



# ***mozaLearn***

*integrated digital education system*

*from Mozaik Education*





## MOZAIK Education



MOZAIK Education is Europe's leading innovative education provider. Founded as an educational publisher, MOZAIK evolved over two decades to become Hungary's largest textbook publisher. With 1000+ titles and a peak production of 4.4 million textbooks yearly, **the brand was founded by mathematicians and software engineers.**



Mozaik Szeged

Working for 33 years in educational publishing has created a **unique fusion of skills establishing an essential link between education and technology development.** This connection provides the essence of Mozaik's digital educational system.

Mozaik excels beyond textbooks and supplementary publications, crafting full curricula and subject syllabuses to enhance teaching programs globally. Over three decades, Mozaik **pioneered innovation, not just adhering to education norms, but setting novel standards as well.**



With a wealth of experience spanning K-12 education and diverse subjects, Mozaik reimaged teaching over the past 16 years. Their holistic digital education system seamlessly melds in-class, remote teaching, and learning.

Combining teaching methodology and software engineering, this **digital ecosystem merges the latest tech innovations** (interactive 3D, AR, VR, AI), bridging classroom and home learning.

BETT London





Backed by more than 30 years of pedagogical expertise, content creation, and insights from training thousands of teachers annually, Mozaik's prowess extends to analyzing curricula, crafting digital content, enriching textbooks, and offering an educational platform. Educators and students can easily access interactive textbooks and the built-in Media Library on their devices (iOS, Android, Windows, browser), thanks to Mozaik's tailored solutions.

LearnTech Karlsruhe

## Worldwide

Mozaik's digital educational solutions are used in **more than 100 countries in 40 languages**. Moreover, the fact that Mozaik has been **awarded at several international exhibitions** and awards shows that our solutions are among the pioneers of the global education market.



Mozaik does not provide only a simple framework, but a solution that contains materials that **foster an interactive and visual learning experience**. Moreover, Mozaik's solutions can be **adjusted to the national curriculum of any country**.



Besides focusing on digital education, Mozaik has also supported teachers' work in its home country by creating a more than 1600 pages long curriculum for the entire school system and syllabuses for each of the K-12 subjects. Mozaik is also organising several methodological teachers' training each year and hosting online competitions for students as well.

Frankfurt Buchmesse

# Paradigm shift in education

Today education policy is facing more and more serious challenges worldwide. Everyone feels that the time has come for a change in attitude, however, a truly effective solution is still some time away. The labour market of the future expects a high level of digital literacy from entrants whose training has its roots in the past. Tension in the classroom can already be felt.

## Future of digital textbooks

While, on one side of the system, there are the pupils who experience the digital boom as an adventure in their everyday lives and have a gradually **increasing need for digital education**, on the other side, there are masses of teachers sticking to the traditional methods of teaching the curriculum, slowly becoming accustomed to digital tools. And so these teachers feel increasingly uncertain and abandoned.

If, in the meantime, the stakeholders in education do not offer a solution, or are stalling, the gap between teachers and pupils will continue to grow: the effectiveness of education and morale decline on both sides.



Here, we are going to represent the mozaLearn system as being capable of building a bridge between these two poles, that is **beneficial for all its participants, and can be quickly implemented in a spectacular and successful way**. It is a system that finally brings along a real paradigm shift.

The **mozaLearn integrated education system** combines the benefits of printed textbooks and digital tools. Publishers are able to integrate their most up-to-date textbooks and add interactive content to their pages. The system provides digital tools for use both during classes and home learning, providing a complex, **world-class, digital tool system** that comprises the entire education system. With its spectacularity, it impresses pupils; and being readily applicable, it makes teachers confident and self-assured in their work at the same time.



## Straightforward implementation

The advantage of the system is that its **implementation can take place smoothly**. Any textbooks - current and future - can be easily added. Digital textbooks can be easily updated or modified by the publisher.

Providing textbooks with rich digital content on all platforms **reinforces the publications' presence on the market**. A quality digital offering as a new added value with the printed products not only can increase brand loyalty, but also the revenue of printed publications.

## The adaptation of the system

The adaptation of the system does not require a bunch of additional special equipment. Basic equipment or, at least, continual and planned equipment upgrades (computers, projectors, interactive boards, Internet connection) are sufficient. **The system can be implemented within just six months**, including its customisation to the needs of the users. Teacher training in education technology is also possible, and as a result, teachers will be able to make use of the **opportunities given by modern technology** and incorporate them into their work on a daily basis. This may **foster a new teaching attitude integrating digital solutions**.

**The implementation is cost-effective** because there is no need for an immediate one-off expense: the system is payable through a licence fee. Annual licences allow costs to be distributed across several years and also allows us to provide our customers with new developments and content yearly, tailored to the needs of their market.

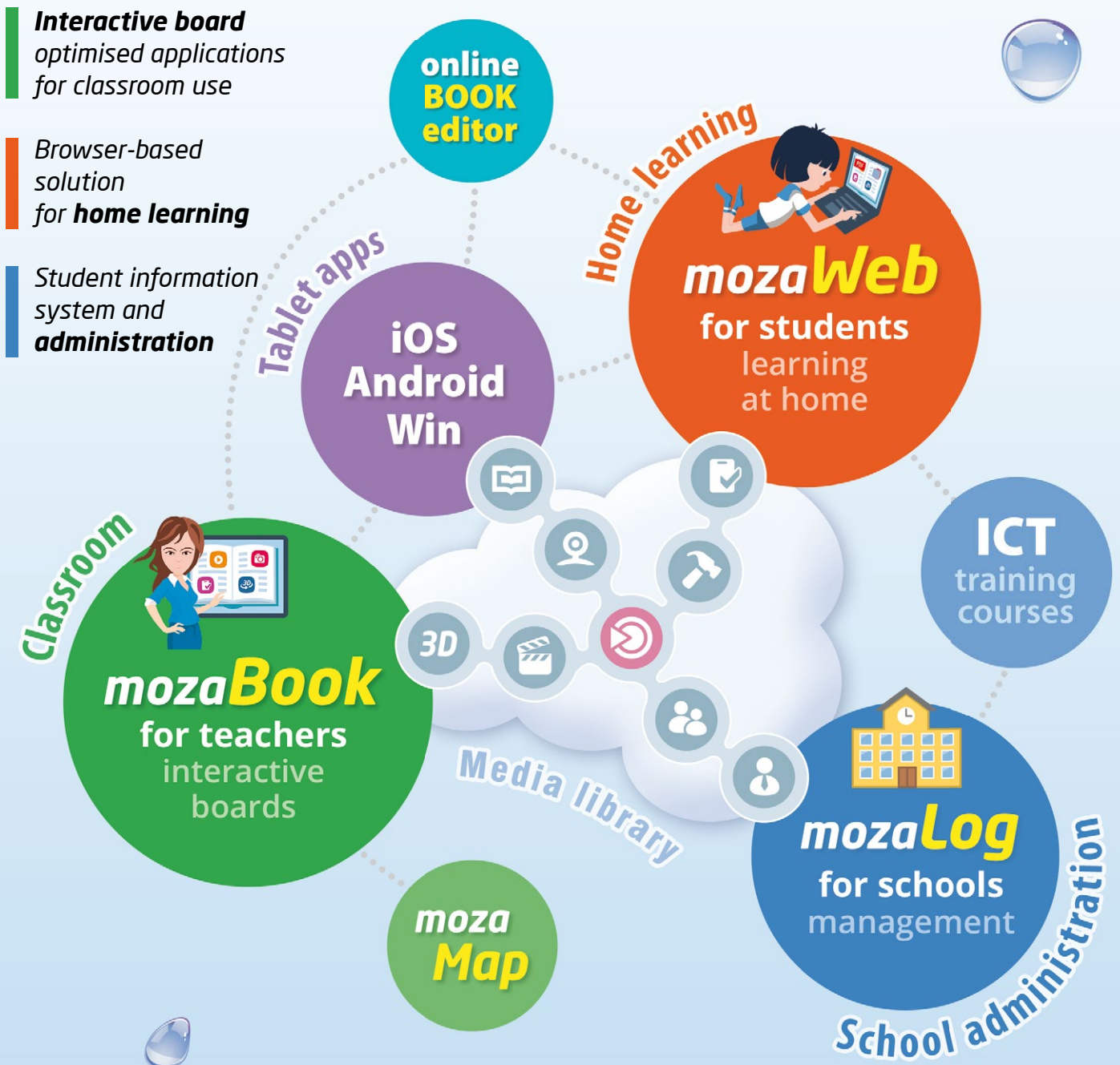


# mozaLearn



integrated digital education system

**mozaLearn** is a professional **integrated education system** that covers the entire K-12 school system. The system satisfies all needs concurrently, and was designed specifically **to help teachers in their work**. The mozaLearn system is in the front line of global education, providing excellent digital support for pupils, teachers and parents.



The mozaLearn system is based on the mozaBook software, developed for interactive boards. **All printed textbooks used in a local market can be uploaded and immediately converted into interactive digital textbooks.**



Educators receive a modern tool system (3D scenes, interactive applications) to use alongside their digital textbooks on an interactive board, **helping teachers work through the curriculum more effectively.**

**Students also have access to the system through the Internet (mozaWeb),** meaning that the same educational environment that pupils encounter in class can be recreated at home.

## Benefits for Teachers

- Teachers use their **standard, familiar textbooks and workbooks** on the interactive whiteboard, complementing them with eye-catching content.
- Using mozaBook, teachers deliver high quality illustrations to pupils that are specifically developed for education, providing spectacular and interesting demonstrations while arousing interest. As a result, students become more motivated and are **able to process the textbook material more easily.**
- The basic use of mozaBook **does not require prolonged training.** Teachers can use it confidently and add spectacular elements to the lesson right from the beginning.
- One can get accustomed to using mozaBook easily and quickly. It does not require the use of any external programs. mozaBook has an **integrated interface** that allows users to reach all content.
- Teachers **can easily get a sense of achievement,** which motivates them to learn even more about the system.
- The interactive educational content is **organised** according to subjects and grade levels **on an integrated interface,** in order to be easily searchable.
- Lesson plans, presentations and exercise books created by innovative teachers **can be shared** at both the school and national level so **their colleagues can see and use them too.**

## Benefits for Students

- Students are open and **receptive to information technology applications** and expect spectacular illustrations. The use of digital tools comes naturally to them. At the same time, students still have to acquire the traditional curriculum.
- Pedagogical research shows that figures and animations significantly help with understanding, and sequential learning textbooks are **essential for the creation of complex and permanent knowledge,** and contribute to the development of internal logic of certain concepts.
- **With the help of the mozaLearn system, pupils enjoy all the advantages of both tools.** The same tools can be used at school and at home: together, textbooks and computers provide a strong foundation, which can be complemented by the Internet.
- **Tools are adjusted for age-dependent characteristics.** There are games, self-assessment quizzes, tests to develop attention and concentration, customised problems and exercises as well as interactive experimental tools.
- Students **can be given customised exercises** that can be solved on a computer at home. Aside from solutions, the lexicon, image bank and tools in mozaBook can be used by pupils for further research and learning.
- Students gain experience using a computer and a number of tools while completing their homework. This way, they **become skilled computer users** by routinely performing most basic user activities.

