



3rd Universe Awareness Multidisciplinary workshop
Lorentz Centre, Leiden, the Netherlands
February 25 – 29, 2008

Introduction

Universe Awareness (UNAWE) is an international programme that exposes very young children in underprivileged environments to the scale and beauty of the universe. UNAWE has been met internationally with great enthusiasm. It has developed into a worldwide community of astronomy enthusiasts who believe in the power of the beauty of the Universe to broaden children's minds and spark their curiosity and world citizenship. In 2007 UNAWE was selected to be a global cornerstone programme of the International Year of Astronomy 2009 (IYA2009).

Following two very successful workshop mid-2005 at ESO in Garching, Germany and end-2006 at the Lorentz Centre in Leiden, The Netherlands, the next logical step in the development of UNAWE was to bring members of the UNAWE network together to discuss the activities and materials used in the implementation of UNAWE in various countries and environments.

Members of the international UNAWE community and selected experts gathered between February 25 and 29 at the Lorentz Centre to focus on the materials, techniques and resources that the programme has developed thus far and should develop in the future.

For three days, 32 participants from 17 different countries shared their ideas and experiences in astronomy education and communication resources for very young children. We welcomed educators who had been present at previous workshops and representatives of active UNAWE programmes that exist in Italy, Spain, Chile, India, Colombia,

South Africa, Germany, Venezuela, UK and Indonesia. We also welcomed members of existing, like-minded organisations with a view to collaboration.

The fourth day was a dedicated event for Dutch primary school teachers (UNAWE Docentendag, see separate report) and on the last day, the UNAWE International Steering Committee got together to discuss the status and future steps of the development of the programme.

The workshop

The participants presented 17 specific educational activities ranging from how to engage a group of young children to making a model of the galaxy using only water and sand. The majority of those activities is now available on the newly dedicated UNAWE Materials website (<http://www.unawe.org/materials>). A number of the demonstrated activities were also used on the UNAWE Docentendag. In addition, a presentation and discussion about astronomy programmes designed for the radio took place.

Moreover, desired materials and their production in different parts of the world were discussed: children's books, posters, teachers' manuals, games and toys, models, simplified scientific instruments suitable for children, cartoons, astronomy kits ("the Universe in a box").

Some of the materials were discussed in the context of professional design and production, while others were said to be preferred as hands-on, do-it-yourself models and instruments.

Evaluation was discussed at length, especially the aspects of children's understanding, their development and attitude. Those evaluations are not trivial like testing only acquisition of knowledge.

Outcomes

A number of new collaborations and projects were initiated thanks to this workshop, e.g. UNAWE Kenya or a collaboration with Pratham, an organisation in India who reach about 100,000 children in the UNAWE age range at any time.

One valuable lesson learnt from collating the materials for publication, is that UNAWE materials currently available cover some topics very thoroughly (e.g. the solar system) while others are hardly covered (e.g. galaxies). It should be noted that this is not an indication that those topics are too difficult for children, rather that they are too new to have reached general scientific culture.

A new website acting as a repository and online database of materials has been developed since the workshop.

Conclusion

The idea that began UNAWE, has now evolved into a successful international programme bringing together like-minded organisations dedicated to making the inspiring nature of astronomy accessible to children who would previously never have encountered it.

This was amply demonstrated in the workshop by the range of materials that are actively in use in a variety of cultural and environmental contexts. These activities are fun. They are inspiring very young children and in many cases they are now a permanent platform on which to build long term sustainable programmes.