

## INTERNATIONAL EDUCATIONAL PROJECTS

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### 1. Goals

We aim to help the scientifically lonely astronomer in small astronomical institutions. Criterion: Any country or university the IAU helps to develop astronomy must contribute significantly.

### 2. The International Schools for Young Astronomers (ISYA)

The IAU provides travel costs, the local host provides rooms, meals, conference site.

Typically four foreign and some local faculty, 12 foreign and 24 local participants.

Students between B.Sc. and Ph.D. from small institutions are often specialized to their professor's research topic, see their professor as authority. So questions and scientific debate are encouraged. ISYA lectures start on broad topics, funnel to a few topics of current research.

Participants gain a much broader perspective on astronomy, on how science works, and on their own research interests.

Both effective scientific communication and useful practice in speaking English require at least two weeks. Participants from four past ISYA have been surveyed.

They note the broadening of their science outlook and, especially for the 1992 ISYA in China, effects on careers and ability to communicate internationally.

Most benefits accrue for the most active participants. Avoid part-time attendees.

ISYA enhances the local astronomical community and leads to university and government recognition of astronomy.

Given the advent of computers even in developing countries, are lonely astronomers passé? No.

Personal interactions, breadth of view are not provided by e-mail, web or data bases.

### 3. Visiting Lecturer Programs (VLP)

Courses to provide astronomical background enough to enable a few students to study abroad, return to form an astronomical community. Lessons:

Our programs must be in English.

We must be patient for many years. Long-term help from Argentina, Brazil essential.

We must focus on university-level astronomy: astronomy in the schools is too vast for the IAU.

### 4. Teaching for Astronomy Development (TAD)

Aims at creating a future astronomical community, but more flexibly than VLP.

Vietnam: Astronomy and astronomy teaching is thirty years out of date.

IAU supports conference to up-date astronomy for college astronomy teachers, physics students.

Integrated contributions by the IAU, Japan, France, Saunders College Publishing, others. Central

America: Six countries cooperating in astronomy development.

IAU supports annual observing course at University of Honduras, and annual meeting of Central American astronomers. Telescope and its equipment are European- and IAU-donated.

Integrate with M.Sc. course sponsored by European Commission.