# mozaBook Editor

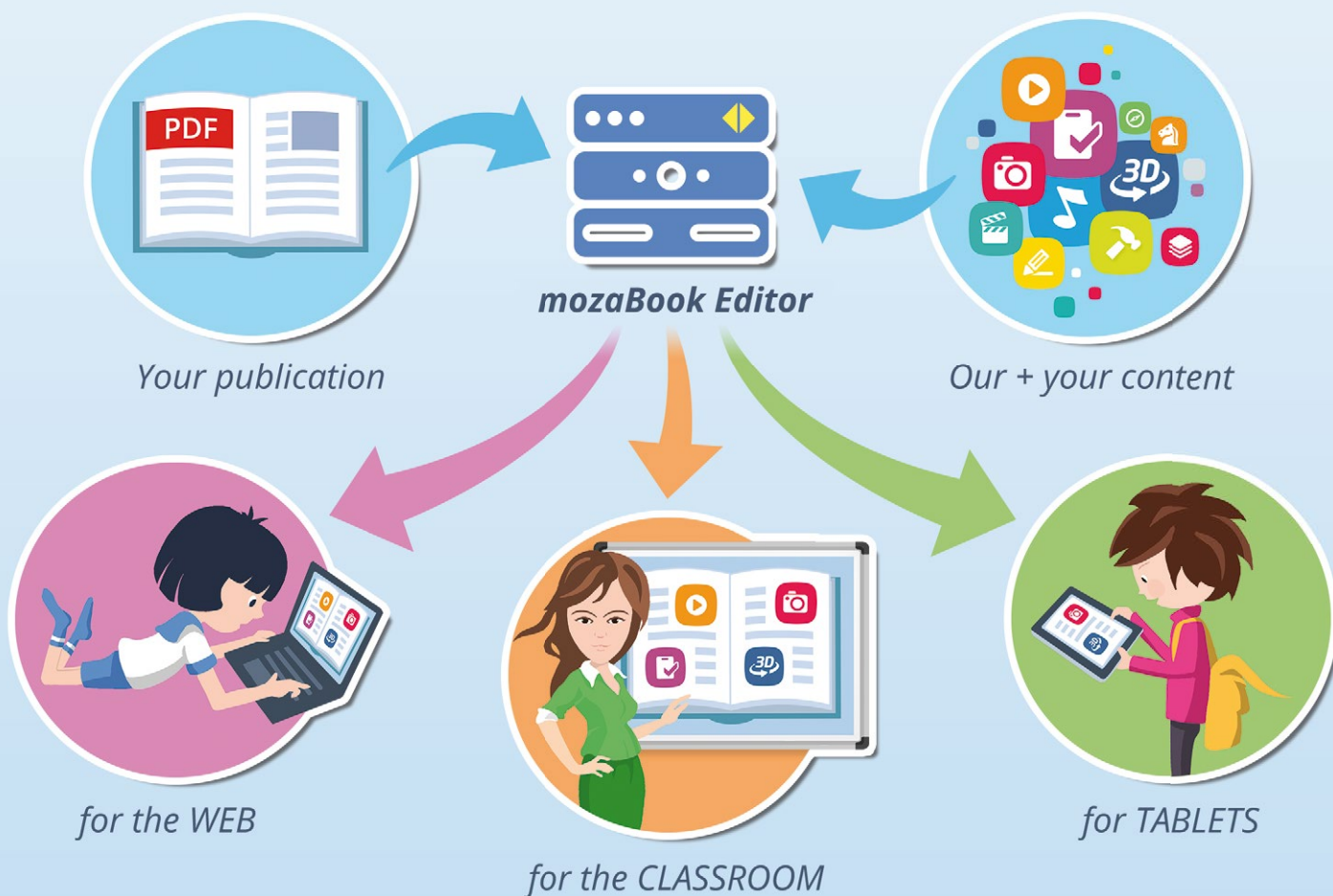


Online digital textbook authoring application

Any publisher can upload **the PDF versions of their own printed textbooks** into the mozaBook Editor, and **convert them instantly into interactive digital textbooks**. The system allows for secure, individual access for every publisher so that each and **every publisher has exclusive access to their own publications**.

## Creation of digital textbooks

First, publishers upload the electronic files of the printed textbooks used by teachers and pupils to the **mozaBook Editor**, an online digital textbook editing software. Then they can insert extra content from the **Media library**, a collection of interactive educational content, including over one thousand 3D models, several hundred video and audio files, images, assessment exercises and other supplementary materials created by Mozaik Education.



In addition to using content from the Media library, publishers can also insert their own digital content, or use educational materials from the Internet, too. The mozaBook Editor can create various digital textbook packages from existing books, depending on the publisher's needs: books for in-class use on an **interactive board**, for **out-of-class learning** online, or for **Windows, iOS and Android** smart devices.





## mozaBook Editor

Online digital textbook authoring application

### Features

- Import of PDF files (textbooks)
- Editing of page highlights and enlargements
- Insertion of interactive content into the publication
- Creation of interactive table of contents
- Creation of digital textbook packages for mozaBook, mozaWeb, iOS, Android
- Assignment of tasks for editors
- Statistics related to editing
- Administration of digital textbook packages
- Management of digital textbook packages
- Status report of digital textbook packages

## mozaLearn Localisation

Online translation and localisation tool for the mozaLearn system

### Features

Upon further localisation requests, translation of the mozaBook and mozaWeb software interface and linguistic elements, as well as any corrections can be made within mozaLearn Localisation.

- mozaBook: menu system and interface
- mozaWeb: menu system and interface
- mozaTools: databases and interface
- 3D scenes: menu system and the labels of certain models

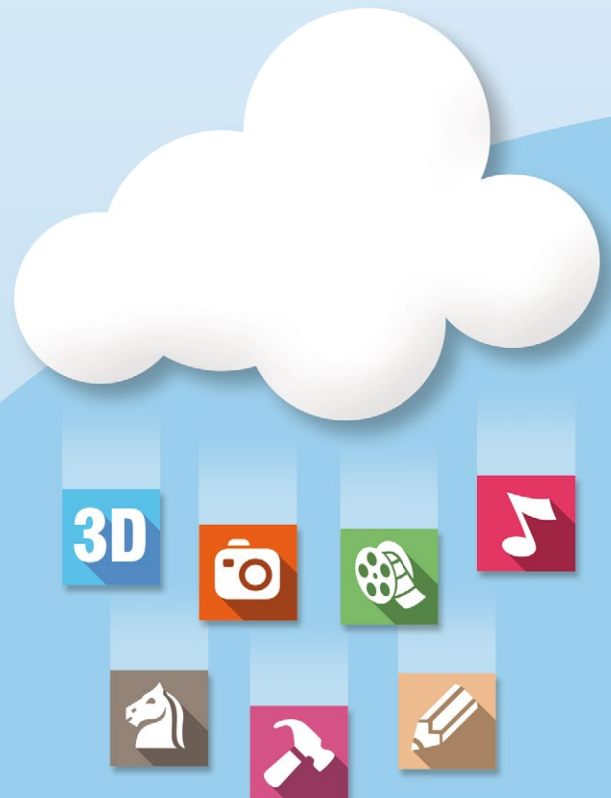
## Media library

K-12 interactive educational content for all subjects

### Content types

- Interactive 3D scenes (more than 1,300)
- Educational videos (more than 1,000)
- Educational tools and games (over 110)
- Quizzes (over 80)
- Complete digital lessons (over 1,300)
- Collection of educational images
- Music and audio files

Mozaik Education and its partners continually develop new educational content, which is why the content in the **Media library is actively growing, day by day.** All currently available content can be viewed on our website, [www.mozaweb.com](http://www.mozaweb.com)



# mozaBook

for interactive boards and classroom work

The most important element of the mozaLearn system is the **mozaBook software, optimized for interactive boards and classroom use.**



mozaBook

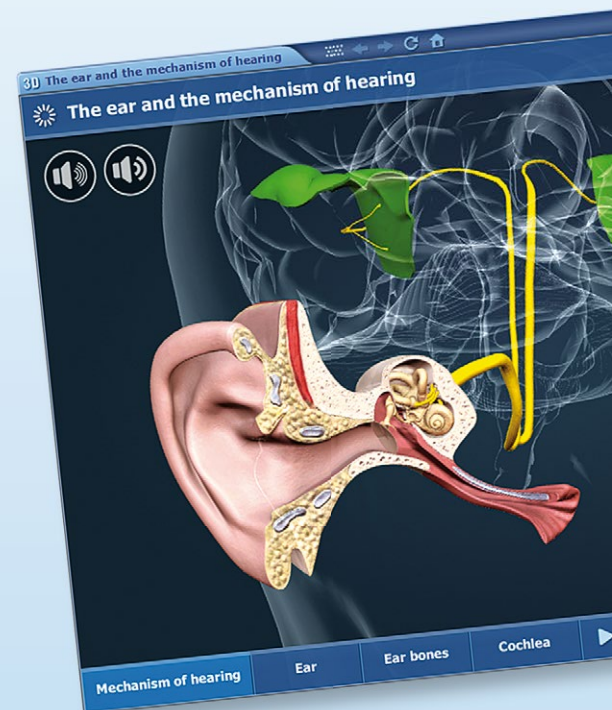
mozaBook allows teachers to use familiar textbooks and workbooks, projecting them onto an interactive board during lessons. Teachers can also enrich the books with interactive activities for students.

mozaBook offers more than 160 thematic applications, which help teachers catch students' attention and increase their engagement. mozaBook includes tools for visualisation, instruction and assessment all in one.



In order to prepare next day's lesson, teachers can also use mozaBook on their computers at home. The full content of the Media library is at teachers' disposal, allowing them to enrich their textbooks and exercise books. The **presentations and learning material developed at home can be synchronised onto classroom computers.**

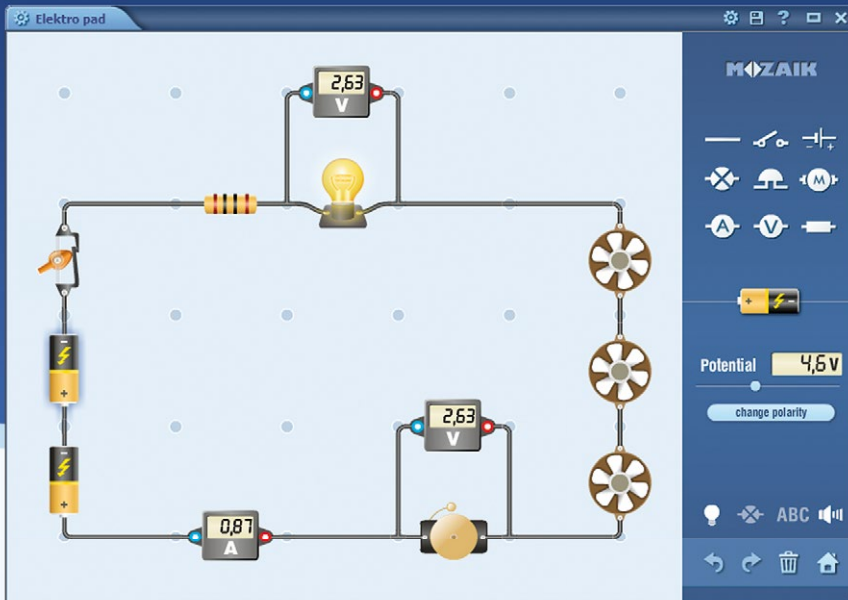
Simple and intuitive to use, mozaBook also offers built-in tutorial videos and interactive guides that help teachers and students use the software and content to the fullest.



mozaik3D scene







The built-in skill development, visualisation and experimental tools in the software help teachers visualise and help pupils **better understand**, acquire and practise various concepts in many different subjects.

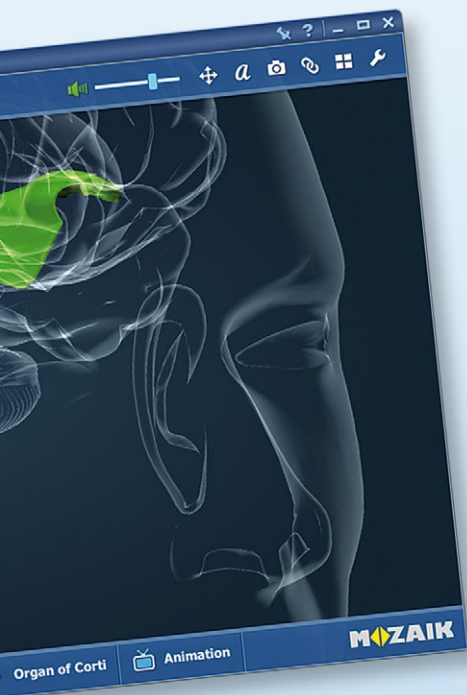
mozaTool app



mozaTools, 3D scenes, videos, and other elements of the Media library can be saved as icons on the margins of textbook pages or in presentations, and later opened in class with a simple click.

