



Project Recommendations

TF2: Children & Schools

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2013

Ancient Greece

At a later stage perhaps a local network of schools and other groups of people interested in astronomy, like Astropili, could be formed, which can coordinate astronomical events and facilitate equipment sharing throughout the whole county of Serres. A web site containing astronomical information on objects, techniques and events, providing access to services like equipment sharing or remote observing and members of the astronomy network could act as the link bringing together all those people interested in astronomy and promoting astronomy development locally.

Such a web portal could also act as a link in uniting other similar efforts throughout the globe and facilitate communication among groups which can thus become parts of an international network of schools, universities, research organizations and various groups promoting the development of astronomy worldwide. The OAD can be a vital part of this network, which can initially be formed by the groups which have been supported so far in implementing astronomy oriented projects. This international network would mostly facilitate the exchange of information (scientific, technical, observational, computational etc), the implementation of remote observations through the use of remotely operated fully automated telescopes, the mobility of people through visitor exchange programs and cooperation among people from all over the world in carrying out international projects, such as measuring the earth radius by doing simultaneous object shadow measurements in various places on the earth.

Astronomy for the Visually Impaired

To be able to go on with the project we suggest to establish mechanisms for “adopting” a kit, and to implement a way to “buy one-give one” for people wishing to collaborate with the project. There has been considerable interest from teacher and astronomy groups in developed countries to buy the kits, and this could help finance the kits for underdeveloped countries.

Some of the materials included in the kit are no longer available - or will not be in the next future - like the “The Little Book about the Moon Phases” or the FETTU prints. Therefore, we will have to review the box contents, maybe even making a reduced version of it. This would reduce production costs too.

Alternatively, we can develop more original materials in order to substitute those which will be no longer available. This would also make it easier to sell the kits, as we would have the copyright of all the items in it.

Mathare-Kenya Ambassadors of Astronomy

It would be great if OAD gave more expertise and content-related support to the projects teams. In Kenya we have few astronomers and not all of them are ready to support education in marginalized areas within the relatively small budget of IAU project. Trainings or e-learning astronomy course would be of great help to educators who already have educational background in science and wish to increase their competencies in astronomy.

- When promoting astronomy in Kenya more emphasis should be put on linking astronomy topics with the primary science and social studies curricula. Our experience shows that many teachers are not aware that astronomy topics are present in the primary school syllabus. On top of that, astronomy content in Kenyan textbooks is often outdated and not correct.
- Although present in primary school curriculum, astronomy is not extensively covered in the primary schools in Kenya. Promoting of astronomy requires twofold approach – within the classroom teaching and learning as well as extracurricular activities e.g. astronomy school clubs.
- Evaluation of the project indicated that teachers seek more opportunities of professional development in the field of science and astronomy. They requested more regular meetings to exchange experiences, resources and methodologies.

2015

Astro Science Ambassadors Tanzania

Description	Recommendation
Through the project we learned the importance of proper planning and identification of the key roles of each stakeholder, in order to increase project performance and efficiency.	It is important to identify all stakeholders to be involved in a project and understand their influence on carrying out of the project activities.
The project taught us the need to have identified appropriate communication channels and methods preferred by each project partner for smooth take off of the project.	For proper project implementation there needs to be well known and understood communication structures and protocol.
The project helped us realize and appreciate that learning is a process and should never be rushed. There are different factors contributing to one's understanding and adoption of new practices, and those need to be considered with caution.	It is important to understand your target audience and what they are accustomed to, in order to successfully introduce new practices and finally have them adopted.

Discover the Universe

- It takes much longer to pre-record videos than to present live webinars with the same content! This was the first time we created pre-recorded videos. We used the program Camtasia, which proved to be very easy to use. We liked the results and find this option very interesting even for our regular Canadian workshops. However, the time taken must be considered.
- It can be a challenge to teach the night sky to people located at different latitudes at the same time! We ended up creating three different videos to introduce participants to the night sky for three different latitudes (40° N, 20° N and the equator). Also, teaching about the southern sky when we have never seen it ourselves can be tricky, even when using a planetarium software.
- It is very rewarding to reach participants in different parts of the world. In astronomy, we are used to see the Earth as being very small, but being in touch with participants in many countries, most we have never visited, makes it feel even smaller!

How Big is Earth

We think we need to get a firmer commitment from teachers that they will follow through and do the activity they signed up to do with their students. Granted that we had the date that many students were not in school, that does not excuse teachers from their commitments. We are unsure how to remedy this in the future. Perhaps we could have much more monitoring and conversations online between the researchers and teachers as the project proceeded.

The other important finding from our limited data is that many students were not prepared and had major misconceptions of the basic scientific, geographic and mathematical concepts that should have been mastered by middle school students.

In the future, the researchers should have shared with the teachers the results of the pre activity survey and asked them to “re-teach” some of the necessary content students MUST have in order to develop deeper understandings from using Eratosthenes’ method of measuring the circumference of the earth.

Traveling Telescope

In certain situations we had to project Stellarium on a big wall where a good number of students could learn and ask questions.