African-European-Mediterranean (AEM) Academies for Science Education (AEMASE) conference, 12-13 October 2015, Dakar, Senegal

Dakar Declaration on Science Education and Science-Based Citizenry, October 13, 2015

AEMASE partner institutions held the 1st international conference on science education in Rome in May 2014, hosted by the Accademia Nazionale dei Lincei, with the support of IAP. The second edition AEMASE II was held on 12-13 October 2015 in Dakar-Senegal and was hosted by the Académie Nationale des Sciences et Techniques du Sénégal also with the support of IAP. The conference has gathered scientists expert on science education from different countries: Senegal, Benin, Burkina, Cameroun, Morocco, Nigeria, Tanzania, South Africa, Tunisia, Italy, France, England, Germany, Belgium, Argentina and Sri Lanka. NASAC Hungary, represented by its President who also represented IAP at the conference. ALLEA was represented by the chair of its working group on science education. The delegates discussed various topics related to Inquiry Based Science Education (IBSE), to Science, Technology, Engineering and Mathematics (STEM) and to Science-Based Citizenry (SBC). They shared the experiences undertaken in their countries and discussed the various challenges for the future of SE programmes within the AEM region.

The Dakar Declaration calls:

• on all countries in the AEM region to urgently implement and consolidate IBSE/STEM/SBC education programmes in order to help all kids, students and the entire society acquire adequate basic scientific knowledge and intellectual tools for a rational approach of situations. This critical thinking approach is necessary towards any event and particularly towards any discourse of isolationism or radicalisation. It also helps prevent non-rational behavior towards communicable diseases, food security and inclusion of young girls in science.

- on the United Nations Educational, Scientific and Cultural Organization (UNESCO) to include IBSE/STEM in the strategic plan of the United Nations and work with science academies and networks of Academies in the AEM region to work out a long-term strategic plan on Science Education
- on the European Commission, the African Union, UNESCO and the African Bank of Development, Islamic Bank of Development and World Bank to support the collaboration and the partnership on IBSE/STEM/SBC education between European and African Institutions and Academies.
- on the Academies and the Ministries of education to rethink Science Education Programmes to include the new ways of teaching and learning, as well as the new global way of communicating among children and youth with the use of powerful information and communication technologies and social networks.
- on foundations, philanthropic and charity organisations, donors and the private sectors to invest in the programmes of science education and science literacy, particularly in Africa and the AEM region