### Additional features include

- Available in 40 different languages
- Display digital textbooks, enlarge page segments or textbook figures and play interactive content
- Run built-in, subject-related applications
- Create custom tests in the Test editor application
- Import PDF documents, create digital exercise books and animated presentations
- Intelligent drawing tools, relations diagrams
- Planar and 3D figures, image and drawing gallery
- Video and audio recorder and player
- Interactive 3D scenes and animations
- Printing options
- English tutorial videos
- Use on- and off-line
- Synchronise publications
- Share teacher content in your school or publicly, send homework to students



Watch our videos to find out more about mozaLearn:  
[www.mozaweb.com/video](http://www.mozaweb.com/video)



# mozaWeb

for digital home learning

*Students have access to digital textbooks and complementary interactive content through our online platform, so the same content from school lessons can be accessed at home.*

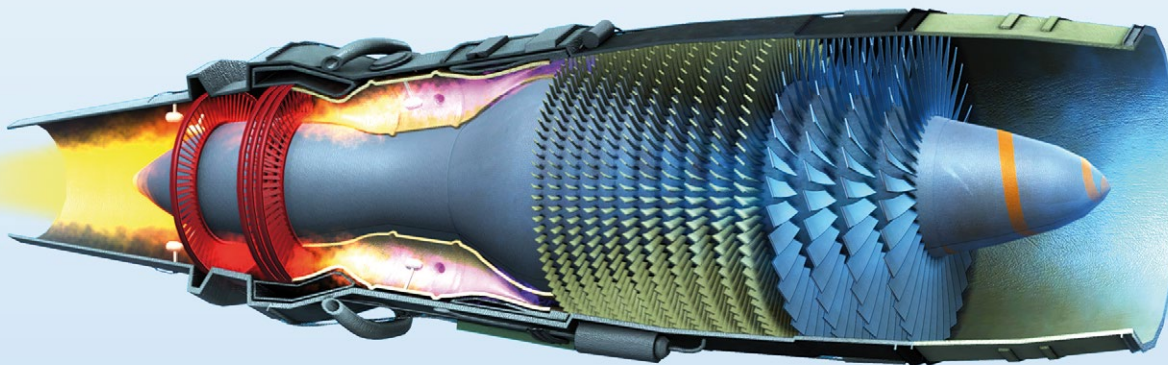


mozaWeb



*mozaWeb is a unique portal for students to learn and for teachers to prepare at home. Digital textbooks and the interactive content, tools and games within each book are all available on mozaWeb.*

*At home, students can access the same videos and 3D scenes seen during their lessons or those recommended by the teacher. Teachers can also create interactive worksheets and assignments for students to complete as homework.*



*mozaWeb only requires an Internet connection and a browser. There is no software to download. Students and teachers can access our entire Media library from anywhere with a simple username and password.*

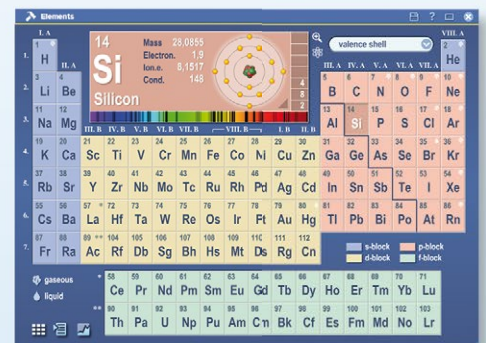
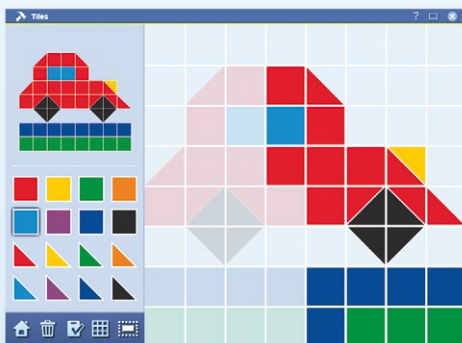
*Students can **complete homework assignments** created and sent by teachers as well as **read and interact with their digital textbooks**. Teachers can log in to see who has completed their homework and check students' results at their convenience. The mozaWeb platform also allows teachers to **share the exercise books and lesson plans** they create in mozaBook with other teachers.*



Alongside using digital textbooks and completing assignments created by their teachers, students can use commonly applied didactic tools and can review and open Media library content, organised by school subject.



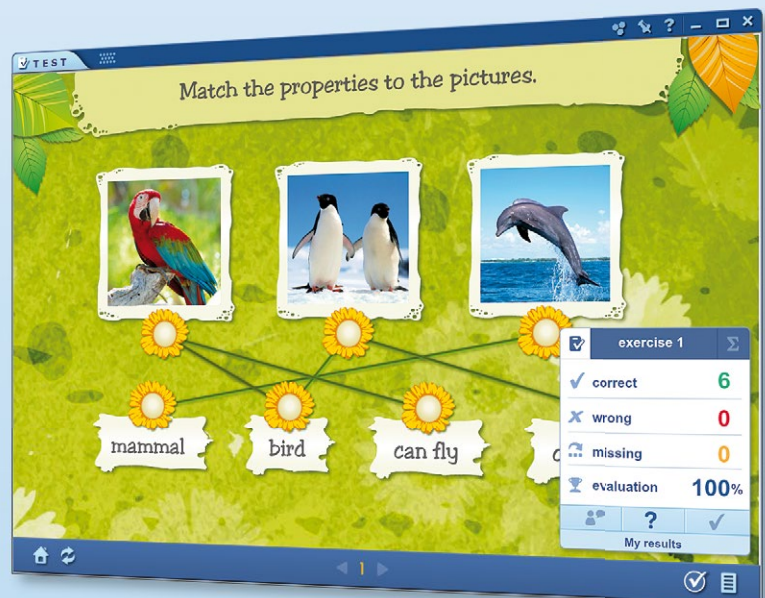
The Media library on mozaWeb contains over 1,300 **3D scenes and hundreds of educational videos, images, audio files and exercises.** With a Mozaik TEACHER or STUDENT licence, you can access all of the content in the Media library, including thousands of interactive items organised by school subject.



Numerous skill development games, demonstration tools and virtual experiments **make learning and practicing more interesting,** providing a unique way for students to both revise and deepen their knowledge.

### Additional features include

- Available in 40 different languages
- Display digital textbooks, enlarge page sections and textbook figures, play inserted digital content
- Run built-in, subject-related applications
- Built-in video and audio player
- Built-in 3D player
- Personal account and storage space for teachers and students
- Search and use Media library content
- Homework function



# mozaBook for tablets



Educational application for mobile devices

Students using tablets in school or at home can access the content of their textbooks directly on their portable smart devices.

With our tablet applications, students can use their enhanced textbooks, including the built-in extra content, on Windows, Android and iOS tablets. Once downloaded, the textbooks are fully functional both online and offline.



## Additional features include

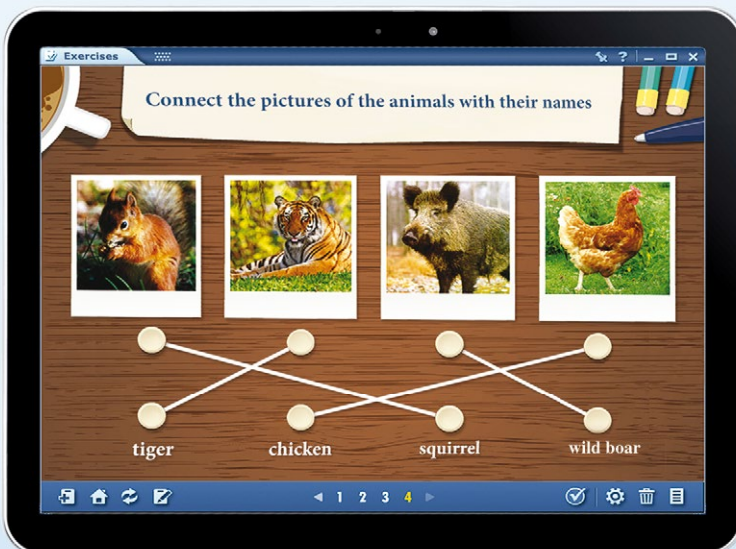
- Access to the interactive textbooks
- Access to the digital exercise books
- Opening and browsing digital textbooks
- Opening and browsing digital exercise books
- Playing interactive content in publications
- Simple and complex drawing tool
- Interactive table of contents
- Text search function
- Built-in video and audio player
- Built-in 3D player
- Offline/online usage
- Synchronisation of publications
- Homework function
- Classwork function



Once downloaded, the digital books and exercise books can be used offline, and their interactive content (3D scenes, educational videos, images, audios, worksheets) can be opened with the built-in players without an active Internet connection.



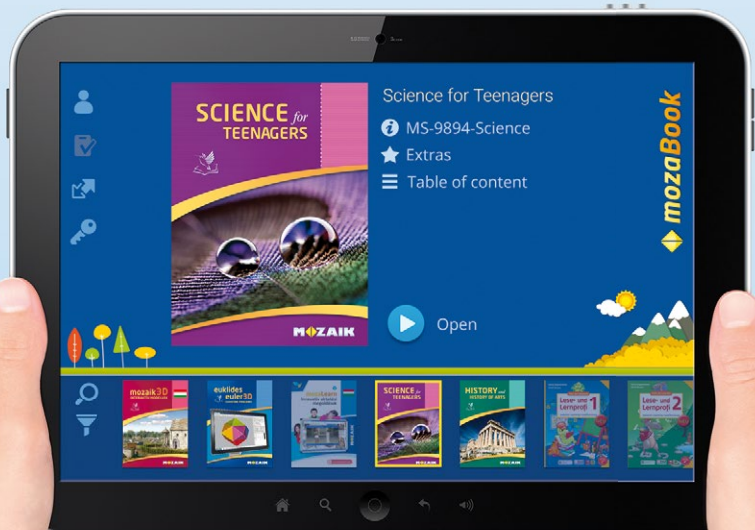
Interactive tables of contents help users navigate in digital publications. The built-in search function makes searching for texts possible, while students can draw and highlight texts in books and exercise books using the drawing tools.



Teachers can assign homework from **mozaBook** in the classroom and through **mozaWeb** from their homes. Students can complete the exercises on their own computers or smart devices and submit their answers.

The system notifies students about new homework assignments, which they can solve and submit to their teachers.

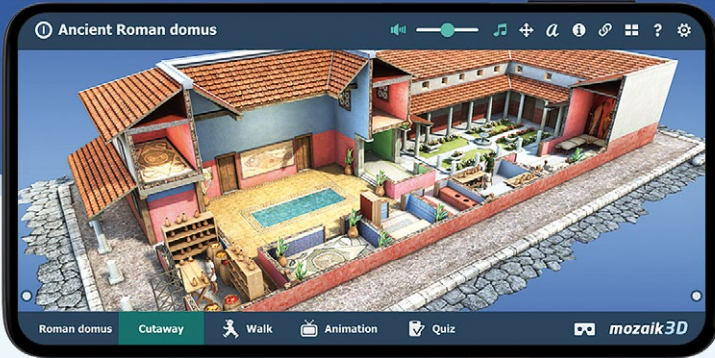
mozaBook allows teachers to start a virtual classroom and invite students to join it. Students can connect to the classwork using their tablets. For this, the teacher's computer and the tablets must be connected to the same Wi-Fi network. It is not necessary to be connected to the Internet.





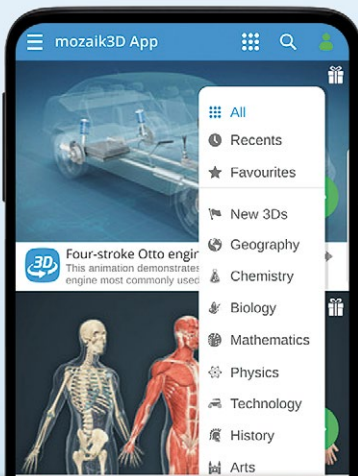
# mozaik3D app

Our application has been designed mainly for students between 8 and 18 years of age. The interactive educational scenes related to History, Technology, Physics, Mathematics, Biology, Chemistry, Geography and Visual Arts will turn learning into an adventure.



The 3D scenes are available in several languages, which also offers an excellent opportunity to acquire and practise foreign languages.

