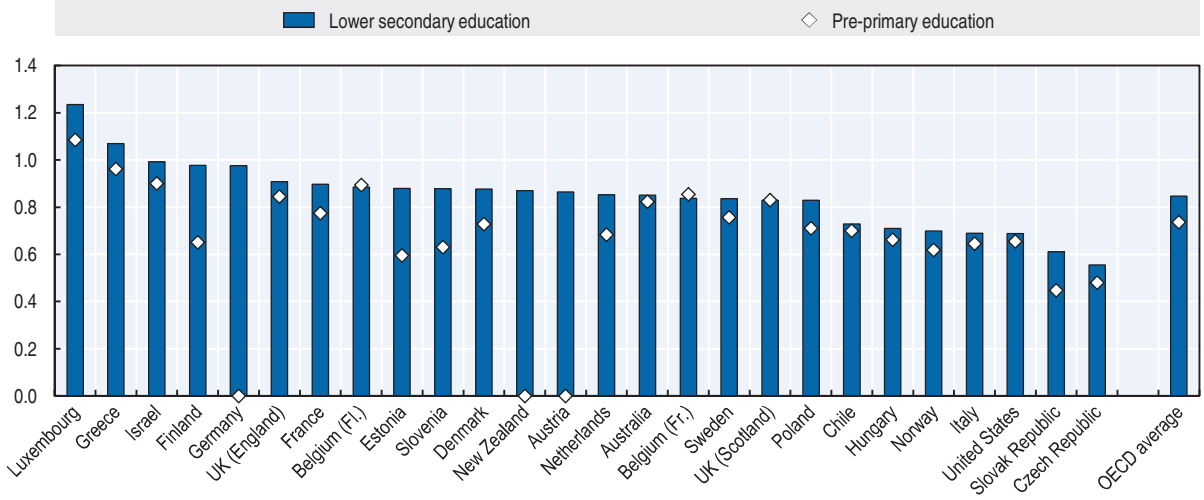
In Chile, teacher employment is conceived on the basis of a workload system, whereby compensation is associated with a teacher's working load. This is likely to improve efficiency in the teacher labour market. This is in contrast with countries which conceive teacher employment on the basis of a teaching load only. Employment under a workload system recognises that teachers need time for engaging in a range of other tasks, including the adequate preparation of lessons. This is likely to make the profession more attractive, by recognising the variety of tasks a teacher performs, and to reduce the number of teachers seeking a high teaching load if pay was directly associated with the number of teaching hours. At the same time, this allows teachers to engage in activities other than teaching, in light of school priorities, including through the requirement to stay at the school outside teaching hours (and within working hours). This also fosters teacher engagement at the school and provides greater opportunities for collaboration among teachers.

This is particularly relevant in the context of Chile which is characterised by high working loads and a considerable proportion of teaching hours (see below). The 2016 Law that creates the System for Teacher Professional Development improves teachers' working conditions and gives further recognition to activities other than teaching. It increases the proportion of non-teaching hours within the regulated working hours. This potentially fosters teacher engagement at the school and increases the opportunities for collaboration among teachers. At the same time, the certification process to grant access to the different career stages is being designed so that activities other than teaching are given due importance.

Efforts to raise teacher salaries send important signals about the importance of teaching

The 2016 Law that creates the System for Teacher Professional Development involves considerable efforts on the part of the Chilean government to increase teacher salaries. Teacher salaries at the start of the career have been planned to be about 30% higher than 2016 salaries for beginning teachers. The career structure is also designed to provide significant salary increases as the teacher transitions to a higher stage. This reflects a commitment to bring teacher salaries to more adequate levels. There is a clear awareness that the salaries of Chilean teachers remain among the lowest within the OECD area, both at the start of the career and at the top of the scale (see Figure 5.5). Salaries of Chilean teachers relative to those of tertiary-educated workers aged 25-64 in Chile are also among the lowest among the OECD for which there are data (see Figure 5.11): for lower secondary teachers, they only reach 73% of the average salary of tertiary-educated workers (OECD, 2016). This is confirmed by national data. According to statistics from the Higher Education Information Service, in 2013, five years after graduation, on average, the salaries of teachers reached only about 80%, 30% and 27% of the earnings of university-educated individuals with a technical career, civil engineers and medical doctors respectively (MINEDUC, ACE and ES, 2016). Salaries of teachers, five years after graduation, are at about the same level of those of individuals with a technical career who obtained their qualifications from a technical training centre (*Centros de formación técnica*, tertiary non-university institutions offering two- to three-year technical programmes) (MINEDUC, ACE and ES, 2016).

Figure 5.11. **Teachers' actual salaries relative to those of tertiary-educated workers aged 25-64, public institutions, pre-primary and lower secondary education, 2014**



Note: Data refer to the ratio of salary, using annual average salaries (including bonuses and allowances) of teachers in public institutions relative to the wages of full-time, full-year workers with tertiary education, for the 25-64 age range. For Finland, France and Sweden the reference year is 2013.
Source: OECD (2016), *Education at a Glance 2016: OECD Indicators*, *http://dx.doi.org/10.1787/eag-2016-en*.

The teacher policy framework is progressively including the publicly-subsidised private sector

The 2016 Law that creates the System for Teacher Professional Development is an opportunity to include teachers in private-subsidised schools into the national teacher policy framework. Private-subsidised schools will initiate their certification processes (for the Recognition of Teacher Professional Development) and be integrated in new career system as of 2018.

Currently, there are no national requirements for teachers in private-subsidised schools to undergo an evaluation process. The typical approach for teacher evaluation in the private school sector consists of giving independence to school providers to run their own procedures, which are not validated externally by public education authorities. This means that there is no public assurance that the majority of teachers in Chile (who work in the private school sector) have their work evaluated once they enter the profession. The risk of a limited integration is that there is little guarantee that teacher evaluation procedures in the private sector rely on the agreed national understanding of good quality teaching (the Good Teaching Framework) and are sufficiently aligned with student learning objectives and educational targets at the national level (Santiago et al., 2013).

Given that private-subsidised schools receive public funds for their operation, it is perfectly legitimate that the new law integrates them to some degree into a national teacher policy framework. This will be progressively achieved while respecting the freedom of organisation of private schools. A complementary valuable development is the fact that the Agency for Quality Education is now required to externally validate internal teacher evaluation processes conducted by private schools. This is in a context where broader external school evaluation processes by the Agency and the Education Superintendence (*Superintendencia de Educación*) already include private-subsidised schools (see Chapter 4).

Initial teacher education benefits from a range of positive initiatives

There is a clear awareness among stakeholders of the need to improve the quality of initial teacher education. It is recognised that a key objective for teacher policy is attracting talent to initial teacher education and offering student teachers a preparation of high quality so they fulfil their potential as future teachers. There is evidence showing that the quality of entrants into initial teacher education is low and the perception that the proliferation of initial teacher education programmes in the country (1 213 in 2015) inevitably means that some do not meet the required standards.

In this context, it is commendable that the 2016 Law that creates the System for Teacher Professional Development includes a range of initiatives to improve the quality of initial teacher education graduates. First, it establishes new requirements to enter initial teacher education programmes – only secondary graduates reaching a given threshold level in entrance tests will be given access. This is adequate as there is room for initial teacher education to be more selective as there is no overall quantitative shortage of teachers in Chile. Second, institutions of teacher education can no longer provide qualifications for teaching if their teacher education programmes are not formally accredited. In addition, a range of new accreditation requirements were added in terms of infrastructure, academic staff, improvement plans and links to schools. Third, the introduction of the external assessment of student teachers before their graduation will

provide useful information to monitor the quality of initial teacher education programmes and devise improvement plans for the delivery of the programmes.

In addition, a number of initiatives are likely to stimulate the decision to engage in initial teacher preparation. The Teacher Vocation Scholarship (*Beca Vocación de Profesor*, BVP) provides academically talented secondary education graduates with a scholarship and other benefits if they choose teacher education as a higher education degree and teach in a subsidised school at least three years. The extent of the benefit depends on the score obtained in the university selection test (PSU). In 2015, 9 413 scholarships were awarded (MINEDUC, ACE and ES, 2016). A further initiative is the "Choose to Teach" (*Elige Educar*) campaign, a partnership between the Ministry and the *Elige Educar* non-governmental organisation, which seeks to promote teaching through a variety of actions, including the monitoring of the social status of teaching, scholarships for individuals with experience outside education who would like to join teaching, and interventions to raise awareness among school agents of the importance of teaching as a profession (Santiago et al., 2013). The decision to limit to universities the provision of initial teacher education programmes is also likely to improve the status of teaching.

Teacher evaluation is well-established and considerable experience has been accumulated

In Chile, teacher evaluation is recognised as an important policy lever to improve student learning and is central in the overall school policy framework. This is reflected in the substantial work on teaching standards, the very comprehensive approach to teacher evaluation in municipal schools and the multitude of reward programmes in the subsidised school sector. Over ten years of experience with formal teacher evaluation have produced a conviction among most teachers about the need for teachers to be evaluated, receive professional feedback, improve their practice and have their achievements recognised. The recognition of teacher evaluation as a positive and necessary process by most teachers is an important outcome of the experience thus far with teacher evaluation (Santiago et al., 2013).

