

# IANAS SCIENCE EDUCATION PROGRAM

## Strategic Planning Workshop

November 7-9, Buenos Aires, Argentina

### IANAS SEP SWOT ANALYSIS

#### Strengths

1. Involvement of 18 American Academies of Sciences that bring high credibility and prestige.
2. IBSE is a continental program supported by a world program.
3. Informal agreements between the Academies of Science and the Ministries of Education in several countries.
4. Involvement of international experts in Science Education.
5. Facilitates exchange of regional experts and sharing of resources within the region.
6. Potential to mobilize science community to participate in the program.
7. Implementation of IBSE in primary schools in many countries since 2001.
8. Regional inclusion of science issues in the official curriculum at primary school levels
9. Potential for international collaboration and improvement of standards.
10. Institutional framework and forum for cross-fertilization of ideas/disciplines in a "multi-lingual body".
11. National programs exist in good stages of development in some countries providing a learning platform for other member countries
12. Establishment of the IndagaLA portal for exchanging resources and experiences.

#### Weaknesses

1. Mission and role not clearly understood (or even known) in some countries of the region.
2. Limited financial resources requires external funding which is very difficult to obtain.
3. Often lacks government recognition and support in some countries.
4. Frequent changes in the Ministries of Education in many countries.
5. Weak ties with private sector
6. Organization lacks a coherent structure and dedicated staff resources.
7. Organization lacks structured program to obtain economical resources, continuous assessment and evaluation of results.

## **Opportunities**

1. Share resources, personnel, and experience in science education reform.
2. Address specific aspects of science education: curriculum, pedagogy, professional development, assessment and evaluation.
3. Engage with Ministries of Education to improve the quality of science education in primary and secondary school.
4. Possibilities to improve interactions regarding science education between countries thus contributing to build up a model for learning communities in the region.
5. More effectively engage OAS, IAP, IAC, etc. in the work of IANAS science education program.
6. To influence official science education policies, address major regional forums (eg: OAS), governments, stakeholders and approach to potential donors for funding.
7. To establish agreements with Universities within the framework of IANAS-SEP
8. Formal agreements to teach inquiry based science education between the academies and ministries of education.
9. Develop a coherent structure, strategic plan and staff resources.
10. Develop a position on the role of technology on IBSE education

## **Threats**

1. Global economic turmoil.
2. Increasing disconnection between Science and Technology and society – in areas of science education.
3. Reduction or elimination of regional and Global Funding.
4. Shifts in governments many times bring discontinuity to programs
5. Lack of sensivity of governments to the problems in education and scarce funding
6. Increasing number of Academies lacking appropriate in-country IBSE assessment practices, evaluation and reporting to the program.
7. Critical mass of human resources in some countries, lack of trained in-country science educators.
8. The future of the Educational Program may be at risk of weak continuity due to the lack of more sponsors.