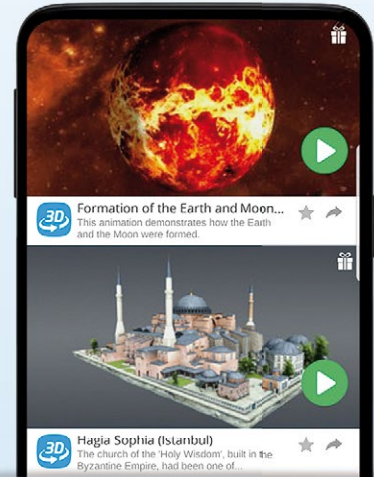
Our interactive 3D scenes can be rotated, enlarged, and viewed from pre-set angles. Navigate through the complex scenes easily with the help of the predetermined views.



Most of our 3Ds include narrations and built-in animations. They also contain labels and entertaining animated quizzes.



Some of the 3D scenes contain a walk function, enabling you to explore the scene yourself by using the virtual joystick.



If you place your phone in a VR headset, you can take a walk in ancient Athens, look around the Globe Theatre or on the surface of the Moon.



WALK



ANIMATION



NARRATION



EXERCISES



VR FUNCTION



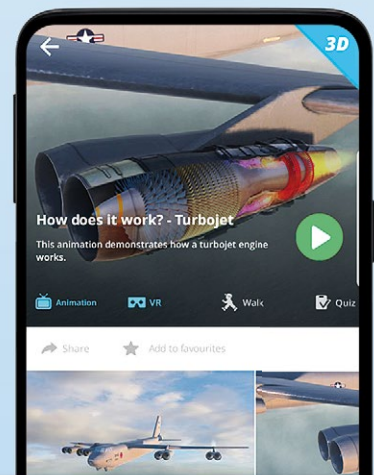
SEARCH, FILTER



DRAWING



GAMES



*Students can virtually explore the 3D scenes on their mobile phones. If they place their phones inside appropriate VR glasses, they can find themselves in ancient Athens, in the Globe Theatre or on the surface of the Moon.*



*All Mozaik 3Ds can be switched to stereoscopic mode for an amazing virtual reality experience. Walking around the city of Babylon, through a medieval town or landing on the Moon is just a click away.*



With the **mozaik3D app** (compatible with all VR headsets and available for iOS and Android), users can explore all our 3D scenes.

### **VR requirements:**

- smartphone with a gyroscope
- VR glasses for smartphones
- mozaWeb account
- mozaik3D application, downloadable free of charge from app stores







# LabCamera



LabCamera is a science exploration application which enables students to carry out experiments using their built-in cameras of smart devices or any external webcam. It's a cost-effective way to enhance the STEM curriculum and promote scientific inquiry.

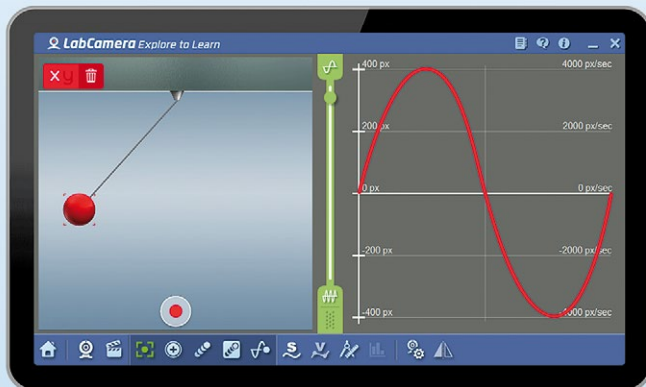
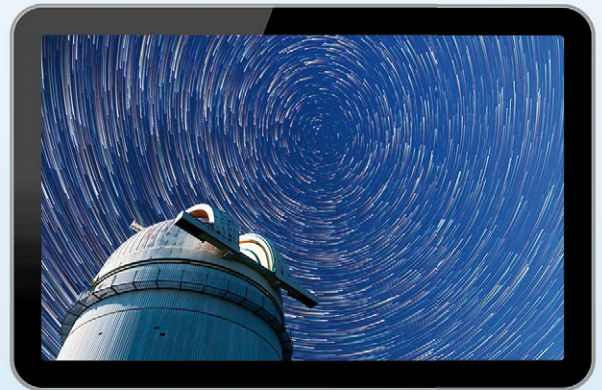
LabCamera develops skills for investigation, problem-solving, critical thinking and deductive reasoning. LabCamera has **7 modules** to cover all Science subjects.



## Time Lapse

The Time Lapse function helps you observe and better understand the slow processes in nature, such as the formation and migration of clouds, ice melting, the growth of plants, etc.

The software makes still shots and stitches these images into a coherent stream of video.

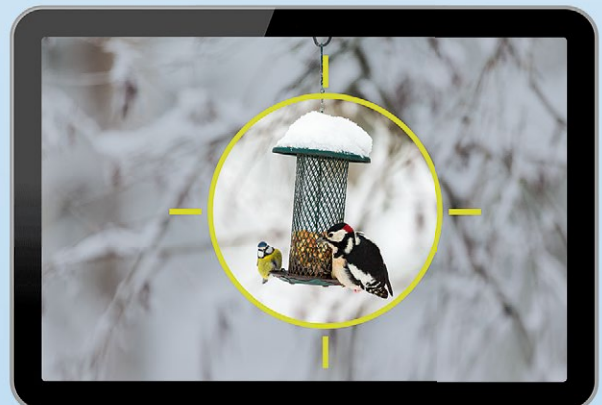


## Kinematics

This module uses the picture of the webcam or pre-recorded videos for movement analysis. Kinematics can track up to 3 objects at the same time, allowing students to conduct more complex experiments involving collisions and real time comparison of movement characteristics.

## Motion Cam

Motion Cam allows you to capture rare and intimate situations in nature. It works just like motion-sensor cameras: it makes a recording when it detects movement in front of the camera.





## Microscope

Built as a universal measuring tool, it enables students and teachers to measure sizes, distances, angles and areas. Web cameras can take macro photos too, allowing the examination of microorganisms.

## Universal Logger

The module can log any measurement instrument's data that has either a digital, radial-dial, or fluid-based display by 'connecting' it to your computer through its built-in camera. Universal logger can track up to three measurement devices at the same time, enabling students to carry out comparative experiments.



## Pathfinder

The Pathfinder module tracks and detects the unseen paths and patterns of moving objects and beings. Toggle between path and motion density maps to find patterns in seemingly chaotic motion. The module allows you to use your device's camera to track patterns in moving objects or animals.

## Graph Challenge

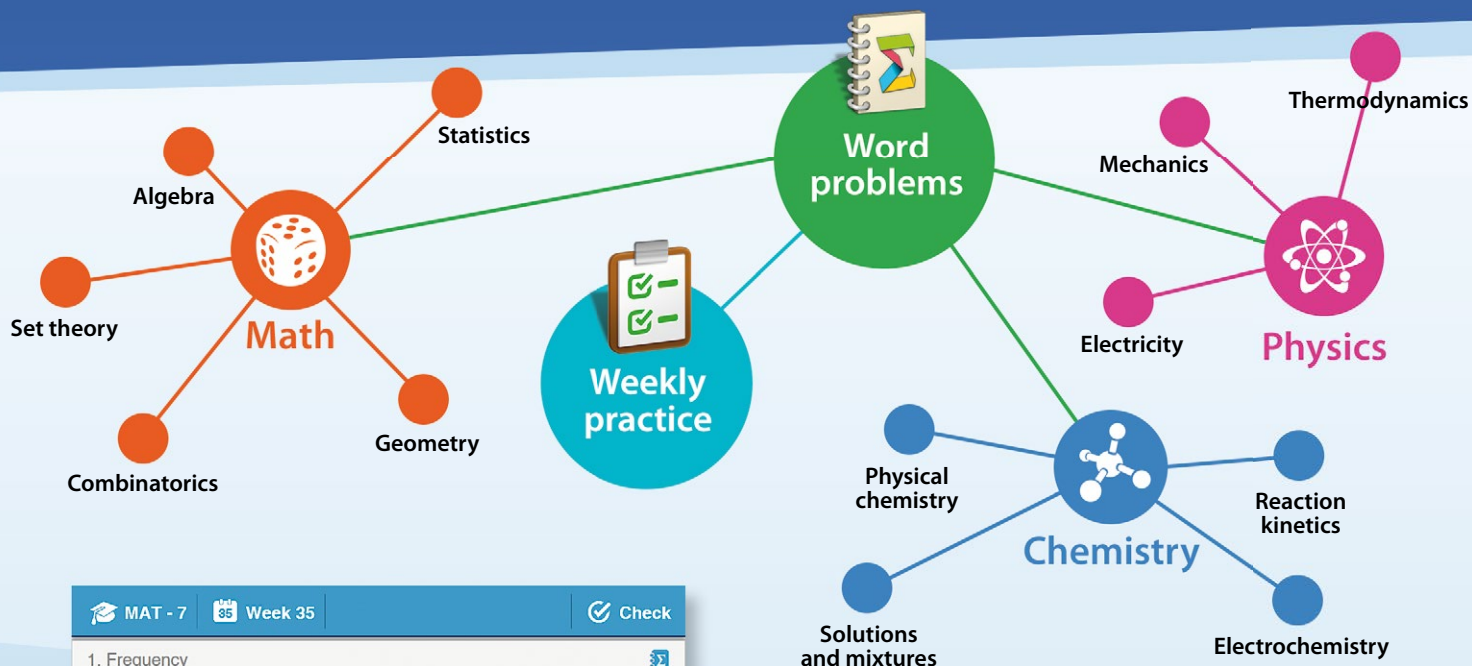
Understand graphs through a game-like app that follows movement and compares it to a designated curve. Graph Challenge features various settings: near-far, horizontal-vertical, rotating an object, and rotating the camera around an object.






# Weekly practice tool

## Artificial intelligence in education


Weekly practice is a complex tool that generates exercises based on the time allocation of topics covered by the curriculum of any given country. It offers teachers and students the opportunity to work and practise with customised tests that allow for individual problem-solving, with the option to monitor results on a weekly basis.



MAT - 7  Week 35  Check


1. Frequency 

A dice has been thrown several times. The outcomes are the following :



Based on this, what was the frequency of throwing a 1?


A 1  B 4  C 3  D 0

2. Adding fractions 

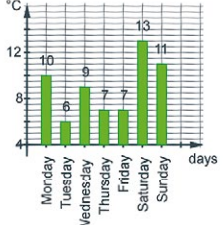
Do the following calculation.

$$\frac{171}{6} + \left(-\frac{80}{3}\right)$$

A  $-\frac{271}{6}$   B  $-\frac{325}{6}$   C  $-\frac{301}{6}$   D  $-\frac{331}{6}$

3. Diagram 

Observe the diagram and find out the average temperature of the specified week.



Day	Temperature (°C)
Monday	10
Tuesday	6
Wednesday	9
Thursday	7
Friday	7
Saturday	13
Sunday	11

A 7 °C  B 10 °C  C 11 °C  D 9 °C

The Weekly practice tool offers practice opportunities for every week throughout the academic year as well as during the summer break.

The user can select the subject, their grade, and the relevant week of the school year.

Based on the curriculum, the software **generates a custom, individualised test** to be solved and checked by the student. Results of the completed tests can be tracked retroactively with the help of the software.

If the student gets stuck while solving an exercise, the **Word problems** tool can be of assistance, **guiding the student** through the solution of each specific exercise **step by step**.

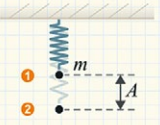


**Word problems** 23/35

An object is attached to a spring. We displace it to a distance of 93 cm away from its equilibrium position then release it. The body starts to oscillate with a period of 13 s. What is the distance of the object from the equilibrium position in 17 s?

**steps of the solution**

1. First make a sketch, then collect the data and write down the quantities you want to calculate. Convert them to SI units if you have to.