A significant experience has been accumulated in the use of a variety of instruments and sources of information. This includes classroom observation, assessment of pedagogical materials, self-evaluation, peer evaluation and written assessments of the disciplinary and pedagogical knowledge of teachers. The different models have considerably built on research evidence. The *Docentemás* team, based in the Measurement Centre of the *Pontificia Universidad Católica de Chile*, brings technical expertise, academic rigour and research evidence into the implementation of teacher evaluation. It also investigates the functioning and impact of teacher evaluation as with the publication *La Evaluación Docente en Chile* (Manzi et al., 2011). This translates into desirable independence vis-à-vis the range of stakeholders with an interest in teacher evaluation and the potential to introduce modifications on the basis of identified best practices. In addition, the Ministry of Education through the CPEIP and its Planning unit conduct a range of studies about the impact of educational policies, including teacher evaluation, and best practices in teaching and learning (Santiago et al., 2013).

Selection and recruitment processes are regulated to ensure their transparency

The selection and recruitment of municipal teachers offer some guarantees of transparency while ensuring local agents are involved to better account for the needs of

the concerned school. Teaching vacancies need to be widely advertised in a national circulation newspaper and a selection committee formed of representatives of the employer (the municipality), representatives of the concerned school (the school principal), and representatives of the profession (a randomly selected teacher among peers of the same specialty) is formed. The mayor is required to select the teacher ranked at the top of the list by the selection committee. The participation of local stakeholders in the recruitment of teachers has considerable advantages. It allows a better match between individual applicants' characteristics and schools' specific needs. Applicants are also in a better position to identify with the school's educational project. In this context, it is suitable to have in place processes providing some transparency as to avoid opportunities for favouritism in teacher selection by schools. Given that private-subsidised schools receive public funds for their operation, their selection and recruitment approaches could also be regulated to ensure levels of transparency similar to those observed in municipal schools.

Incentives to teach in disadvantaged schools are improving

The 2016 Law that creates the System for Teacher Professional Development recognises the challenging working conditions of disadvantaged schools and introduces new incentives for individual teachers to work in them. A special allowance to work in schools with more vulnerable students is introduced (*Asignación de Reconocimiento por Docencia en establecimientos de Alta Concentración de Alumnos Prioritarios*), whose amount increases the higher is the teacher's career stage. This reinforces the current allowance for difficult conditions of work given to teachers in isolated, rural, culturally-diverse and disadvantaged schools. Also, as of 2019, primary school teachers employed in schools with over 80% of disadvantaged students will benefit from 40% of contract hours devoted to non-classroom activities. These measures improve the ability of schools and the system as a whole to address staffing problems in disadvantaged schools. As analysed later, there are indications of an inequitable distribution of teachers across schools.

There are opportunities for professional development

There is a range of in-service professional development activities to which teachers have access. Particularly important in this respect is the contribution of the Centre for Pedagogical Training, Experimentation and Research (*Centro de Perfeccionamiento, Experimentación e Investigaciones Pedagógicas*, CPEIP), which co-ordinates the supply of professional development activities, defines priority areas and provides professional development programmes. The CPEIP is in a particularly good position to identify teacher professional development needs and subsequently inform the supply of professional development programmes through its contact with Ministry's local representatives, namely the Education Provincial Departments (DEPROV) which have a direct interaction with schools and their needs.

Teachers also have facilitated access to information on professional development opportunities through the National Public Training Registry (*Registro Público Nacional de Perfeccionamiento*, RPNP), an Internet-based platform managed by the CPEIP. The RPNP brings together the professional development programmes accredited by the CPEIP, a function that ensures minimum quality standards in the provision of professional development for teachers. Municipal teachers also benefit from a training allowance. However, there appears to be little culture of professional development in Chile (see below).

The 2016 Law that creates the System for Teacher Professional Development states promising principles for teacher professional development likely to increase its effectiveness. It aims to offer an entitlement for free and pertinent professional development; it proposes individual professional development plans informed by the needs of both the teacher and the school; and it empowers school principals to develop a plan for professional development at the school in alignment with the school improvement plan. The objective is to move to a system whereby teachers have the incentive to undertake professional development to gain the competencies needed to access the higher stages of the teaching career and perform new roles at schools.

Challenges

The status of the teaching profession is low

Many of the stakeholders interviewed by the OECD review team commented on the low status of the teaching profession. There is a feeling among some Chilean teachers that society does not value their work. According to TALIS 2013 data, 33.5% of lower secondary Chilean teachers reported that they agree or strongly agree that the teaching profession is valued in society, slightly above the TALIS average (30.9%). A good proportion of them (31.9%) also wonder whether it would have been better to choose another profession (against a TALIS average of 31.6%). Nonetheless, 94.6% of Chilean lower secondary teachers also reported that they are satisfied with their job, against a TALIS average of 91.2% (OECD, 2014a).

National studies confirm the low status of the teaching profession. Only 47% of the general population state that being a teacher is a source of pride (Cabezas and Claro, 2011) and about 80% of teachers state that social recognition of teaching as a profession is medium or low (Ávalos and Sevilla, 2010). Clearly, there are concerns about the image and status of teaching in Chile, and teachers often feel that their work is undervalued. This is related to the low relative salaries of teachers (see above) which, to a great extent, determine the teaching profession's social standing. As a result, the teaching profession is not competitive in the labour market, causing difficulties in attracting young people and males to the teaching profession and in keeping motivated those already on the job (see OECD, 2005, for evidence on the impact of salaries on the supply of teachers). There are also concerns regarding working conditions, namely in terms of heavy workloads (see below). It is also unclear the rationale for upper secondary teachers to earn more per hour worked than pre-primary, basic education and special education teachers given that the level of qualifications for teaching is the same among all teachers and demands on teachers are similar across educational levels.

There are concerns about teacher quality

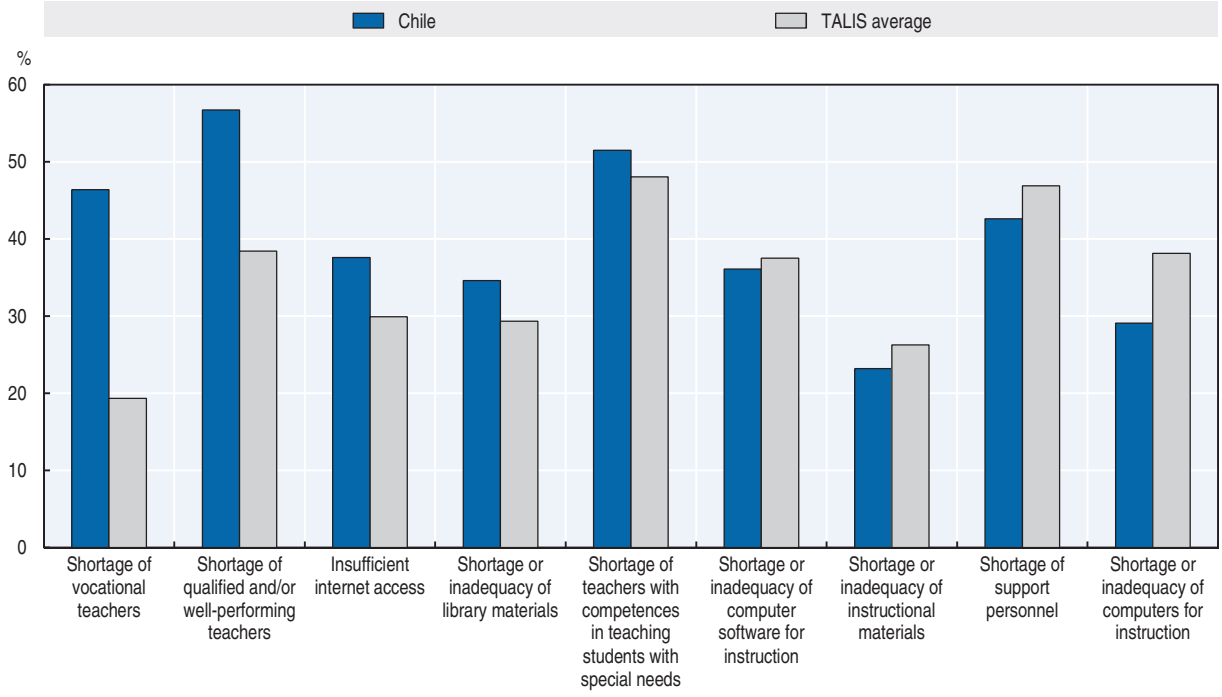
There are concerns about shortages of good quality teachers. According to TALIS 2013 data, Chilean principals of schools providing lower secondary education identify the shortage of qualified and/or well-performing teachers as the main resource issue hindering the school's capacity to provide quality instruction, a problem perceived as much more acute than in other countries participating in TALIS (an issue affecting 56.7% of Chilean lower secondary teachers, the fourth highest figure among TALIS countries, with a TALIS average of 38.4%) (see Figure 5.12). The equivalent figure for shortage of vocational teachers is 46.4%, also much higher than the TALIS average of 19.3% (OECD, 2014a). A similar picture emerges for upper secondary education. According to PISA 2012 data, the

percentage of 15-year-old students in schools whose Chilean principals reported that the lack of qualified teachers in mathematics, science, language of instruction and other subjects hindered student learning "to some extent" or "a lot" was 43%, 42%, 27% and 33% respectively, considerably above the OECD averages of 17%, 17%, 9% and 21% (OECD, 2013b). Also, in 2014, about 23% of teachers evaluated by the teacher performance evaluation system were rated below "Competent" (see Figure 5.10).

