

Science Education for Youth Workshop: Capacity building

Dr. Jane Yau, DIPF Leibniz Institute for Research and Information in Education, Germany

Dr. Siok Yee Chan – University of Science Malaysia

Dr. Karen Cloete, University of South Africa

Workshop for 20-30 participants

Part A – 90 minutes including Q & A and coffee break

Part B – 90 minutes activity for each workshop participant to summarize their research topic to be published collectively as a GYA booklet titled *“Inspiring science topics for youth”*

Concept Note:

Part A includes five sections as follows:

- 1) A description of the current global situation with an increasing number of learners daily being displaced due to war, the pandemic, effects of climate change, poverty, food crisis etc. The UN’s Global Fund for Education in Emergencies “Education Cannot Wait” estimates 222 million crisis-affected children and adolescents;
- 2) Inspiring stories including that of Sugata Mitra and the 60 Million Girls Foundation will be shared. In 2021, this foundation celebrated their 15 years of voluntary work resulting in huge impact in many communities around the world, giving and allowing many girls and boys to stay in education by building school infrastructure, providing clean water supply and learning materials, via a Mobile Learning Lab, which consists of a server, tablets with WIFI, 1TB of learning content (e.g from Khan Academy) and a solar panel for charging the devices (and therefore does not require access to Internet or electricity). Evaluation results of over 1000 learners showed that their scores in literacy and mathematics as well as self-confidence and motivation improved;
- 3) Initiatives for increasing the number of children with access to education from other non-profit organizations including UNESCO will be shared;
- 4) The use of games to increase citizen engagement with important global issues such as the climate emergency (a newly-funded 3-year European project) will be shared. This citizen engagement and their views will be directly passed onto the relevant policy-makers; and
- 5) The concrete actions that we can today take to advance the UN Sustainable Development Goal 4 – quality education for all – will be presented.

Part B includes a brief introduction of the science communication basics, and then is dedicated for each workshop participant to summarize their research topics in an inspiring and accessible way. Tips, help and suggestions will be given. All of the summaries will then be collectively published in a GYA booklet titled *“Inspiring science topics for youth”*. Beyond the workshop, there would be an opportunity for participants to individually produce a video clip of their summary, which will then be collectively produced as a video version of the booklet.