2.  $A = 93 \text{ cm} = 0,93\text{m}$  *amplitude*
3.  $T = 13 \text{ s}$  *period*
4.  $t = 17 \text{ s}$  *time*
5.  $x = ?$  *displacement*

7. Write down the formula you are using. If you need to, evaluate the quantities you are looking for from the formula.

$$x = A \cdot \sin(\omega \cdot t)$$

*Formula for displacement-amplitude-angular velocity-time of the simple harmonic motion*

9. The angular velocity is used in the formula, but it is not yet known. Write down the formula for calculating it.

$$\omega = \frac{2\pi}{T}$$

*Formula for angular velocity-period of uniform circular motion*

11. Substitute into the formula and do the calculations.

The distance of the object from the equilibrium position is  m.

# Word problems tool

The tool is familiar with the rules of a given field of natural science and can apply these when generating and solving exercises. This enables the software to generate any number of custom exercises and reveal solutions step by step.

## Word problems features:

- categorisation of the various exercise types pertaining to natural science by topics
- able to generate exercises in any given topic and language (localisation possible upon separate custom agreement)
- guides user through the solution of any generated exercise step by step
- allows teachers to custom-create tests for students

Processing the units of the syllabus temporarily is adapted to each country's curriculum. Import local curricula for various areas and subjects to enable the software to generate an appropriately timed test, in accordance with the relevant week's topic of discussion.

## Benefits of the Weekly practice tool:

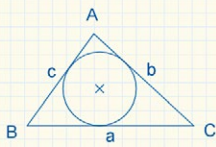
- ensures systematic practice
- generates custom tests
- offers users help with the solution of exercises
- aids the monitoring of results
- tailors topics and timing to curriculum of specific country

**Word problems** 12/23

The area of a triangle is  $25 \text{ m}^2$ , and its perimeter is 1,500 cm. What is the radius of the circle inscribed in the triangle?

**steps of the solution**

1. First make a drawing, collect the data and then write down the quantities you want to calculate. If necessary convert the units into common metric units.



2.  $A = 25 \text{ m}^2$  *area*
3.  $P = 1,500 \text{ cm} = 15\text{m}$  *length*
4.  $r = ?$  *length*

6. Write down the formula you are using. If necessary, rearrange the formula to solve for the unknown quantity.

$$A = \frac{P \cdot r}{2}$$

*Area-perimeter-inner circle radius formula of the triangle*

8.  $r = \frac{2 \cdot A}{P}$
9. Substitute into the formula and do the calculations.

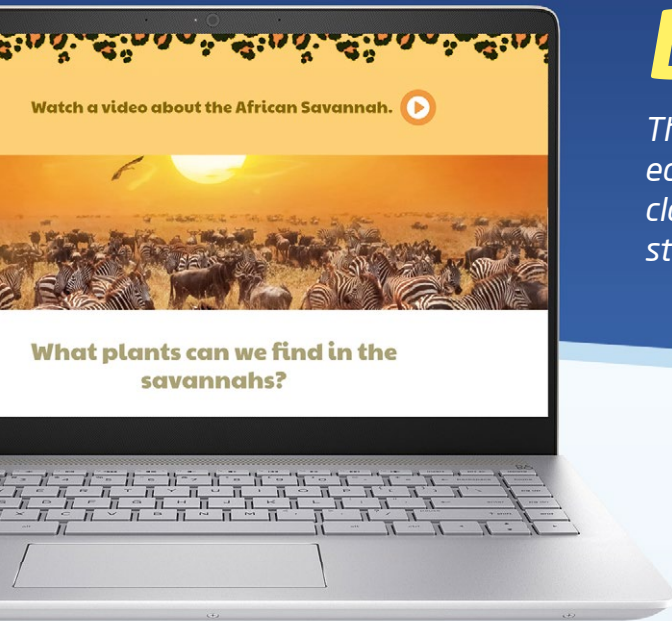
$$r = \frac{2 \cdot \text{m}^2}{\text{m}} = \text{m}$$

The radius of the circle inscribed in the triangle is  m.



# Digital lessons

The missing link between printed textbooks and digital education. Material that helps make the transition to digital classes. As a result of use, both the teachers' and the students' digital competence improves.

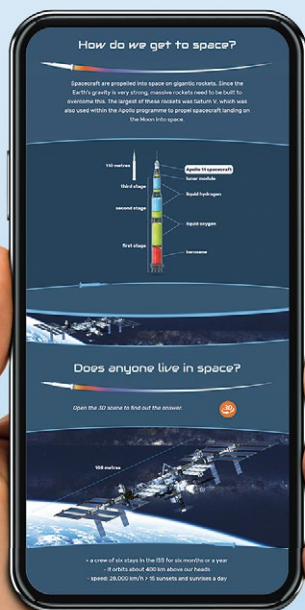


Digital lessons are modern, up-to-date digital materials that are processed and shared by users with the help of digital devices. The lessons are interesting, even their imagery has a motivating effect. The understandable, easy-to-follow line of thought make the learning experience enjoyable.

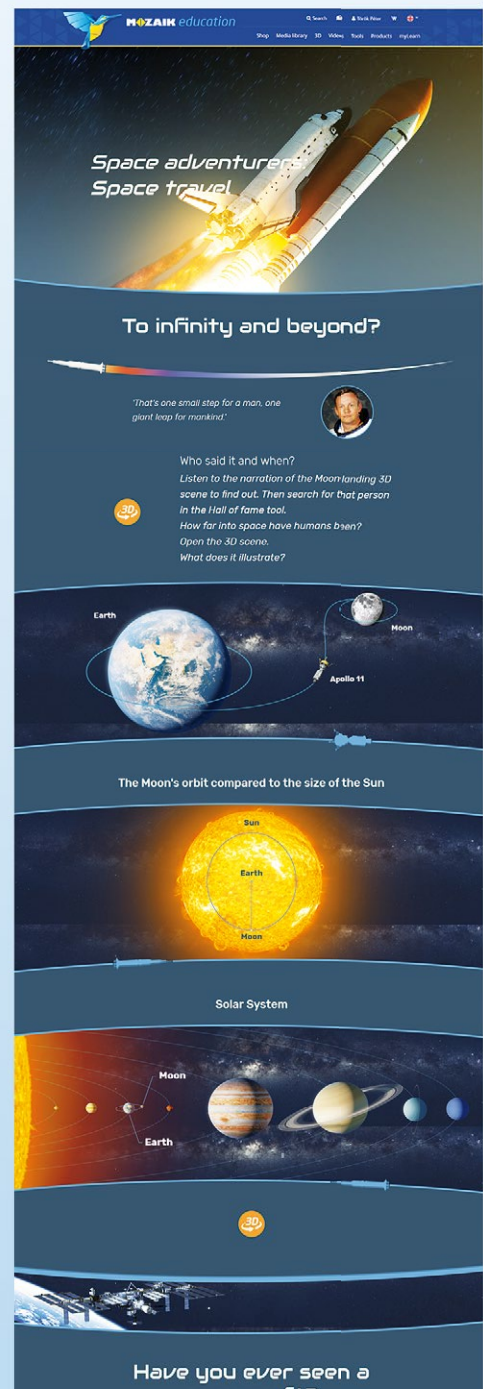
The lessons include a plentitude of interactive items: 3D scenes, educational videos, as well as tests for practice and revision.

Teachers can access lesson plans that help to process the curriculum in the most efficient way possible. These also provide ideas regarding the allocation of time, the realisation of pedagogical aims, and the smooth execution of lessons.

The spectacular content **can be used on interactive displays, tablets, and smartphones.**



The materials build on the teacher's role as facilitator and improve student cooperation along with social and digital competences. Therefore, skill sets that prove essential for future generations in the world of artificial intelligence are brought to the forefront.

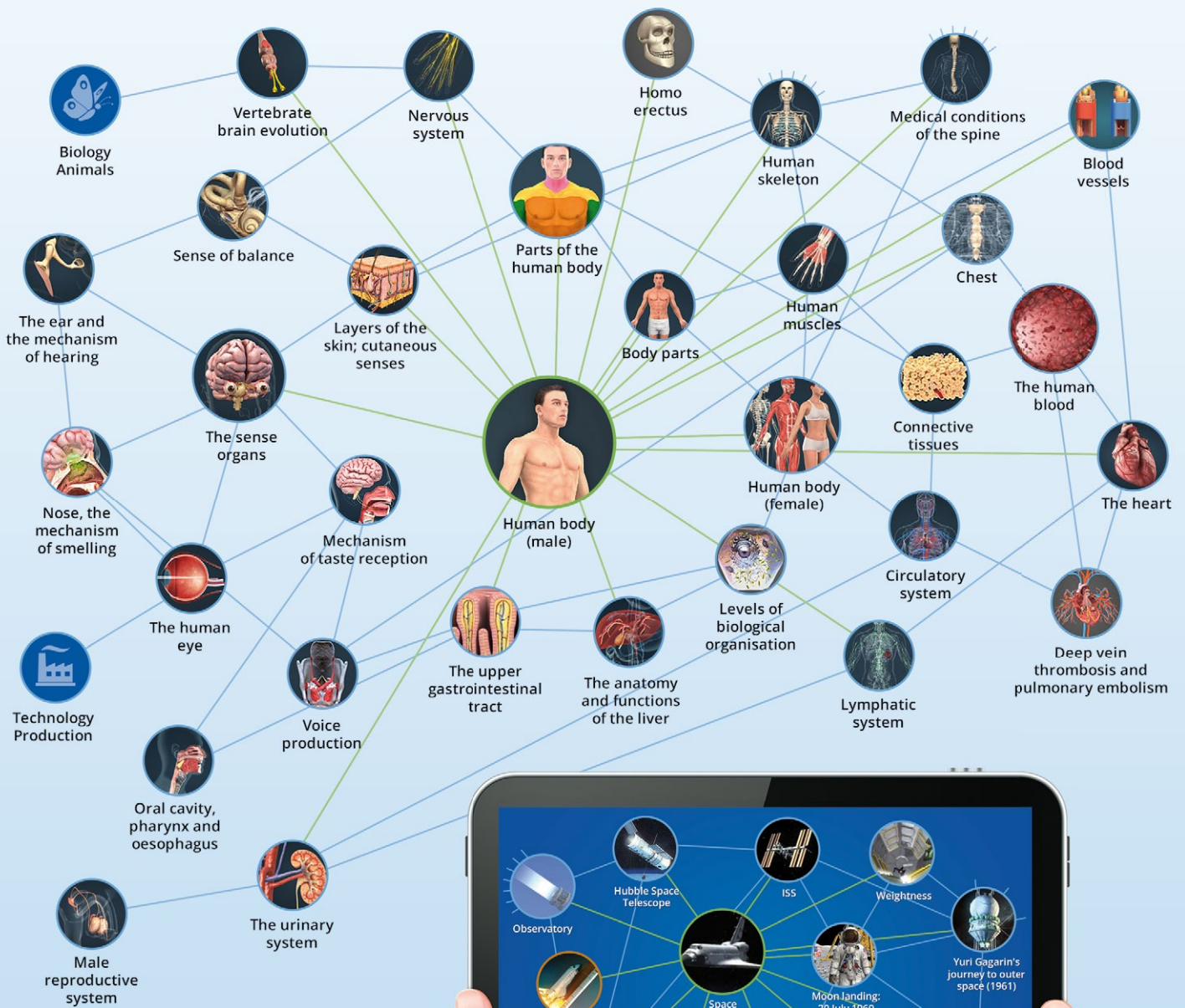




# Network of Knowledge

All educational materials (books, lessons, digital lessons, 3D scenes, videos, interactive 3D smartbooks) tie into a shared network, creating a conceptually unified system based on the individual content items.

The **Content graph** allows users to jump from one content item to the next, supporting movement between related topics as well. Depending on the individual's interests, forming custom learning paths is also possible.