Teachers have heavy workloads with a great proportion of contact hours

In international comparison, Chilean teachers have both high teaching time and high statutory working time. Teaching time in Chile is considerably above the OECD average with 1 146 maximum annual teaching hours at all education levels compared to OECD averages of 1 005, 776, 694 and 644 hours in pre-primary, primary, lower secondary and upper secondary programmes respectively (see Table 5.9). Similarly, statutory working hours are considerably above OECD averages for the different educational levels (see Table 5.9). As seen earlier, more than 60% of Chilean teachers work 38 hours or more (see Table 5.8). There is also evidence that Chilean teachers spend a greater proportion of their working time in classroom teaching (see Figure 5.8).

Figure 5.12. **Resource issues hindering quality instruction, lower secondary education, Chile and TALIS average, 2013**



Note: Data correspond to the percentage of lower secondary teachers whose school director reports that the resource issues depicted above hindered quality instruction "a lot" or "to some extent".
Source: OECD (2014a), *TALIS 2013 Results: An International Perspective on Teaching and Learning*, *http://dx.doi.org/10.1787/9789264196261-en*.

This suggests that Chilean teachers have less room to spend time in lesson preparation, student assessment, professional development or teacher collaboration than peers in other countries. This is not desirable as it can be detrimental for teachers'

Table 5.9. **Teachers' working time in Chile and selected countries, hours per year, public institutions, 2014**

	Chile	Brazil	Colombia	Mexico	Portugal	Spain	OECD average
Net teaching time							
Pre-primary education	1 146	..	800	532	945	880	1 005
Primary education	1 146	..	1 000	800	743	880	776
Lower secondary education	1 146	..	1 200	1 047	605	713	694
Upper secondary education	1 146	..	1 200	848	605	693	644
Total statutory working time							
Pre-primary education	2 006	..	1 600	x	1 412	1 425	1 577
Primary education	2 006	..	1 600	x	1 586	1 425	1 585
Lower secondary education	2 006	..	1 600	x	1 442	1 425	1 609
Upper secondary education	2 006	..	1 600	x	1 442	1 425	1 588

x: not applicable
.. : missing data
Note: Data for lower and upper secondary education refer to general programmes. Data for Chile and Portugal refer to maximum teaching time; data for Colombia, Mexico and Spain refer to typical teaching time.
Source: OECD (2016), *Education at a Glance 2016: OECD Indicators*, *http://dx.doi.org/10.1787/eag-2016-en*.

professional growth. During its visit, the OECD review team saw few examples of communities of practice on schools where teachers share strategies, reflect as a team and collaborate in specific projects. This is likely to at least partly result from the time demands of teachers' jobs.

In addition, the size of classes is relatively high in Chile at 30 and 31 for primary and general lower secondary education respectively against OECD averages of 21 and 23 respectively (OECD, 2016). This adds to teachers' workload and further reduces their ability to engage in collaborative work and reflective practice.

There are some challenges to the preparation of teachers

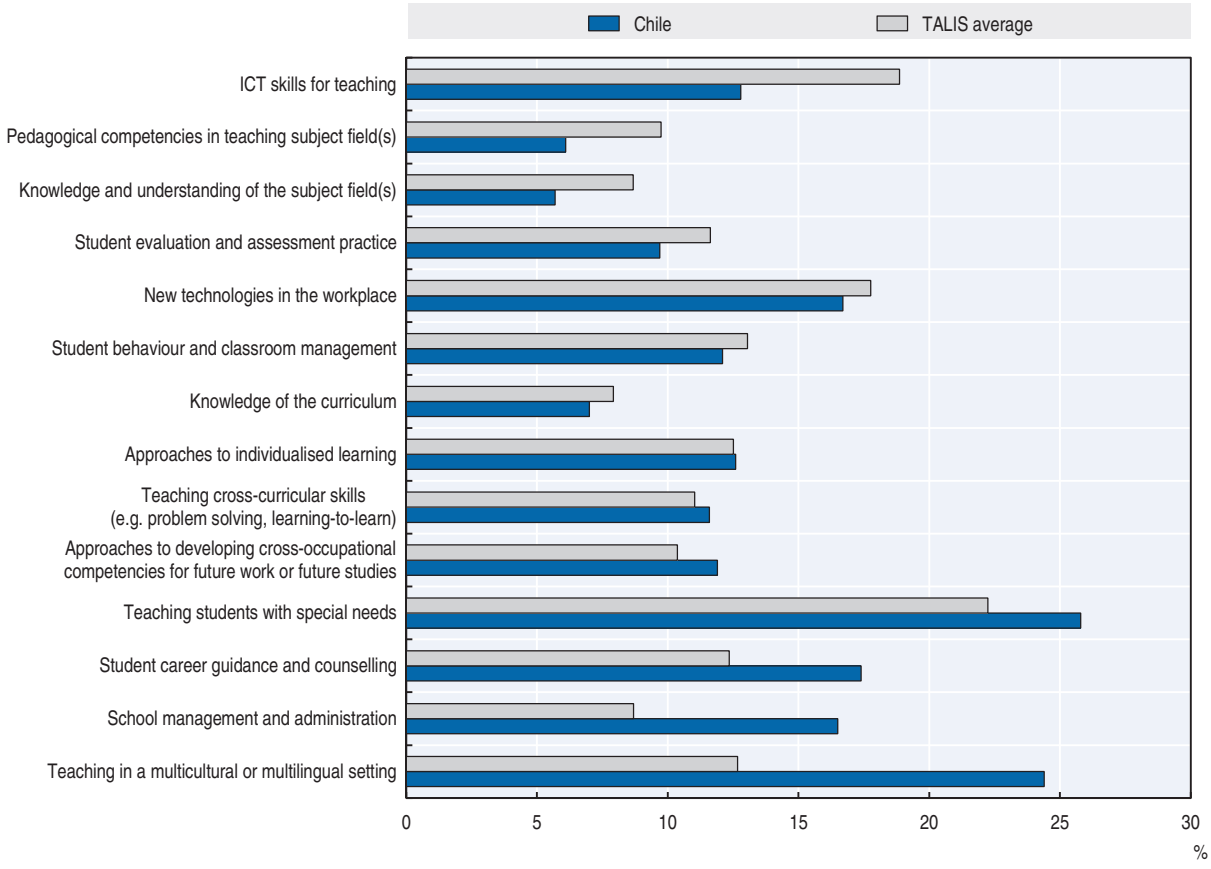
Initial teacher education raises a range of concerns. First, there is evidence indicating that initial teacher education is not attracting the best candidates from school education. This reflects the loss in the attractiveness of teaching as a result of low salaries, difficult working conditions and the low status of the profession. However, the 2016 Law that creates the System for Teacher Professional Development is introducing a range of initiatives (e.g. more selective entry into teacher education; better remuneration) that are likely to improve the attractiveness of the teaching profession.

Second, there are indications that teachers in mainstream schools are not adequately prepared to instruct students with special educational needs. Chilean lower secondary school principals identify the shortage of teachers with competencies in teaching students with special needs as the second main resource issue hindering the school's capacity to provide quality instruction, a problem perceived as more acute than in other countries participating in TALIS (an issue affecting 51.5% of Chilean teachers against a TALIS average of 48.0%) (see Figure 5.12).

Third, teaching students with special needs, teaching in a multicultural or multilingual setting and student career guidance and counselling have been identified by Chilean lower secondary teachers as their main needs for professional development, according to TALIS (see Figure 5.13), which might potentially indicate some under emphasis in these areas in initial teacher education and professional development programmes.

Finally, the OECD review team formed the impression that teachers receive little preparation for multigrade teaching (i.e. simultaneously teaching students who are in different school years) and teaching in rural schools. The regular preparation of teachers does not seem to include special training to deal with rural contexts, or to provide special strategies for teaching in multigrade classes.

Figure 5.13. **Teachers' needs for professional development, lower secondary education, Chile and TALIS average, 2013**



Note: Data correspond to the percentage of lower secondary education teachers indicating they have a high level of need for professional development in the areas displayed.
Source: OECD (2014a), *TALIS 2013 Results: An International Perspective on Teaching and Learning*, *http://dx.doi.org/10.1787/9789264196261-en*.

Teacher underperformance is not adequately addressed in the first few years of the career

While a comprehensive teacher evaluation system has been established in Chile, the identification of teacher underperformance, particularly in the early stages of the career, remains limited. The introduction of a mentoring process upon entry into the teaching is a positive development but it is not associated with a probationary period. This considerably reduces the scope for beginning teachers and their employers to assess whether teaching is the right career for them. The introduction of the new career structure was a missed opportunity to include a probationary period as the first major step in gaining certification

for the teaching profession. At present, the school system can only respond to specific instances of teacher underperformance in two situations:

- Teachers are given two opportunities to access the *Early* stage of the new career structure, with a failure at the second opportunity (two years after the first attempt) leading to dismissal from the education system. This means that a teacher can perform below standards at least during six years. The teacher is placed in the *Initial* stage of the career as he or she enters the profession and is not required to undergo certification to access the *Early* stage until his or her fourth year of experience.
- The teacher performance evaluation system provides for the dismissal of underperforming municipal teachers in case the teacher is rated *Unsatisfactory* two consecutive times. The evaluation cycle is four years while a rating of *Unsatisfactory* leads to a new evaluation the following year. School principals can also dismiss up to 5% of the teaching's staff among those teachers who were rated *Unsatisfactory* at their most recent evaluation. This means that a teacher may remain in the profession at four or five years while performing below standards. The teacher performance evaluation system is designed to deal with the most critical cases of sustained underperformance in municipal schools.

