Argo Education Workshop
Feedback for AST-17

T. Morris, M. Scanderbeg, M. Belbeoch, E. Rusciano, H. Freeland and participants to video conferences and discussions
Initial discussions – WebEx Meetings

- 11 June 2015:
  - Megan Scanderbeg (Scripps – USA), Carol Young (SEAREAD - NZ) and Jake Dagget (San Diego school teacher- USA)

- 18 June 2015:
  - Mathieu Belbeoch and Martin Kramp (JCOMM - France), Tammy Morris and Thomas Mtontsi (SAEON - SA), Abel Caine and Davide Storti (UNESCO – Paris), Toshio Suga (JAMSTEC – Japan), Carolyn Scheurle (LOV, France) and Carol Young (SEAREAD - NZ)
Feedback – 11 June 2015

• Carol Young – SEREAD:
  – SEREAD works with schools from southwest Pacific Islands and Mauritius in various age groups.
  – Schools in Mauritius forming after-school clubs to learn about Argo and virtually adopt floats, as no space in standard curriculum for this type of teaching (similar in South Africa and other places)
  – A ~ 2 day competition being organized between to schools on analysis of pre-selected floats from around the world. Presentations will be made by the learners to the greater education group.

• Educators are keen for (potential objectives of a workshop):
  – What are other educators in teams / countries doing around the world, specific to their unique environments? Inter-change of methods and ideas.
  – Internet and broadband is a very big problem for developing countries, and workable solutions for training around this would be useful to discuss with other teams / countries
  – What do climate scientists and oceanographers do with the Argo data? How is it being used to tackle today’s big problems such as climate change and sea level rise?
  – New Argo float technologies and how do these work?
Feedback
18 June 2015

• Abel Caine - Youth Mobile Initiative:
  – UNESCO keen to get more involved and a follow up meeting with Mathieu was planned (Mathieu – feedback)
  – UNESCO has the following branches Argo Education Workshop could slot in:
    • Science Education Unit
    • Education Sector, which has a side branch linked to global citizenship looking at concepts within maths and science education
    • The Communication and Education Sector – which Abel is a part of and where the Youth Mobile app was developed

• Workshop ideas / objectives suggested:
  – Two levels at which a workshop could be hosted
    A) International, regional and national initiatives
    B) Different education levels (primary, secondary, tertiary)
  Either route should include a civic outreach section; for example sailing and shipping communities
  – Workshop needs to present ‘packages’ of information which an educator could adapt for their unique environments (education level, internet accessibility, technical aspects, etc)
The YouthMobile Initiative builds on the experience of many worldwide initiatives that introduce young people to computer science programming (learning-to-code) and problem solving (coding-to-learn). It also seeks to build on experiences targeting young women who are vastly underrepresented in this field. Finally it builds on the consideration that for millions of young people, the smartphone in their pocket is a very powerful computer, it will be their only computer, and they use it for nearly every aspect of their lives: communicating, learning, taking pictures, and playing games. With this new initiative UNESCO and its partners strive to provide young people with the high-level skills and confidence to develop, promote, and sell locally relevant mobile apps that solve local issues of sustainable development and provide employment.

WHO BENEFITS FROM YOUTHMOBILE?

» Youth and Youth organizations
Informal learning opportunities for youth to engage in society and earn livelihoods as mobile app entrepreneurs. ICT-enabled youth organizations creating a sustainable pool of trainers, support staff, and mentors.

» Secondary School Students
Acquiring high-level 21st century skills and confidence to develop/promote mobile apps to resolve local issues of sustainable development.

» Teachers and Principals
Teaching a new, innovative course in mobile apps development, acquiring ICT-pedagogy skills, connecting the school to other schools nationally and globally.

HOW?

» By gathering training materials to teach young people to develop mobile apps. The materials will be high-level and open-licensed for translation, localization, and innovations. Training materials will be pedagogically accurate for accreditation and employer recognition.

» By training teachers to teach the students. UNESCO will be identifying all schools worldwide with existing programs for advanced computer studies.

» By linking existing competitors to each other through the creation of the first global list of app competitors. This way encourage trained students to submit apps for prizes, recognition, and employment opportunities.
Feedback – 18 June 2015

• Workshop hosting possibilities:
  – Japan AST-17: Opportunity for Dr. Howard Freeland to present to ~ 20 educators in Sendai as a guest lecturer hosted by Prof. Toshio Suga
  – There was a potential for side meetings at COP21 (Paris – November 2015) and Ocean Sciences (New Orleans – February 2016), but these were not taken up
  – Potential first workshop to be held in Brest, France, in 2016 and hosted by JCOMM and the Argo Office (Mathieu’s team). This needs to be confirmed by the host team once the agenda is confirmed
  – Potential second workshop to be held in Cape Town, South Africa, in 27 August – 01 September 2017 as a side meeting to the IAPSO-IAMAS-IAGA Meeting (website being developed at http://www.iapso-iamas-iaga2017.com/). Hosted in collaboration with UCT and SAEON, with additional potential partners.
CAPE TOWN WELCOMES YOU

IAPSO-IAMAS-IAGA

27 August – 1 September 2017
Cape Town, South Africa

www.iapso-iamas-iaga2017.com
Moving forward...

- Deciding on a way forward regarding the agenda (as noted previously), and we would appreciate comments / ideas from the AST:
  - Two levels at which a workshop could be hosted
    A) International, regional and national initiatives
    B) Different education levels (primary, secondary, tertiary)
    Either route should include a civic outreach section; for example sailing and shipping communities
- Various initiatives are ongoing (over and above those mentioned already):
  e.g. South African schools program (Thomas Mtontsi at SAEON) in collaboration with the UK MetOffice will initiate an Adopt-a-Float project for the four floats being deployed from the ASCA Cruise in April 2016
- Final plans for a workshop in Brest, France in 2016 (Mathieu)
In memory of Capt. Peter Flanagan of the *Lady Amber*

The research yacht *Lady Amber* in Table Bay, Cape Town (above).

Capt. Flanagan in Mossel Bay with the GLOBE project (above)

Capt. Flanagan with The Hon, Dr V. K. Bunwaree, Minister for Education, and Dr Carol Young at the SEREAD Workshop in Mauritius in 2014 (left). Photo by Ashan Purmessur