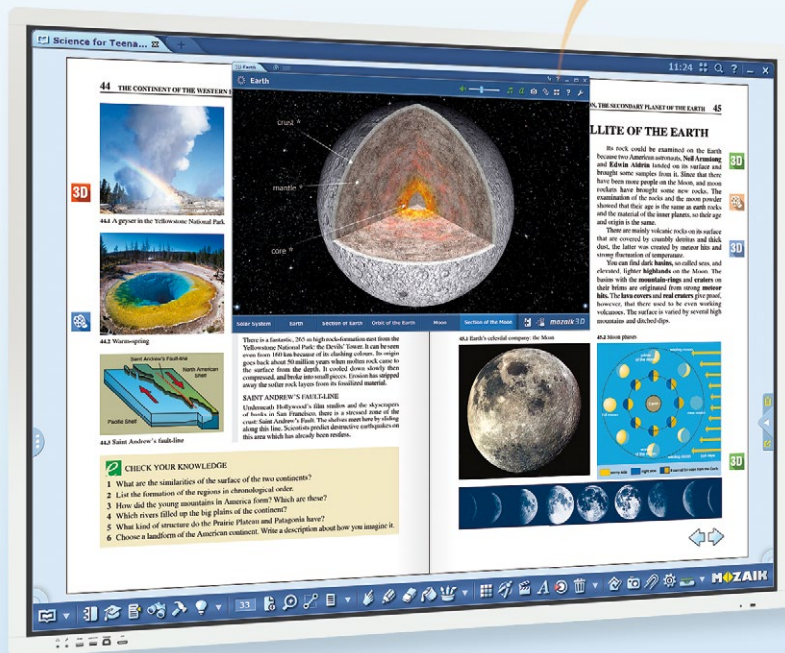
The connectivity structure of the graph is adaptable to the requirements of the given country.

# ClassWork and HomeWork

Classroom management

mozaBook allows teachers to set up a virtual classroom and invite students to join it. Students can connect to the classwork using their tablets. For this, the teacher's computer and the tablets must be connected to the same Wi-Fi network. It is not necessary to be connected to the Internet.

Teachers can also share pages of a textbook directly with the students' devices. In addition, teachers can send assignments, worksheets, videos or images to students.



Teachers can also keep track of worksheet completion and check students' results on their computer.

The mozaBook app for tablets and smartphones provides the perfect opportunity for classwork, connecting the board and student devices, while filling it with relevant content.

On the teacher's control panel, teachers can keep track of completed **exercises and worksheets** sent to the students' devices.

They can see answers that have been submitted and **automatically checked** and receive statistics on the results.

Classwork											
Current group											
	1	2	3	4	5	6	7	8	9	10	%
Abdul Ghafoor	✓	✓	✓	✓	✓	✓	✓	✓	✓	⚠	80
Brooks Pulipher	✗	✓	✓	✗	⚠						20
Dalton Seamster	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	100
Dania Tufford	✓	✗	✓	✓	✓	✓	✗	✗	✗	✗	50
Eddie Denn	⚠	✓	✓	✓	✓	⚠					40
Elias Surls	⚠	✗	⚠								0
Gerard Willocks	✗										0
<b>Total</b>	<b>50</b>	<b>83</b>	<b>83</b>	<b>67</b>	<b>50</b>	<b>50</b>	<b>33</b>	<b>33</b>	<b>17</b>	<b>17</b>	<b>48</b>





# markr AI-assisted grading



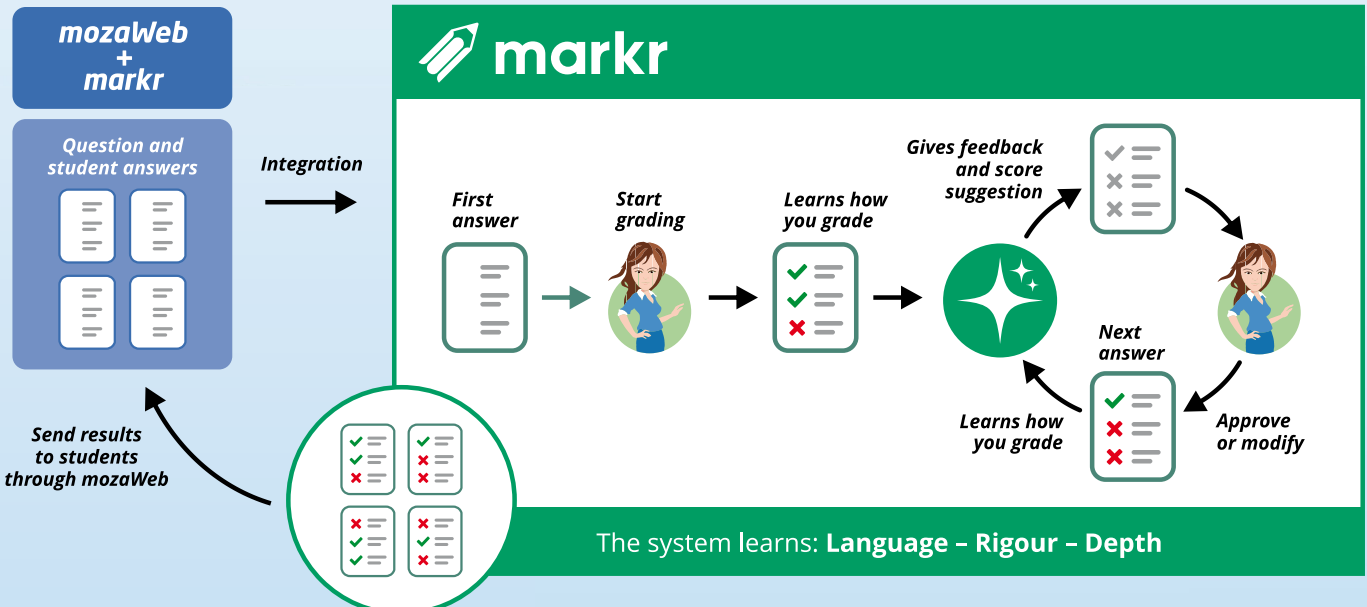
AI-assisted grading and personalized feedback

Grade **open-ended questions** including complex arguments and analysis with **AI-assisted high-speed** grading while maintaining full **control over grading quality**.



## Get started in 4 simple steps

- 1 Send assignments with many different question types through mozaWeb
- 2 Grade the first answer so that markr understands how you grade
- 3 Grade faster with the smart suggestions of markr
- 4 Send scores and feedback to students with a single click



**Adaptive:** learns how you grade

**Fast:** provides and improves its suggestions in a matter of seconds

**Personalized:** deliver targeted feedback to each student

**No admin:** fully integrated with mozaWeb

**Secure:** anonymize responses to improve grading standards, secure sensitive student data



## Faster, more consistent assessment

- Secure online assessment by filtering out unauthentic responses with AI
- Standardise grading for multiple graders
- Scale up personalised feedback with bespoke AI grading assistance

### Highlights of relevant parts in the student's answer

During a television programme the presenter states, „Looking through a telescope at the night sky is like looking back in time“. Use physics principles to comment on this statement.

Approve

Time dilation is used to say that the faster you go and closer to the speed of light you go the slowest time will go. As you look through a telescope the light you see travelling at 'c' ( $3 \times 10^8 \text{ ms}^{-1}$ ) means that you will see into a galaxy where time is so very slow. If you reach the speed of light it would appear that time will have stopped. This statement is partially correct since you would be looking into what we would consider the past because our clocks on earth are going at a normal speed.



MARKS  
**0/3**



AUTHENTICITY  
**86%**

#### CONCEPT

#### FEEDBACK

CONCEPT	MARKS	FEEDBACK
● Looking back	0/3	Your mention of time dilation and the speed of light was not relevant to the question. Also, you missed discussing the time it takes for light to reach us from distant objects. Improve your response by explaining „looking back in time“ and emphasizing the light travel time.

Full control of grading quality. Accept suggestions of mark AI or override with your scores and feedback

### Is light a wave or a particle?

Approve

Light can act like a wave as it can produce a diffraction spectrum when directed through a slit. However light can also act like a particle as photons can give energy to dislodge electrons.



MARKS  
**2/2**



AUTHENTICITY  
**72%**

#### CONCEPT

#### FEEDBACK

CONCEPT	MARKS	FEEDBACK
● Wave-like properties	1/1	Great example!
● Particle-like properties	1/1	You could explain the photoelectric effect in a bit more detail

## Improve student satisfaction and achievement

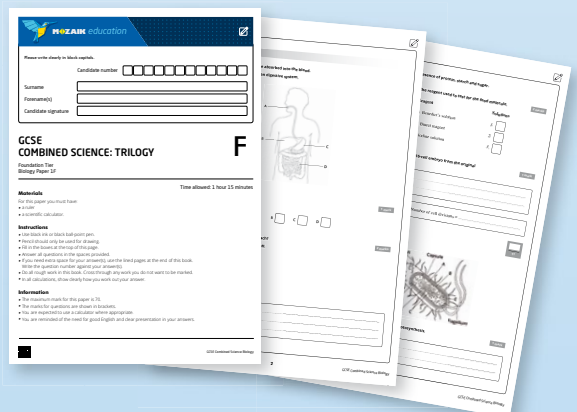
- Timely, detailed and personalised feedback to students
- Provide opportunities for advanced practice
- Analyse curriculum and receive actionable feedback on curriculum improvement

## Eliminate Admin

- Assign homework to your study groups with ease
- Grade faster in mark

## Offline assessment

- Ready-to-print exercise sheets with just one click
- Automated processing of scanned assignments
- Handwriting recognition
- GCSE Combined Science question bank



The mozaLog digital gradebook is an educational information system that enables school staff to use a single interface for both administrative and organisational tasks.



Thanks to mozaLog, the laborious and cumbersome management of traditional paper-based class registers becomes redundant. The software also helps to reduce teachers' daily administrative workload considerably.



Besides absences, late arrivals, exemptions and lack of equipment can also be recorded, and lists of students missing out on tests can be obtained.

## Flexible and versatile

mozaLog includes all the functions of traditional, paper-based school registers: it allows for entering marks, tracking academic progress and managing absence data as well as student groups.

#	Student's name	Mark	L-term					Average	New mark	Final-term mark
			Sep	Oct	Nov	Dec	Jan			
1.	Abbott Anthony (BTM)	0.A	3	4	5	24	3.6	5		
2.	Beck Jacob	0.A	5	5.4	5	5.4	4.87			
3.	Bradley Violet	0.A	5	5	5	5.5	5	5		
4.	Campbell Timothy	0.A	4	4	5	5.5	4.6	4		
5.	Cannon Luke	0.A	4.5	5	5	5	4.8			
6.	Cooper Deborah (SN)	0.A	5	5.5	5.5	5.5	5	5		
7.	Goodman Pat	0.A	4	3.4	5	4.5	4.17			
8.	Kall Alan	0.A	4	5.5	5.5	4.5	4.75	5		
9.	Henderson Cathy	0.A	5	5.5	5.5	5.5	5			
10.	James Helen	0.A	5	5	5.5	5.5	5	4		
11.	Lee Mary	0.A	5	4.5	5	4	4.6			
12.	Marsh Terrence	0.A	5	3	5	4.4	4.33			
13.	Moore Phillip	0.A	5	5.5	5	5.5	5	5		

A/B	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
	29. Monday	30. Tuesday Teacher staff meeting	31. Wednesday	1. Thursday Commencement ceremony	2. Friday	3. Saturday Holiday	4. Sunday Holiday
	5. Monday Parent-teacher conference	6. Tuesday	7. Wednesday	8. Thursday	9. Friday	10. Saturday Holiday	11. Sunday Holiday
	12. Monday	13. Tuesday	14. Wednesday Back-to-school survey	15. Thursday	16. Friday	17. Saturday Holiday Field trip	18. Sunday Holiday Field trip
	19. Monday	20. Tuesday	21. Wednesday	22. Thursday	23. Friday ICT-training	24. Saturday Holiday	25. Sunday Holiday
	26. Monday Open day	27. Tuesday	28. Wednesday	29. Thursday	30. Friday		

Different types of marks (e.g. final marks, calculated with weighted average) can be entered.

## Simple administration

The software handles changes in standard class time and the school-year calendar, and oversees school events (ceremonies, school trips, form teacher classes).