In addition, once they have reached the *Advanced* stage of the new career structure, teachers no longer need to go through an evaluation to confirm their certification at these stages of the career. As a result, teachers may perform at a level lower than expected at the concerned career stage for a number of years. While it is a strength of the system that processes exist to move ineffective teachers either out of the school system or into non-teaching roles, there remain opportunities for underperforming teachers to remain in the system for long periods of time. If sustained underperformance by teachers is not tackled this has adverse consequences not only on student learning but also on the reputation of both schools and the teaching profession.

There is considerable overlap between teacher evaluation for certification and the teacher performance evaluation system

The introduction of the new career structure is leading to the establishment of an evaluative certification process to determine teacher transition across career stages. While the broad features of this new component of teacher evaluation have been defined, its more specific characteristics are still to be determined. At the same time, Chile has had extensive experience with its teacher performance evaluation system whose major functions considerably overlap with those attributed to teacher evaluation for career certification. Hence, in order to reduce duplication in the overall teacher evaluation system, it is important to define the functions of each of these two components of teacher evaluation and identify how they can inform each other.

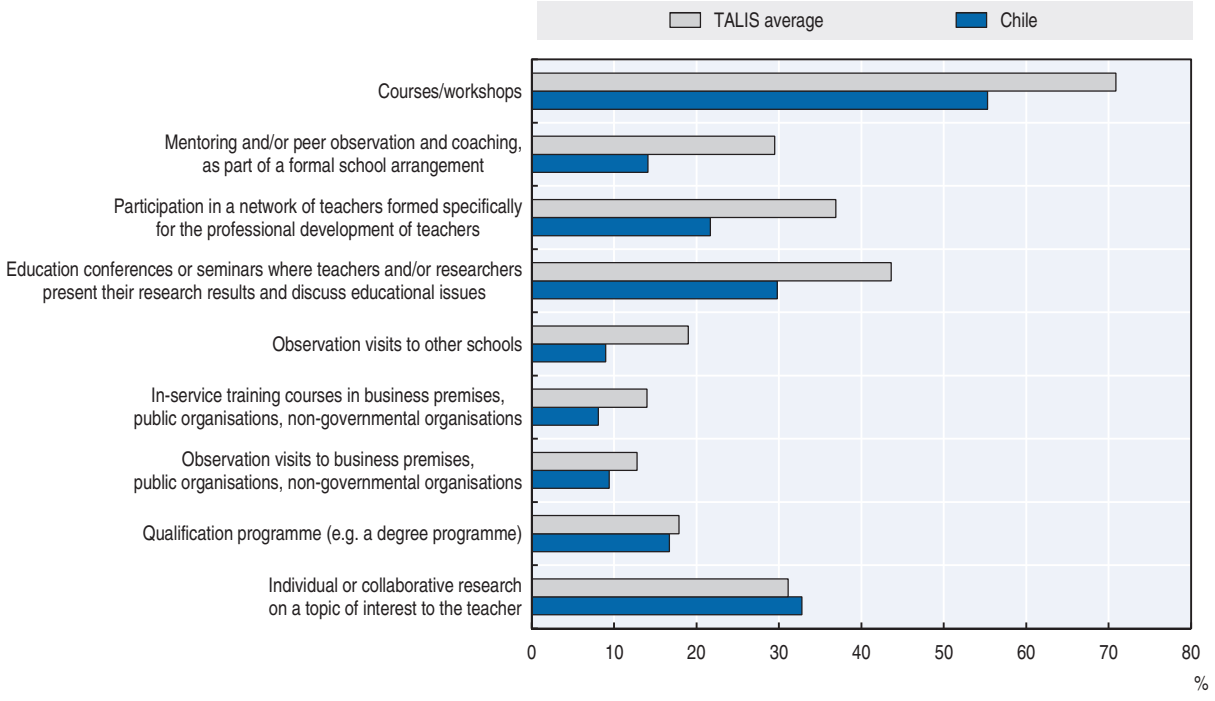
To begin with both the teacher performance evaluation system and teacher evaluation for certification are high-stakes teacher evaluation processes with accountability as their dominant function. The teacher performance evaluation system gives access to monetary rewards to the best rated teachers (through AVDI – even if this will be discontinued as the new Law that creates the System for Teacher Professional Development is implemented) and can lead to dismissal for underperformance. Similarly, teacher evaluation for certification monetarily rewards teachers through access to higher salary scales and may lead to dismissal if the teacher is unable to access the *Early* certification stage. Also, both teacher evaluation processes use a professional portfolio with classroom observation as

their main evaluation instrument. Clearly, there is considerable duplication across both processes. At the same time, there is considerable potential for the teacher performance evaluation system to inform certification processes, as is the case with the assignment of career stages in the new career structure to current teachers.

There are a number of concerns about the operation of professional development

In international comparison, the participation rates of Chilean teachers in professional development are low. According to TALIS 2013 data, 71.7% of Chilean lower secondary teachers reported having participated in at least one professional development activity in the previous 12 months, the lowest figure among TALIS participating countries, against a TALIS average of 88.4% (OECD, 2014a). Chilean lower secondary teachers in 2013 reported the highest levels of participation in activities such as courses or workshops, individual or collaborative research (the only activity with an average above the TALIS average) and education conferences and seminars (see Figure 5.14).

Figure 5.14. **Type of professional development recently undertaken by lower secondary teachers, Chile and TALIS average, 2013**

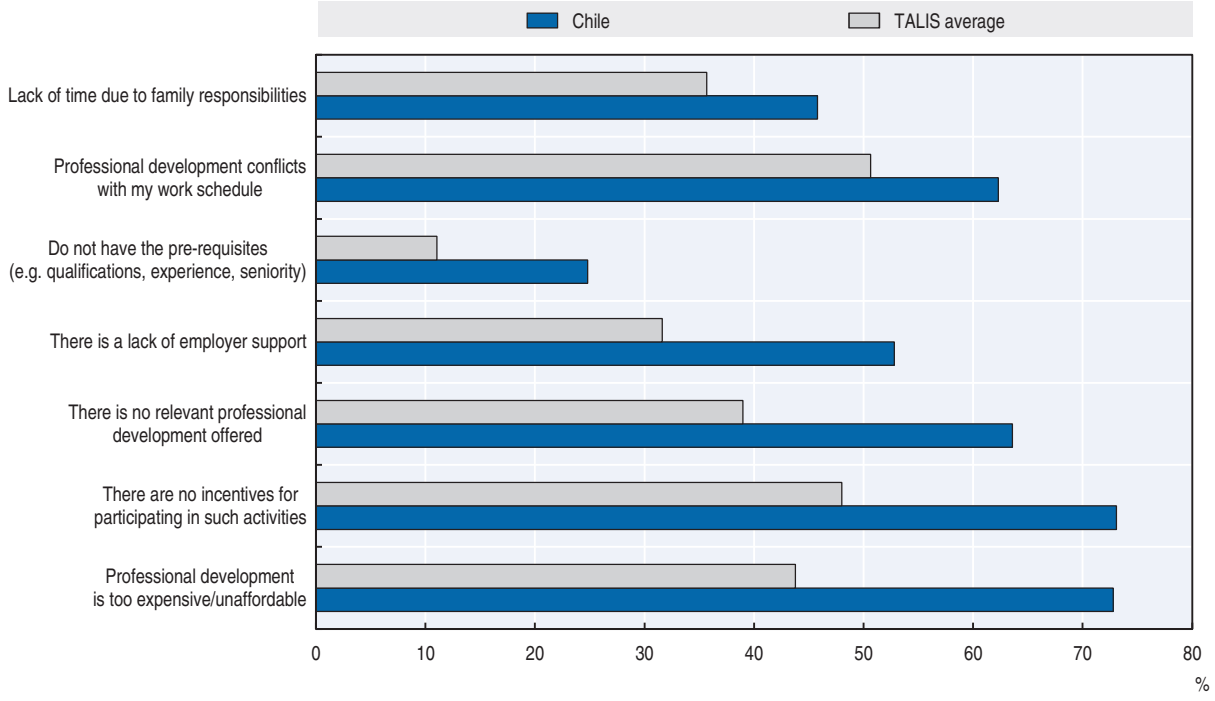


Note: Data correspond to participation rates for each type of professional development reported to be undertaken by lower secondary education teachers in the 12 months prior to the survey.
Source: OECD (2014a), *TALIS 2013 Results: An International Perspective on Teaching and Learning*, *http://dx.doi.org/10.1787/9789264196261-en*.

The low levels of engagement in professional development have a variety of reasons. No incentives for participating in professional development, the unaffordability of courses, the lack of relevance of teacher professional development activities and conflicts with the work schedule seem to be important barriers for some Chilean teachers to engage in professional development. This is what Chilean lower secondary teachers expressed in TALIS 2013, as shown in Figure 5.15: respectively 73.1%, 72.8%, 63.6% and 62.3% of them

agreed or strongly agreed with these four barriers, against TALIS averages of 48.0%, 43.8%, 39.0% and 50.6% respectively. The heavy workload and lack of an entitlement for free professional development in Chile do not facilitate the engagement in teacher professional development. Also, free professional development is guaranteed mostly in the context of the Professional Development Plans (*Planes de Superación Profesional*, PSP) which are mandatory when the teacher's performance is evaluated as *Basic* or *Unsatisfactory* by the teacher performance evaluation system. In addition, there is no budget for professional development at the school level. However, the 2016 Law that creates the System for Teacher Professional Development is addressing these concerns. It intends to guarantee the availability of free and pertinent professional development activities for teachers as identified by individual teachers and their schools. In addition, the increase of the proportion of non-teaching hours within the regulated working hours, as planned by the 2016 Law, will facilitate the participation of teachers in professional development activities.

Figure 5.15. **Barriers to teachers' participation in professional development, lower secondary education, Chile and TALIS average, 2013**



Note: Data correspond to the percentage of lower secondary education teachers indicating that they "agree" or "strongly agree" that the reasons depicted above represent barriers to their participation in professional development.
Source: OECD (2014a), *TALIS 2013 Results: An International Perspective on Teaching and Learning*, *http://dx.doi.org/10.1787/9789264196261-en*.

Some other important aspects to the organisation of professional development are problematic. The use of results from school-based teacher evaluation to inform the teacher's professional development plan seems limited in international comparison. According to TALIS 2013 data, in Chile only 58.3% of lower secondary teachers agree or strongly agree that the teacher evaluation and feedback systems in their school are used to establish a development or training plan to improve their work as a teacher, against a TALIS

average of 59.1% (OECD, 2014a). However, 68.3% of lower secondary Chilean teachers report a moderate or large positive change in the amount of professional development after they received feedback on their work at school, against a TALIS average of 45.8% (OECD, 2014a). There is room in Chile for better linking teacher evaluation to individual professional development, which is desirable given that teacher development is one of the main goals of teacher appraisal (OECD, 2013c). The 2016 Law that creates the System for Teacher Professional Development intends to reinforce such link – school principals are empowered to define professional development plans for their teaching bodies on the basis of information provided by school self-evaluation and teacher evaluation.

Also, even if schools organise internal processes for teacher evaluation, there might be no systematic alignment to school development plans. According to TALIS 2013 data, 78.3% of school directors of lower secondary schools reported having worked on a professional development plan for the school in the 12 months prior to the survey, against a TALIS average of 79.1% (OECD, 2014a). The link between, teacher appraisal, teacher professional development and school development is essential to ensure teachers give priority to acquiring those competencies that better fit the needs of the schools (OECD, 2013c). The 2016 Law that creates the System for Teacher Professional Development is following this principle with teacher professional development plans being created in the context of school improvement plans under the leadership of the school principal.

The formative function of teacher evaluation remains limited

A recent OECD review of teacher evaluation (Santiago et al., 2013) concluded that teacher evaluation in Chile is mostly perceived as an instrument to hold municipal teachers accountable. Furthermore, it concluded that "The feedback for improvement teachers receive from the *Docentemás* evaluation is limited, there is little professional dialogue around teaching practices that occurs as a result of teacher evaluation, teacher evaluation results are not systematically used to inform a professional development plan for all teachers and the concept of feedback is not yet fully ingrained among school agents" (Santiago et al., 2013). The introduction of teacher evaluation for certification to determine career progression within the new career structure reinforces this situation as it is an evaluation process with mostly accountability purposes.

While the new 2016 Law that creates the System for Teacher Professional Development places considerable emphasis on teacher professional development, including in terms of its links to teacher evaluation and the importance of professional development plans for individual teachers, it does not propose a component of teacher evaluation predominantly with formative purposes. It is not clear from the strategy it proposes what teacher evaluation processes will inform the future professional development plans for teachers. As it stands the System for Teacher Professional Development is limited in its emphasis on formative teacher evaluation. As a result, there are risks that teacher evaluation remains perceived as an instrument for accountability and control leading to little professional dialogue. There are also no guarantees that teachers receive proper professional feedback at the individual level.

There are indications of some inequitable distribution of teachers across schools

In Chile, there are some indications from TALIS and PISA data that there is an inequitable distribution of teachers across schools and school locations. The likelihood of teacher shortages (as perceived by school principals) in schools attended by 15-year-olds is

considerably higher in public schools, socio-economically disadvantaged schools and in schools located in a rural area (fewer than 3 000 people) (Table IV.3.11, OECD, 2013b). Also, the proportion of lower secondary teachers with a highest level of education of ISCED (International Standard Classification of Education) 5B (tertiary degrees shorter than university degrees) or below in schools whose directors report that more than 30% of the students are from socio-economically disadvantaged households is 22.8% while the proportion of such teachers in schools whose directors report that 30% or less of the students are from socio-economically disadvantaged households is 11.8% (OECD, 2014a).

However, according to TALIS 2013 data, the proportion of lower secondary teachers with 5 years of experience or less working in schools located in areas with 15 000 people or fewer was 31.1%, only slightly above the equivalent proportions in schools located in areas with 15 001 to 100 000 people (30.0%) and in schools located in areas with more than 100 000 people (29.3%) (OECD, 2014a). Also, the proportion of lower secondary teachers with 5 years of teaching experience or less in schools whose directors report that more than 30% of the students are from socio-economically disadvantaged households is 30.1% while the proportion of such teachers in schools whose directors report that 30% or less of the students are from socio-economically disadvantaged households is 32.0% (OECD, 2014a). It should however be said that, in Chile, less experienced teachers might often be preferred by schools as there is the perception that they are better prepared than teachers who entered the profession a few generations ago.

Policy recommendations

Ensure the successful implementation of the System for Teacher Professional Development

Raise quality expectations in initial teacher education

The implementation of the System for Teacher Professional Development, which recognises initial teacher education as the key stage providing the foundations for teacher competency development, is an opportunity to raise quality expectations in initial teacher education. Accreditation processes will need to send clear signals about the quality standards initial teacher education programmes need to reach. This will require a rigorous application of the accreditation standards to be achieved in terms of academic staff, quality of teacher education programmes, links to school practice, research orientation of programmes and mechanisms for the continuous improvement of programmes. In practice, this should lead accreditation processes to remove the range of low quality initial teacher education programmes that are deemed to be currently offered.

It would also be beneficial to align the accreditation of initial teacher education programmes to Graduating Teacher Standards. This could involve making them mandatory for teacher education providers and assess whether or not graduates reached these standards through the assessment conducted by the Ministry of Education towards the end of the programme. This would ensure accreditation processes evaluate whether or not graduates acquire, as part of initial teacher education, the necessary set of competencies to enter the teaching profession. In addition, initial teacher education providers should be required to establish internal quality assurance processes to ensure their programmes are continuously improving in light of evaluation exercises and new research relevant for teacher education.

In order to ensure that efforts to improve the quality of initial teacher education are sustained, it is important to ensure that the quality of entrants into teacher education continues to improve. This will depend on the overall attractiveness of teaching and on specific incentives to attract high-quality secondary graduates. Fee waivers, scholarships and forgivable loans are some of the financial incentives to be provided to high-quality entrants as is currently the case with the Teacher Vocation Scholarship (*Beca Vocación de Profesor*, BVP).

Ensure a rigorous implementation of progression within the new career structure

The effective establishment of the new career structure requires the further definition and implementation of a number of elements. First, the operational features of the National Induction System need to be further defined as it is systematically applied across the system. The crucial importance of induction programmes for new teachers in the early years of their teaching careers is now widely acknowledged (OECD, 2005; Jensen et al., 2012). Well-designed induction programmes help new teachers apply the more theoretical knowledge acquired in their teacher preparation programmes to the complexity of teaching in the classroom. In successful programmes mentor teachers in schools provide guidance and supervision to beginning teachers in close collaboration with the initial teacher education institution. Mentors must have a level of professional expertise that goes beyond being a source of emotional support and practical information. They should be able to provide not only a good role model, but also offer the help necessary to establish the beginners as competent professionals. Mentors provide on-the-job support, diagnose deficits in subject matter knowledge, classroom management strategies and other pedagogical processes. Central to the success of induction and mentoring programmes are the resources dedicated to the programmes and the quality of mentor training. Often schools that would need to provide the most support to beginning teachers are the least capable of delivering high-quality induction programmes. Effective partnerships between teacher education institutions and schools are particularly important in this respect (OECD, 2005).

Second, the System for the Recognition of Teacher Professional Development, the certification process to determine progression in the career structure, needs to be fully designed and established. The considerable experience with the teacher performance evaluation system, the AVDI and the AEP will be very helpful as a range of teacher evaluation instruments have been tested, validated and extensively used in Chile. As the new career structure is implemented, it will be crucial for the established certification process to send clear signals of rigour in identifying both good performance at the different stages of the career and underperformance as a teacher. This is a necessity if the career structure is to be perceived as credible in differentiating levels of experience and skills across teachers. An important issue will be to resolve the current duplication between the certification process associated with the career structure and the teacher performance evaluation system. Given the similar functions both processes seek to achieve, a possibility would be for the teacher performance evaluation system to become the certification process for career progression with some adjustment to its instruments. For instance, as originally planned for the certification process, the test to assess the pedagogical and specific knowledge of teachers would be added on the basis of the experience of the similar test used in the AVDI and the AEP. To take advantage of the continuous character of the teacher performance evaluation system (organised every four years for each teacher) and

to address the need for teachers to continuously show they are fit for the profession at the different levels of the career structure, it could be considered introducing the requirement for re-certification at a given career stage. The re-certification process could be organised in a simplified manner relative to the evaluation process associated with progression into a new career stage.