MOZAIK SAMPLE SCHOOL

2016 / 2017

Bozovich, Martin  
TEACHER

REGISTERS DATA CALENDAR **STATISTICS** INSTITUTION SETTINGS

PROGRESS STATISTICS 2018, January 23, Thursday

Teacher	Sep	Oct	Nov	Dec	Jan	1st term	Jan	Feb	Mar	Apr	May	Jun	2nd term	Together
All Zein Khaddam	66/68	62/62	94/94	75/75	60/62	359/361								359/361
Amala, Ingrid	41/41	42/42	44/44	36/36	28/36	191/199								191/199
Bernath, Gregory	76/76	52/52	54/54	46/46	49/53	277/281								277/281
Bernd, Zachary	70/70	57/57	74/74	64/64	53/60	318/325								318/325
Blond, Andrew	97/97	87/87	87/87	57/57	35/45	343/373								343/373
Bak, Agnes	76/76	78/78	97/97	96/96	57/77	364/384								364/384
Boznic, Kate	85/85	80/80	90/90	83/83	55/71	393/409								393/409
bn1 Bozovich, Martin	99/99	90/90	106/106	67/67	82/82	444/444								444/444
bn2 Charles, Andrew	26/26	84/84	74/74	59/59	48/53	291/296								291/296
Chibury, Zach	91/91	93/93	68/68	79/79	60/90	399/411								399/411
Farnath, Agatha	99/99	90/90	97/97	80/80	78/78	444/444								444/444
Farrow, Igor	40/40	25/25	43/43	12/28	0/23	120/159								120/159
Feky, Charles	1/5	6/8	8/8	2/4	2/6	19/31								19/31
Fisherman, Karl	95/95	96/96	102/102	68/68	48/73	409/434								409/434
Froom, Adele	32/32	27/27	32/32	21/24	20/23	132/138								132/138

## Academic statistics

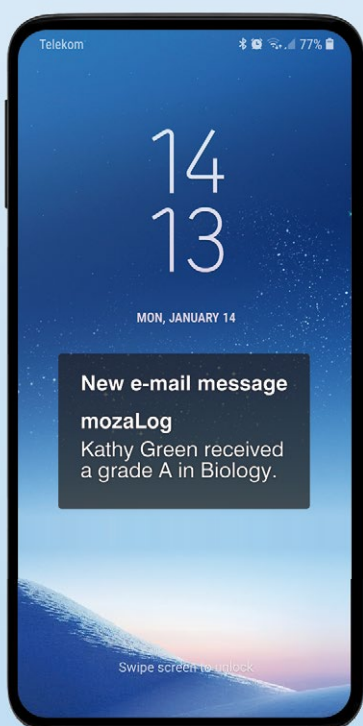
Progress books make it possible to follow the academic activities of teachers and classes, making teachers more motivated to update it on a regular basis.

Student data does not need to be typed in individually, it can be imported from spreadsheets.

## Communication with Parents

Parents can follow their children's academic performance, absences from classes or the evaluation of their conduct. If required, parents receive e-mail updates regarding new entries related to their children. Teachers are able to send reminders about approaching school events, trips or even exams, so that students and parents stay well-informed.

With mozaLog, school managers can create comprehensive analyses and illustrate these with diagrams.



## Additional features include

- Progress book
- Attendance reports
- Assessment records
- Possibility to create student groups
- Possibility to create sub-groups
- Import or export student data
- Timetable editor function
- Managing teachers' substitutions
- Academic statistics
- Absence data
- School statistics
- Written report function
- Messages to parents
- Print function for gradebooks, progress registers, reports, certificates, overtime and all statistics

# Statistics

The mozaLearn system offers a wide range of monitoring options. The statistics module can provide an overall insight into the usage of the system. Based on the data, both the students' and the teachers' performance can be evaluated as well.



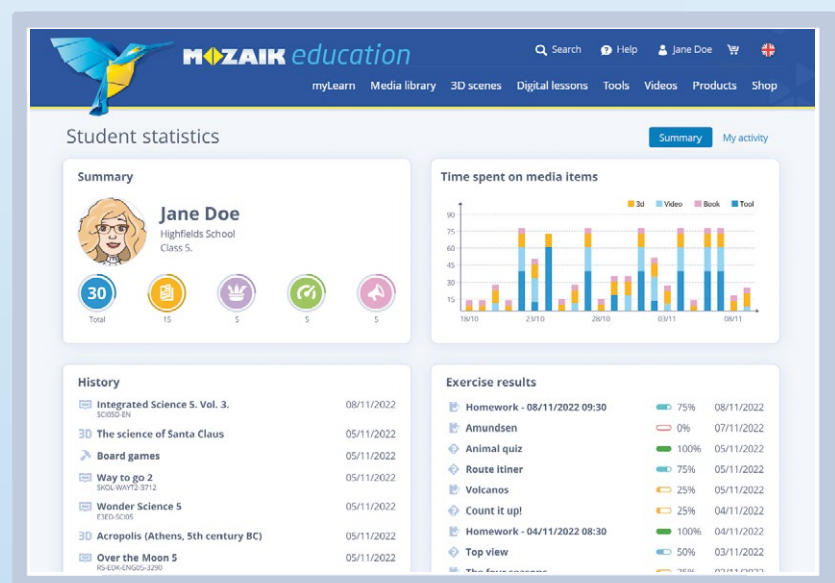
## Monitoring the system

By implementing the mozaLearn system, central statistics can be gained, which provide information about the current operation of the system and can contribute to an even better usage of the system in the future.

## Reports about the students' performance

It is essential to receive data about the performance of students and classes. The mozaLearn system makes it possible for both teachers and students (and parents) to receive detailed reports about the learning progress.

**Students can review their previous digital activity as well.** They can see which digital books and exercise books they opened and which educational tools and other types of interactive content they used. They can get an overview of their participation in classwork and the results of their homework.

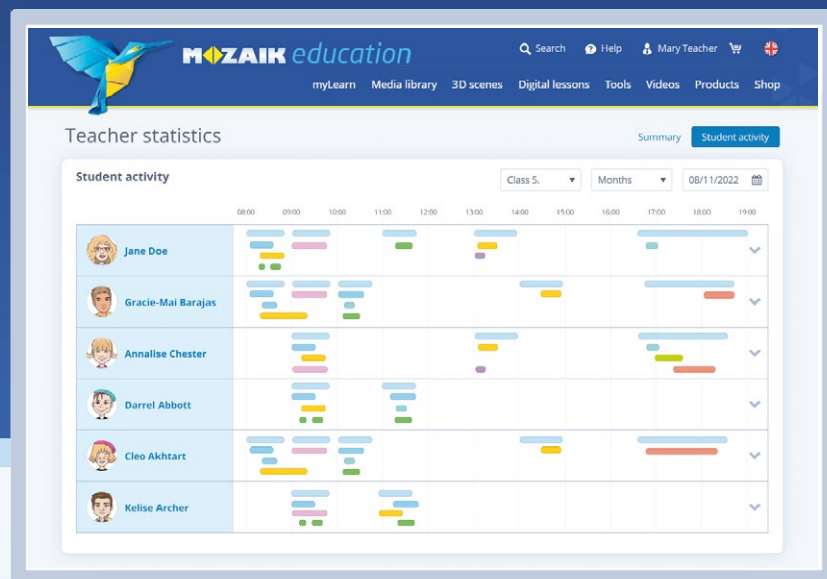


With the summary view of the statistics, students and parents can see how much time was spent on each type of activity and can also **review the tasks to be completed.**



## Teacher statistics

Teachers can track their students' overall digital activity. They can also get an idea of how students use digital learning materials, how they participate in classwork and how they perform in their homework assignments.



The statistical data also allows teachers to give their students constructive feedback.

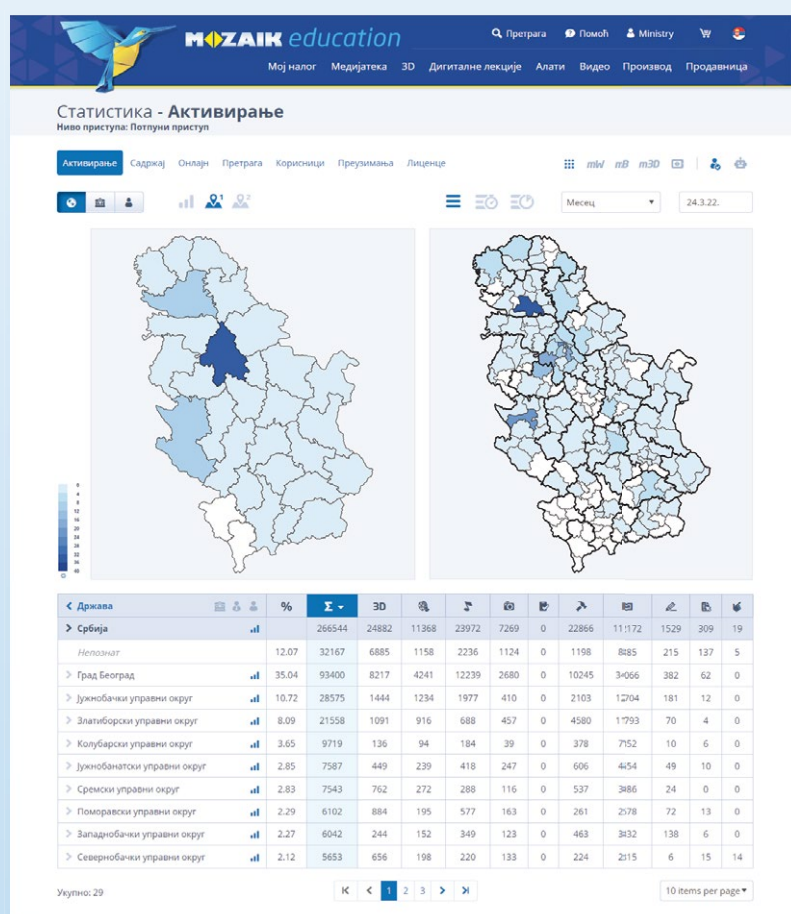
Moreover, **it offers the possibility to identify areas where improvements must be made**, by comparing the students' performance to the class average and suggesting further actions.

Teachers can use existing exercises and **easily generate new ones from relevant content** (e.g.: exporting exercises from a 3D scene or a tool in mozaBook) and these exercises can be sent to students in various forms (e.g.: homework assignment and classwork assignment during lessons).

## System control

The mozaLearn system is able to provide an overview of the usage statistics by region or by sub-region. In case it is possible to collect and process data by smaller units (settlement, school or class) then it is possible to configure the statistics module accordingly.

The data can be useful for either planning a future investment or development or reviewing one from the past. **The efficacy of the investment in the digitalisation of the education system can be monitored throughout these reports**, whether we are speaking about developing the infrastructure or providing professional training for teachers about a new methodology of teaching with digital resources.



# Interactive 3D smartbooks



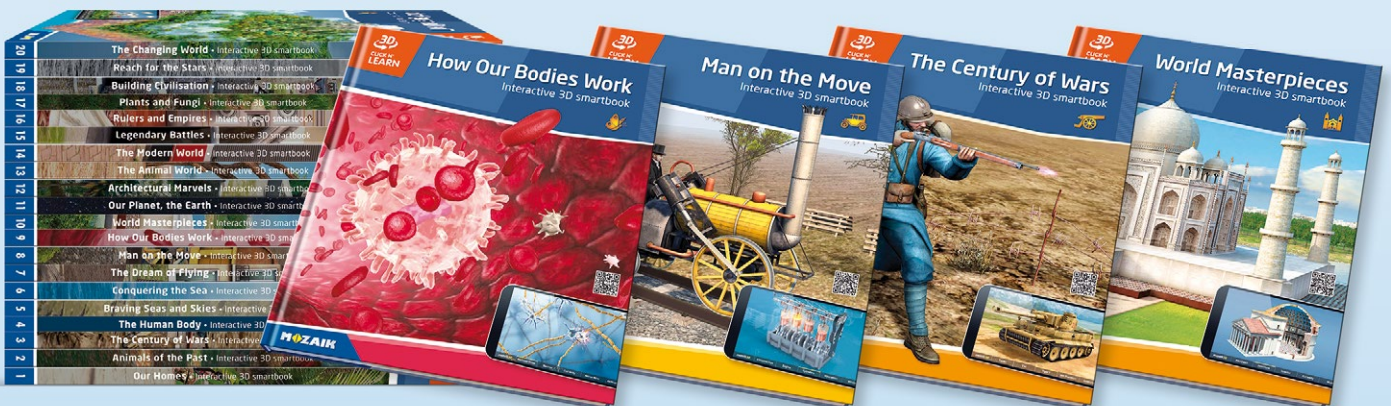
The series consists of 20 books based on the 3D scenes available on mozaWeb. The publications combine the spectacular images from animations with well-formulated and easily understandable texts, are available in several languages, and cover various school subjects.