Third, there is a need to reflect on the linkages between the different career stages of the new career structure and the teaching standards (the Good Teaching Framework, *Marco para la Buena Enseñanza*, MBE). An important policy objective should be to align the definition of expected skills and competencies at different stages of the career (as reflected in teaching standards) and the tasks and responsibilities of teachers in schools (as reflected in the career structure). This would strengthen the incentive for teachers to improve their competencies, and reinforce the matching between teachers' levels of competence and the tasks which need to be performed in schools to improve student learning. Such alignment can be achieved by developing teaching standards which reflect different levels of the teaching expertise needed in schools; and ensuring levels of teaching expertise match the key stages of the career structure (teaching standards with different levels of performance for each of the career stages). An alternative is to use a single set of teaching standards with certification criteria specific to the distinct career stages. This would recognise the variety of responsibilities in today's schools, the acquired knowledge, skill sets and expertise developed while on the job. Certification criteria for higher career stages would also have the distinct function of guiding teachers' improvement of skills and competencies and steering their aspirations to responsibilities.

Maintain efforts to improve teacher remuneration

As further resources become available to the school system and as efficiency gains are realised, a top priority for the allocation of the newly available resources should be the improvement of teachers' compensation and working conditions. The objective is to improve the status of the teaching profession, attract better candidates to teaching, retain quality teachers in the profession and ensure teachers have adequate incentives to be effective in their daily practice. This need is well recognised by the Chilean government as shown in recent efforts to improve teachers' salaries as the new career structure is introduced. These efforts should be sustained in the years to come and result in the significant improvement of teacher salary conditions. However, it is important that the increase of salaries conveys the expectation of an improvement in the quality of teachers' work – a good strategy to achieve this is to ensure access to further career stages is associated with significant salary raises. In addition, it is important to provide significant incentives for quality teachers to work in schools located in disadvantaged or remote areas. This is essential to ensure an equitable use of teacher resources across schools.

Design strategies for professional development that give greater prominence to formative teacher evaluation and professional dialogue

The implementation of the System for Teacher Professional Development is also an opportunity to raise the profile of formative teacher evaluation and improve the effectiveness of teachers' continuous learning. A competency-based career structure provides teachers' with a clear rationale to engage in professional development activities. These become the main vehicle for teachers to acquire the competencies needed to

progress in the career structure. As a result the whole new approach to the teaching career will not deliver its promise if teachers are not provided with the opportunity to engage in meaningful and well-informed professional development. As explained in greater detail below, this will require allocating the necessary resources for teacher professional development, give teachers individual professional development entitlements, and ensure professional development activities are informed by teachers' individual needs as well as the needs of their schools. These will need to be further articulated as the System for Teacher Professional Development is implemented.

Achieve the improvement function of teacher evaluation predominantly through the consolidation of school-based developmental teacher evaluation

As explained earlier, the new System for Teacher Professional Development is limited in its emphasis on formative teacher evaluation. At the same time, it reinforces the high stakes of teacher evaluation as it becomes associated with the progression in the teaching career. In Chile, there are clear risks that the developmental function of teacher evaluation is hampered by high-stakes teacher evaluation – clearly dominant through the career progression certification process, the teacher performance evaluation system, the AVDI and the AEP. Since the System for Teacher Professional Development indeed seeks to develop a professional learning culture among Chilean teachers, it is all the more important to give a prominent role to formative teacher evaluation. Hence, as originally suggested in an earlier OECD review of teacher evaluation in Chile (Santiago et al., 2013), it is proposed that a component predominantly dedicated to developmental evaluation, fully internal to the school, be created.

This developmental teacher evaluation would have as its main purpose the continuous improvement of teaching practices in the school. It would be an internal process carried out by line managers, senior peers, and the school leadership. The reference standards would be the Good Teaching Framework but with evaluation rubrics developed at the school level to better account for the school objectives and context. The main outcome would be feedback on teaching performance and the whole contribution of the teacher to school development which would lead to a plan for professional development. It can be low-key and low-cost, and include self-evaluation (possibly through the preparation of a portfolio), classroom observation, and structured conversations and regular feedback by the leadership and experienced peers. It should include a qualitative analysis of student results. It could be organised once a year for each teacher, or less frequently depending on the previous assessment of the teacher. The key aspect is that it should result in a meaningful report with recommendations for professional development and not involve a quantitative rating (Santiago et al., 2013).

In order to guarantee the systematic and coherent application of developmental evaluation across Chilean schools, it would be important to undertake the external validation of the respective school processes for developmental teacher evaluation. An option is that the Agency for Quality Education, in its monitoring of the quality of teaching and learning in individual schools, includes the audit of the processes in place to organise developmental teacher evaluation, holding the school director accountable as necessary. The Agency for Quality Education and municipal education authorities would play an important role of support ensuring that schools develop ambitious developmental teacher evaluation processes to be properly documented in school activity reports (Santiago et al., 2013).

Give the Agency for Quality Education a prominent role in supporting teacher evaluation

As suggested in a previous OECD review of teacher evaluation in Chile (Santiago et al., 2013), the Agency for Quality Education is well placed to situate teacher evaluation within the broader evaluation and assessment framework, shaping its specific role in the broader evaluative context and articulating it with other components of the evaluation and assessment framework (i.e. student assessment, school evaluation, school leader evaluation, education system evaluation) to build complementarities, avoid duplication of efforts and ensure consistency of objectives (Santiago et al., 2013). First, the Agency is in a good position to undertake the external audit of school-based teacher evaluation procedures and, in particular, of the teacher developmental evaluation processes recommended above. This should include both the municipal and private school sectors. There is already a good basis for the Agency to perform this function as Standard 10.4 of the Indicative Performance Standards for Schools and School Providers (*Estándares Indicativos de Desempeño para Establecimientos Educacionales y sus Sostenedores*) is "The school has an evaluation and feedback system of staff performance" (one of nine standards of personnel management). However, this might require the Ministry of Education to develop more detailed and explicit standards for school-based teacher evaluation. Second, the Agency should have an important role in supporting agents in the implementation of teacher evaluation procedures. This includes supporting education providers and individual schools in the development of their capacity for educational evaluation (e.g. for designing frameworks for teacher evaluation), giving feedback to schools on how they can improve their internal approaches to teacher evaluation (in the context of school evaluation), and developing functions such as school leadership and the monitoring of teaching and learning which directly influence teacher evaluation. Third, the Agency should have an eminent role in modelling, identifying and disseminating good practice in teacher evaluation and in using relevant research to improve evaluation practices (Santiago et al., 2013).

Also, another major function of the Agency for Quality Education is to articulate the different components of the evaluation and assessment framework. A particularly important link is the one between teacher evaluation and school evaluation, which needs to be strengthened in the Chilean school system. Analysis from TALIS (OECD, 2009) suggests that school evaluations can be an essential component of an evaluative framework which can foster and potentially shape teacher evaluation and feedback. Given that the systems of school evaluation and teacher evaluation and feedback have both the objective of maintaining standards and improving student performance, there are likely to be great benefits from the synergies between them. To achieve the greatest impact, the focus of school evaluation should either be linked to or have an effect on the focus of teacher evaluation (OECD, 2009). This indicates that the external evaluation of schools should comprise the monitoring of the quality of teaching and learning, including the observation of classes. Also, as indicated above, school evaluation should comprise the external validation of the processes in place to organise developmental teacher evaluation, holding the school director accountable as necessary. As part of school evaluation, attention should also be paid to the school's use of teacher evaluation results for school development. In the context of school self-evaluation, it is also important to ensure the centrality of the appraisal of teaching quality and the evaluation of individual teachers (Santiago et al., 2013).

Consider the introduction of a probationary period

As explained earlier, teacher underperformance is not adequately addressed in the first few years of the career. A beginning teacher, who is not necessarily fit for the profession, can remain in the system for several years until his or her underperformance is addressed. This is not desirable for both the beginning teacher and the school system. Hence, a formal probationary process for new teachers should be introduced as part of the new career structure. There is considerable evidence that some beginning teachers, no matter how well prepared and supported, struggle to perform well on the job or find that it does not meet their expectations. A formal probationary process can provide an opportunity for both new teachers and their employers to assess whether teaching is the right career for them. The satisfactory completion of a probationary period of one to two years teaching should be mandatory before moving into the Initial stage of the new career structure. At the same time, beginning teachers should be given every opportunity to work in a stable and well-supported school environment, and the probation decision should be taken by a panel which is well trained and resourced for assessing new teachers. The successful completion of probation should be acknowledged as the major initial step in the teaching career.

Improve the provision of initial teacher education

Make initial teacher education more selective

Overall, Chile is not facing shortages. This is an opportunity to be more selective about those who are employed and those who enter the profession and initial teacher education. If salaries are increased, as currently planned, and better candidates are attracted to initial teacher education, it is clear that entry into preparation programmes can be much more selective to ensure only high-quality graduates fill the available teaching posts. Potentially useful initiatives include: providing more information and counselling to prospective student teachers so that better informed enrolment decisions are made; procedures that try to assess whether the individuals wanting to become teachers have the necessary motivation, skills, knowledge and personal qualities (specific assessments in addition to the university entrance examination); incentive schemes to recruit candidates with high-level competencies (such as higher education grants, as is currently the case); and flexible programme structures that provide students with school experience early in the course, and opportunities to move into other courses if their motivation towards teaching changes. This should go alongside continuous efforts to improve the quality of initial teacher education programmes, as monitored by accreditation processes.

Improve the preparation of teachers to support students with special educational needs

There is a clear need to strengthen the preparation of teachers to instruct students with special educational needs. This is an important dimension to the current efforts to integrate students with special needs in mainstream schools through the School Integration Programme (*Programas de Integración Escolar*). It calls for initial teacher education institutions to ensure that special needs becomes a regular area for the initial education of any teacher, regardless of the type of school at which he or she will teach. This would respond to a strong need in schools for these particular skills. In addition, it is also important to foster professional development programmes targeted at developing skills to integrate special needs students in mainstream schools.

Provide better foundations to work in rural schools and address cultural diversity

Given the characteristics its territory, Chile has a large number of remote and rural schools for which teachers need specific skills. This calls for initial teacher education programmes to include in their curriculum specific aspects targeted at teaching in remote and rural schools such as strategies for teaching in multigrade classes, forming high expectations of student performance in rural contexts, and effective approaches to interact with the school community. The latter might require adequate strategies to teach in a multicultural or multilingual setting, another area in which teachers have significant professional development needs.

Rethink teachers' use of time

It is recognised that, in Chile, teachers have heavy workloads and a high proportion of teaching time as part of their overall workload. The 2016 Law that creates the System for Teacher Professional Development provides for a lower proportion of teaching time as of 2017 (70% of the workload) and 2019 (65% of the workload). This is a step in the right direction and will require considerable resources to be implemented. However, the extent to which the use of the extra non-teaching time will be effective will depend on the ability of individual schools to organise teachers' non-teaching activities in ways that maximise their impact on student learning.

A priority should be the requirement for teachers to use the extra non-teaching at the school premises. This allows teachers to further engage in other activities at the school such as collaboration with colleagues, reflection on own practices, mentoring of less experienced teachers, communication with parents and professional development. It also favours their further engagement with students. This would be part of the effort for Chile's schools to develop as professional learning communities. In line with research on effective organisational learning, many schools in a range of countries are adopting new ways of working that focus on collegial and collaborative teaching, conducted in teams and larger professional learning communities. This requires teachers to adapt to collaborative work cultures based on shared goals, continuous professional development, reflective practice, peer observation, feedback and quality improvement (OECD, 2013c). Less teaching time should also give the opportunity for teachers to more thoroughly prepare their classes and give extra support for students with greater learning difficulties.

Improve the framework for professional development provision

Conceive professional development as the main instrument to acquire the new competencies necessary for career advancement

There is a clear need for professional development to become a more regular practice among teachers in Chile, with an adequate time entitlement, greater diversity of activities, led by school development plans, informed by teacher evaluation and with a supply which reflects teachers' developmental needs. There must be an explicitly stated expectation that every teacher engages in a career-long quest of improved practice through professional development activities. Professional development should be understood by teachers as the main instrument to acquire the new competencies necessary for professional growth and career advancement as part of the new career structure. Teachers' motivation to engage in professional development should not be achieving better salary prospects per se. This approach requires providing teachers with more dedicated release time and financial support for professional development than is currently the case. It is important that the

professional development system benefits all teachers in the school system. Hence, the focus for teacher professional development should not be those teachers identified as underperforming.

Align teacher professional development with school development plans

Teacher professional development also needs to be associated with school development if the improvement of teaching practices is to meet the school's needs. To be most effective, professional development programmes should be co-ordinated at the school level in association with school development plans, so that teachers are aware of the learning goals pursued by their colleagues and potential areas for collaboration. Such joint efforts can contribute to establishing learning communities within schools. This could benefit from the provision to individual schools of a budget dedicated to professional development.

Systematically use teacher evaluation results to inform professional development activities

There is also a need to improve linkages of teacher evaluation to professional development. Professional development is only fully effective when it is aligned with recognised needs, for both individual teachers and for schools as a whole. Professional development in Chile appears at the moment to be a matter for individual teachers to pursue and it is to a great extent de-coupled from the results of teacher evaluation. Linking professional growth opportunities to evaluation results is critical if evaluation is going to play a role in improving teaching and learning. Chile does not have a system in place to ensure that the feedback provided to teachers is systematically used to guide improvement plans (Santiago et al., 2013). The recommended school-based developmental teacher evaluation component proposes a direct link between formative teacher evaluation and an individual professional development plan.

Improve the relevance of professional development programmes

Chilean teachers raise doubts about the relevance of professional development programmes that are on offer. This indicates that the supply of programmes does not fit teachers' needs, possibly because providers are not successful in forming an accurate picture of the actual professional needs of teachers and schools. As a result, suppliers of professional development programmes need to better connect to the professional development of teachers. This suggests a range of possible actions: better interaction between professional development providers and individual schools; an assessment on the part of the Agency for Quality Education of the professional development needs of teachers on the basis of the information collected through external school evaluations; or strategies to directly survey teachers about their professional development needs. The CPEIP plays the key role in ensuring the supply of professional development programmes meets the needs of the Chilean teaching workforce. It should continuously assess supply gaps, conduct a review of teacher specific needs, and evaluate the quality of courses they have attended in view of improving them.

Note

1. TALIS is the OECD Teaching and Learning International Survey, which was implemented in 2008 and in 2013, covering lower secondary education and with the participation of 24 and 34 countries respectively. TALIS 2013 enabled countries to also conduct the survey in their primary and upper secondary schools. Chile participated in the 2013 edition of TALIS with a sample of teachers restricted to lower secondary education. The results derived from TALIS are based on self-reports from teachers and directors and therefore represent their opinions, perceptions, beliefs and their accounts of their activities. Further information is available at *www.oecd.org/edu/school/talis.htm*.

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ANNEX A

The OECD Review of Policies to Improve the Effectiveness of Resource Use in Schools

The **OECD Review of Policies to Improve the Effectiveness of Resource Use in Schools** (also referred to as the School Resources Review) is designed to respond to the strong interest in the effective use of school resources evident at national and international levels. It provides analysis and policy advice on how to distribute, utilise and manage resources so that they contribute to achieving effectiveness and efficiency objectives in education. School resources are understood in a broad way, including financial resources (e.g. expenditures on education, school budget), physical resources (e.g. school buildings, computers), human resources (e.g. teachers, school leaders) and other resources (e.g. learning time).

Seventeen education systems are actively engaged in the review. These cover a wide range of economic and social contexts, and among them they illustrate quite different approaches to the use of resources in school systems. This will allow a comparative perspective on key policy issues. Participating countries prepare a detailed background report, following a standard set of guidelines. Some of the participating countries have also opted for a detailed review, undertaken by a team consisting of members of the OECD Secretariat and external experts. Insofar, the participating countries are (in bold those that have opted for an individual review): **Austria**, **Belgium (Flemish Community)**, Belgium (French Community), **Chile**, **Colombia**, **Czech Republic**, **Denmark**, **Estonia**, Iceland, **Kazakhstan**, **Lithuania**, Luxembourg, **Portugal**, **Slovak Republic**, Slovenia, Spain, Sweden and **Uruguay**. A series of thematic comparative reports from the OECD review, bringing together lessons from all countries, will be launched as of 2017.

The project is overseen by the Group of National Experts on School Resources, which was established as a subsidiary body of the OECD Education Policy Committee in order to guide the methods, timing and principles of the review. More details are available from the website dedicated to the review: *www.oecd.org/education/schoolresourcesreview.htm*.

ANNEX B

Composition of the review team

Ariel Fiszbein is Director of the education programme at the Inter-American Dialogue. Prior to joining the Inter-American Dialogue, Fiszbein was Chief Economist for the World Bank's Human Development Network, where he has helped develop strategies for work worldwide on education, health, nutrition, population, social protection, and labour. Fiszbein has over 20 years of experience working on education and other social policy issues in Latin America and globally. A native of Argentina, he has a Ph.D. in economics from the University of California, Berkeley.

Sandra García Jaramillo is Associate professor at the School of Government at the Universidad de los Andes in Colombia, where she teaches Policy Evaluation, Social Policy, and Poverty, Inequality and Public Policy. She is currently the co-Principal Investigator of a nationwide research project on secondary schooling funded by the Colombian Ministry of Education. During 2014 she was the Principal Investigator for the impact evaluation of *Todos a Aprender* programme, an educational intervention that is targeted to low-performing schools and provides in-site teacher training and textbooks. She has also conducted research on topics that include impact of conditional cash transfers on educational and health outcomes, determinants of early school leaving and teacher quality. Her research has been published in numerous international peer reviewed journals and she is co-author of "*Tras la excelencia docente: Cómo mejorar la calidad de la educación para todos los Colombianos*" (2014). She received her PhD in Social Work from Columbia University in 2007 and her MPA in 1999 from the same university.