Immerse yourself in the world of Natural Sciences, Technology, History and Archaeology using the books of the series.



The publications are unique as they **combine the benefits of both printed books and virtual reality** so that readers may acquire state-of-the-art knowledge.



By **scanning the QR codes** found on the pages, students are **just a click away from accessing the 3D scenes**, which provide an interactive approach to exploring the topics. Students can even **walk around** in this virtual world using a VR headset and experience first-hand what they are reading about in the books.



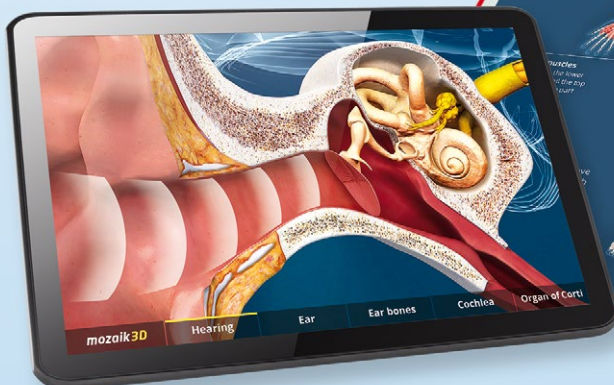
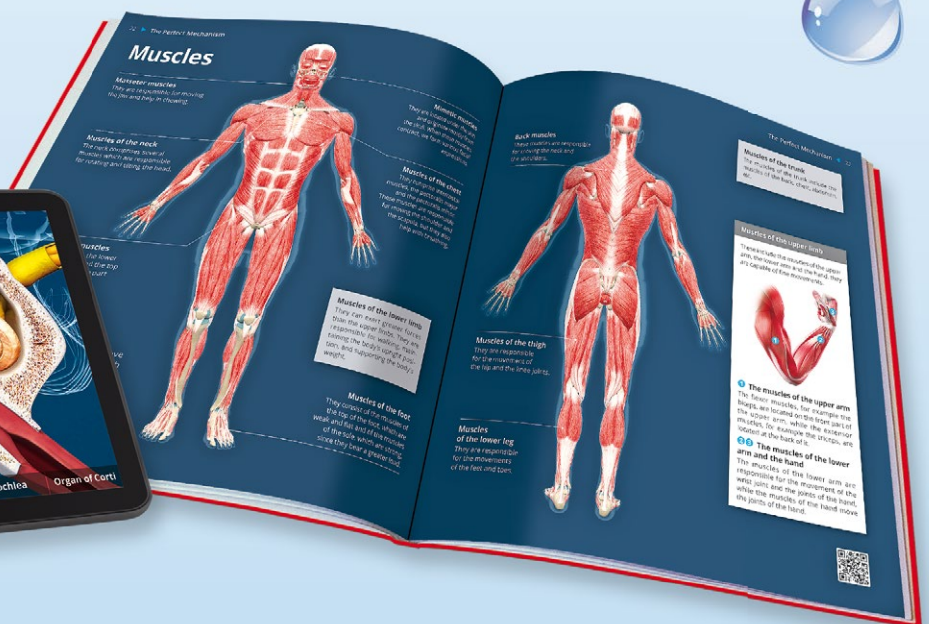
Dealing with various topics, these publications can be used in the classroom or at home for deepening knowledge in a unique and playful manner.



Students can explore not only the past and the future, but also the microscopic world, the human body, and distant celestial objects.

**The series is recommended for:**

- schools that want to add modern, high-quality books to their libraries or to offer them as gifts to students
- teachers who want to motivate their pupils and need ideas regarding the use of digital tools in class
- children who like to read and are also interested in digital animations
- parents who not only want their children to spend their time usefully, but also to enjoy the spectacular resources and to learn while having fun



The 3D scenes can be opened with the mozaBook application, which is available free of charge.





# mozaMap

digital maps for interactive boards

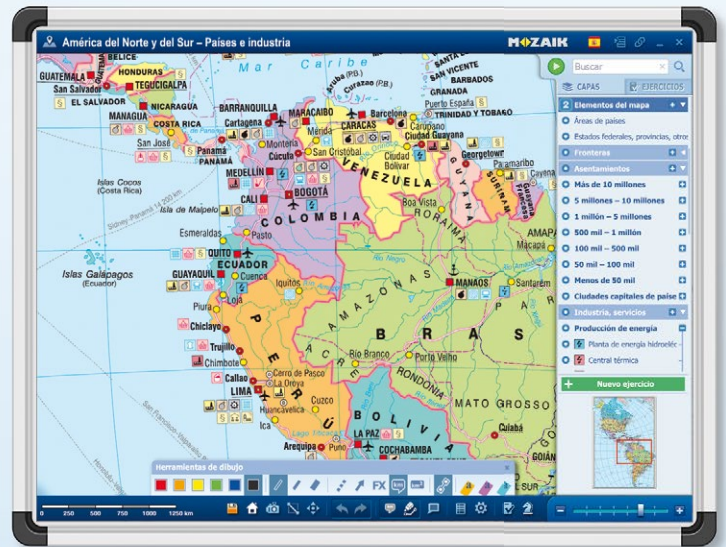
The mozaMap interactive map software offers atlases to expand the range of tools available to Geography and History teachers. mozaMap is suitable for use on interactive boards and for home learning as well.

**The digital atlases contain the full content of our printed Geography and History atlases.**



The maps are vector-based files, so any segment **can be magnified to an incredible extent without any loss in quality**. You can search for text content within the maps, and layers can be switched on and off, one by one. You can also easily create map views that best suit your lessons, increasing efficiency.

Freehand lines, images, symbols and annotative bubbles can be placed onto separate map layers in mozaMap.



## Illustration possibilities

The built-in drawing tool provides several possibilities for illustration, including a **large collection of geographical and historical symbols**.

Drawings and other illustrations created in mozaMap can easily be saved, moved, and their size can be adjusted to the scale of the maps. You can also **create and share presentations containing your enhanced maps**.



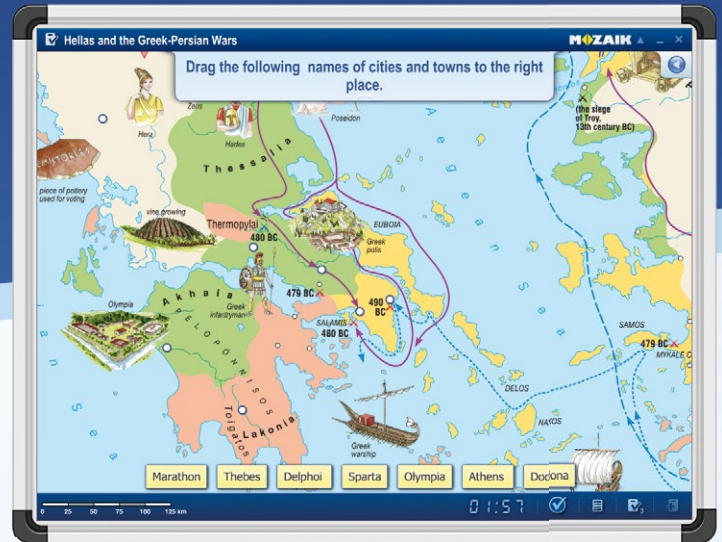


## Exercises

mozaMap allows users to create custom exercises on the maps. These exercises can be saved, shared and easily inserted into mozaBook.

Battle sites and other **historical and geographical landmarks** can be added to the blank maps according to the teacher's needs.

Students can match events with the appropriate labels. Time limits can also be set. While students are working, the map shows the time used for solving the exercise. When students finish their work, mozaMap displays the ratio of correct answers.



## Animating history

By selecting and highlighting different characteristics or parts of a map showing various important historical dates, our software is able to animate the transitions between these events over time. This allows users to **dynamically illustrate the geographical impact of certain events (such as wars, trade, or treaties) over a period of time**, and allow students to see and understand correlations between developments - not just by territory and area, but also by date.

As the animation is played, the relevant date is displayed clearly on a timeline at the bottom of the screen. The playback speed can be modified, and the animation can be paused at any time.

## Additional features include

- Navigation on the map (zoom, pan)
- Layers, combined maps
- Save view, window and map
- Search on map
- Drawing tools, presentation, user-created content
- Animation (dynamic change)
- Lessons and questions
- Integration with mozaBook
- Customisation



# In the Classroom

Create dynamic presentations on your interactive board and use amazing interactive tools, 3Ds, videos and other content for any school subject; create tests and assignments for students to complete in class or at home.

## What is needed in the classroom?

To use mozaBook on an interactive board or projector, all one needs is a **Mozaik TEACHER** or a **mozaBook CLASSROOM** licence.

### Mozaik TEACHER licence

**User-based licence** that allows a teacher to use both **mozaBook** and **mozaWeb** on multiple devices.

### mozaBook CLASSROOM licence

**Device-based licence** that allows multiple teachers to use **mozaBook** on the same device.

Both licences grant teachers access to the entire media library, plus they can create interactive exercise books (presentations) or share teaching materials through the cloud with fellow teachers or their students.



## What do my students need for their tablets?

Students need a Mozaik STUDENT subscription in order to be able to connect to the classwork started by their teacher and receive images, interactive apps, texts and worksheets and complete the assignments set to them.

If students have a Mozaik STUDENT subscription, they can also install the mozaBook Windows software to their computers, download the mozaBook Android, iOS app to their smartphones and tablets and they can use the mozaWeb educational portal. With their user account, they can access every Mozaik content on a suitable device.

For more information, please visit [www.mozaweb.com](http://www.mozaweb.com)



# At Home

With mozaBook, teachers can plan and create lessons comfortably from home. In addition, students can benefit from home learning, completing assignments or taking the initiative to learn more by themselves **from any computer with Internet access and a browser.**

## How can teachers use mozaBook at home?

Teachers can enrich their digital books with interactive content, create presentations, use the educational tools in mozaBook to simulate experiments and create custom tool states and lab settings that complement the lesson topic. The Mozaik TEACHER licence allows users to access every Mozaik content on any suitable device even outside the classroom. For teachers' convenience, all content created in mozaBook can be uploaded to the cloud, so that teachers can use any PC running mozaBook in order to access their content. There's no need to carry around the same laptop all day! The Mozaik TEACHER licence offers all the same features on a PC that are available on the interactive board in class.



## How can students solve homework and learn independently at home?

With a **Mozaik STUDENT licence** students can **log in to mozaweb.com from any desktop browser** to access and work on homework assignments or view exercise books sent by teachers.

### mozaik STUDENT licence

**User-based licence** that allows a student to use both **mozaBook** and **mozaweb on multiple devices**. Students can also use their free time to explore the media library to review the topics taught in class or learn more about their favorite topics. Students can watch educational videos, practice using games, set up their own virtual labs or learn something new using Mozaik's 3D scenes.

If students use their tablet at home they can login with the same mozaWeb account on Windows, iOS or Android devices. Any **digital textbooks** purchased can be accessed from all platforms.



For more information, please visit [www.mozaweb.com](http://www.mozaweb.com)





**György Medovárszki**  
CEO

[medovarszki@mozaweb.com](mailto:medovarszki@mozaweb.com)  
+36 20 556 6177



**Dr. Ildikó Török**  
business development director

[ildiko.torok@mozaweb.com](mailto:ildiko.torok@mozaweb.com)  
+36 30 269 1279



**Péter Török**  
deputy managing director

[peter.torok@mozaweb.com](mailto:peter.torok@mozaweb.com)  
+36 30 279 4289



## Mozaik Education

Somogyi u. 19, 6720 Szeged, Hungary, Phone: +36 62 554 664  
E-mail: [office@mozaweb.com](mailto:office@mozaweb.com), Web: [www.mozaweb.com](http://www.mozaweb.com)

[www.mozaweb.com/video](http://www.mozaweb.com/video)