Thomas Radinger, a German national, is a Policy Analyst with the OECD Directorate for Education and Skills. He joined the Organisation in September 2011 to contribute to the OECD Review on Evaluation and Assessment Frameworks for Improving School Outcomes. Thomas is a co-author of the project's final synthesis report "Synergies for Better Learning" (2013) and took the lead in the analysis of school leader appraisal. Between October 2012 and January 2015, he was involved with the development of the OECD Education GPS, an online platform to disseminate OECD data and research on education to a broader audience. Since February 2015, Thomas has been working with the OECD School Resources Review team. He co-authored five country review reports and the project's first thematic report on "The Funding of School Education: Connecting Resources and Learning".

Paulo Santiago, a Portuguese national, is the Head of the Policy Advice and Implementation Division in the OECD Directorate for Education and Skills, where he has been since 2000. He was the co-ordinator of the OECD School Resources Review between January 2013 and July 2016. He has previously assumed responsibility for three major

cross-country reviews, each with the participation of over twenty countries: a review of teacher policy (2002-05), leading to the OECD publication "Teachers Matter"; the thematic review of tertiary education (2005-08), leading to the OECD publication "Tertiary Education for the Knowledge Society"; and a review of evaluation and assessment policy at the school level (2009-13), leading to the OECD publication "Synergies for Better Learning". He has also led reviews of teacher policy, tertiary education policy and educational evaluation policy in over 25 countries. He holds a Ph.D. in Economics from Northwestern University, United States, where he also lectured. He co-ordinated the review and acted as Rapporteur for the review team.

ANNEX C

Visit programme

Tuesday, 22 September 2015, Santiago	
09:30-10:30	**Ministry of Education** General Education Division
10:30-11:15	**Ministry of Education**: ● Head of International Relations ● Head of Advisors to Minister ● Head of Studies' Centre, Planning and Budget Division
11:30-12:45	**Thematic Discussion: School Funding – Ministry of Education** ● Head of the Planning and Budget Division ● Head of the Financial Resources Department ● Head of Unit in charge of School Grants System ● Ministry Auditing Unit
14:15-15:30	**Thematic Discussion: Human Resources – Ministry of Education** ● Head of the Centre for Pedagogical Training, Experimentation and Research (CPEIP) ● Co-ordinator and representative of the National Teacher Plan (*Plan Nacional Docente*) ● Head of the Higher Education Division ● Head of the School Leadership Co-ordination Unit, General Education Division
15:30-16:15	**Thematic Discussion: School Infrastructure – Ministry of Education** ● Head of the School Infrastructure Unit
16:30-17:30	**Thematic Discussion: Educational Policy Planning – Ministry of Education** ● Deputy-Head of the Planning and Management Control Unit ● Head of Studies' Centre, Planning and Budget Division
17:30-18:15	**Implementation of Teacher Evaluation** ● Director of the Measurement Centre at the Catholic University of Chile (MIDE UC) ● Co-ordinator of the teacher performance evaluation system (*Docentemás*), MIDE UC
Wednesday, 23 September 2015, Santiago	
10:00-11:30	**New System of Public Education** (*New Public Education*) ● Ministry of Education Team in charge of developing the new System of Public Education
11:45-13:00	**Agency for Quality Education** (*Agencia de la Calidad de la Educación*) ● Executive Director and Advisor of the Agency for Quality Education
14:15-15:30	**Education Superintendence** (*Superintendencia de Educación*) ● Education Superintendent
15:30-16:15	**Thematic Discussion: Indigenous Education – Ministry of Education** ● Ministry units in charge of Indigenous education
16:30-17:30	**Ministry of Finance** (*Ministerio de Hacienda*), Budget Department ● Evaluation Unit, Public Management Division
17:30-18:30	**Court of Auditors** (*Contraloría General de la República*) ● Municipalities Division ● Administrative Audit Unit

Thursday, 24 September 2015, Temuco	
11:00-12:00	**Municipal Authorities: Temuco** ● Director of Education for the Temuco Municipality ● Director of Finance for the Temuco Municipality
12:00-12:45	**Education Provincial Department (DEPROV): Province of North Cautín**
14:00-17:00	**SCHOOL VISIT 1:** *Alonso De Ercilla* school (Temuco, La Araucanía), Municipal school, pre-primary, basic and secondary education ● School management ● Group of teachers ● Group of students ● Representatives of parents
17:15-18:00	**Education Regional Secretariat (SEREMI): Region IX (La Araucanía)**
Friday, 25 September 2015, Nueva Imperial and Temuco	
08:45-10:35	**SCHOOL VISIT 2:** *Escuela Básica Santa Maria De Boroa* (Nueva Imperial, La Araucanía), Municipal school, Pre-primary and basic education ● School management ● Group of teachers ● Group of students ● Representatives of parents
11:00-12:00	**Municipal Authorities: Nueva Imperial** ● Deputy Director of the Municipal Education Department of the Municipality of Nueva Imperial ● Head of Finance of the Education Department of the Municipality of Nueva Imperial
14:00-16:20	**SCHOOL VISIT 3:** *Colegio Augusto Winter* (Temuco, La Araucanía), Private-subsidised school, Pre-primary and basic education ● School management ● Group of teachers ● Group of students ● Representatives of parents
16:35-17:35	**Meeting with Representatives of the Indigenous Peoples**
Sunday, 27 September 2015, Santiago: Review Team Meeting	
Monday, 28 September 2015, Graneros and Santiago	
09:30-11:40	**SCHOOL VISIT 4:** *Colegio Particular Nuestra Señora* (Graneros, O'Higgins), Private-subsidised school, Pre-primary, basic and secondary education ● School management ● Group of teachers ● Group of students ● Representatives of parents
14:45-15:30	**Preferential School Subsidy** (*Subvención Escolar Preferencial*, SEP) **– Ministry of Education** ● National Co-ordinator of the Preferential School Subsidy
15:30-17:00	**Education Committee of the Chamber of Deputies** (*Comisión de Educación de la Cámara de Diputados*) ● President of the Education Committee of the Chamber of Deputies ● Deputies of the Chamber
Tuesday, 29 September 2015, La Pintana and Santiago	
08:45-10:35	**SCHOOL VISIT 5:** *Liceo Centro Educacional La Pintana* (La Pintana, Metropolitan Region of Santiago), Municipal school, Pre-primary and basic education ● School management ● Group of teachers ● Group of students ● Representatives of parents
11:15-12:15	**Chilean Association of Municipalities** (*Asociación Chilena de Municipalidades*) ● Co-ordinator of Education
12:15-13:30	**Associations of Teachers and Other Education Professionals** ● President and representatives of the Teachers' Union (*Colegio de Profesores*) ● President and representatives of the Association of Workers of the National Board of Kindergartens (*Asociación de funcionarias de la Junta Nacional de Jardines Infantiles*, AJUNJI) ● President and secretary-general of the National Council of Teaching Assistants (*Consejo Nacional de Asistentes de la Educación*)
14:30-15:30	**Secondary Student Organisations** ● Representatives of the Co-ordinating Assembly of Secondary Students (*Asamblea Coordinadora de Estudiantes Secundarios*, ACES)
15:30-16:30	**International Organisations based in Chile** ● UNESCO Office in Santiago, Regional Bureau for Education in Latin America and the Caribbean ● United Nations Development Programme (UNDP), Santiago office
16:30-19:00	**Review Team Meeting**

Wednesday, 30 September 2015, Santiago	
08:00-08:45	**Thematic Discussion: Educational Resources – Ministry of Education** ● Head of the Procurement Unit, General Administration Division ● Manager of the Purchasing Portal *Chile Compra*
08:45-09:30	**Thematic Discussion: Technical-pedagogical support – Ministry of Education** ● Co-ordinator of the system of independent private consultant services (*Asesorías Técnicas Educativas*, ATE)
10:30-11:15	**Thematic Discussion: Educational Support – Ministry of Education** ● Ministry Unit in charge of textbooks and pedagogical resources ● Ministry Unit in charge of National Curriculum ● Ministry Unit in charge of school libraries ● Ministry Unit in charge of rural education
11:30-12:30	**Representatives of Initial Teacher Education** ● President of the Association of Deans of Faculties of Education
12:30-13:30	**Associations representing the interest of Children with Special Educational Needs** ● National Institute of Child Rehabilitation (*Instituto Nacional de Rehabilitación Infantil*) ● *Teletón Chile*
14:30-15:15	**Education Non-Governmental Organisations (NGOs)** ● "Teach Chile" (*Enseña Chile*) ● "Choose to Teach" (*Elige Educar*) ● Education 2020 (*Educación 2020*) ● "Stop SIMCE" (*Alto al SIMCE*)
15:15-16:45	**Meetings with Education Researchers in Chile** ● Beatrice Ávalos, *Universidad de Chile* ● Cristián Bellei, *Universidad de Chile* ● Cristián Cox, *Universidad Diego Portales* ● Alejandra Falabella, *Universidad Alberto Hurtado* ● Juan Pablo Valenzuela, *Universidad de Chile*
17:00-18:30	**Final Delivery by Review Team: Preliminary Impressions** ● Representatives of Ministry of Education ● Representatives of the Agency for Quality Education ● Representatives of the Education Superintendence

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(91 2017 14 1 P) ISBN 978-92-64-28562-0 – 2017

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ISBN 978-92-64-28562-0
91 2017 14 1 P

9 789264 285620