HORIZON 2020

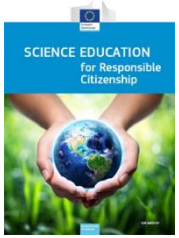
- *SWAFS NCP Info Day*
- *Brussels, 25 November 2019*

- ***Karen Slavin – Science Education***
- *RTD G2 – Academic R&I and Research Organisations*

PRESENTATION OUTLINE

- Science Education in H2020

- SEEG Report



- Other actions to be funded: SCIENTIX, EUCYS and more….

- SWAFS-01-2018-2019 - Open Schooling and collaboration on science education (CSA)

Science Education in H2020 - the story so far….

Science Education **forms the basis for the full achievement of the Innovation Union and the European Research Area.**

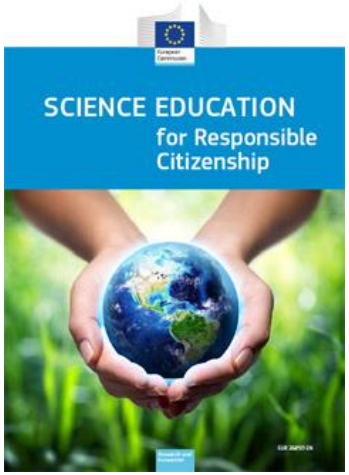
Creative and innovative formal and informal teaching and learning help young people make the best use of their capacities and capabilities to become a force of innovation and to address the challenges faced by young people when pursuing careers in Science, Technology, Engineering and Mathematics (STEM)

Horizon 2020 **has been financing a range of initiatives to pursue greater participation of young people in science and encourage long-term scientific careers. Projects include formal settings of science education (e.g. schools) and non-formal, out-of-school teaching settings (e.g. science parks, science museums and events).**

Slightly different emphasis since 2016….

European Commission

….The different emphasis follows the publication of "Science Education for Responsible Citizenship" which makes recommendations on how best to equip citizens with the skills they need for active participation in the processes that will shape all of our futures.
The current Open Schooling call is one of the recommendations of this report



http://ec.europa.eu/research/swafs/pdf/pub_science_education/KI-NA-26-893-EN-N.pdf

SWAFS-01-2018-2019-2020 : Open Schooling and collaboration on SE (CSA)

*The action calls for **collaboration** between **education providers**, **enterprises** and **civil society** to ensure relevant and meaningful engagement of all societal actors with science to increase the uptake of science studies and science careers.*

Now - Two stage submission, of which more later!

SWAFS-01-2018-2019-2020 contd.

Challenge **-** We need to expand opportunities for science learning. We know European citizens, young and old, appreciate importance of science and want to be more informed. Action calls for **collaboration** between **education providers, enterprises and civil society** to ensure relevant and meaningful engagement of all societal actors with science and increase uptake of science studies and careers.

Scope – Activities based on **collaboration** between **formal**, **non-formal** and **informal** education providers, enterprises and civil society to **integrate concept** of **open schooling** in SE. Schools and other stakeholders become agents of community well-being; families encouraged to become partners in school life, professionals from enterprises and civil and wider society should actively be involved in bringing real-life projects to the classroom. Gender and geographical differences should be considered.

EUR 1.5 million but other amounts considered

Expected Impact **–** Action targets **creation of new partnerships** in **local communities** to foster improved science education for all. **Short term**: develop partnerships between schools, local communities and local industry.

SwafS-24-2020: Science education outside the classroom (RIA)

Science education outside the classroom i.e. informal science education, and the effects of non-educational activities, are not well explored.

Acquiring and evaluating knowledge, often with the help of the Internet, is happening in reality, and should be recognised for what it contributes in terms of more sophisticated consumers and scientific citizenship.

Consideration on what is available and what is being learnt would be useful to understand how science education outside the classroom influences today's citizens.

1.3M – 1.7M euros per project, 2 projects to be funded

SwafS-24-2020: Science education outside the classroom contd...

Challenge **-** Consideration on **what is available** and **what is being learnt** would be useful to understand how science education **outside the classroom influences today's citizens.**

Scope – The **available knowledge** on science education outside the classroom and its impact on citizens need to be **analysed**, taking into account possible gender and geographical differences. Consideration on impact outside schools, **possible accreditation and quality.**

Expected Impact **– Short term:** Proposals to **identify good practices** in terms of science education outside the classroom and consider the **impact** this information has on formal and informal science education for **students and citizens**. **Medium term**: results to **help EU better understand** effects of science education outside classroom and increase range of innovative products to reflect societal needs. **Long term: possible accreditation** of results.

Definitions on formal, non-formal and informal learning and Open Schooling…

Formal learning *– learning that occurs in an organised and structured environment (e.g. in an education or training institution or on the job) and is explicitly designated as learning (in terms of objectives, time or resources). Formal learning is intentional from the learner's point of view. It typically leads to validation and certification.*

Non-formal learning *– learning which is embedded in planned activities not always explicitly designated as learning (in terms of learning objectives, learning time or learning support), but which contains an important learning element. Non-formal learning is intentional from the learner's point of view. It can take place in museums, science camps/ clubs etc.*

Informal learning *– learning resulting from daily activities related to work, family or leisure. It is not organised or structured in terms of objectives, time or learning support. Informal learning is mostly unintentional from the learner's perspective.*

Open Schooling *– institutions that promote partnerships with families and the local community, with a view to engaging them in the teaching and learning processes but also to promote education as part of local community development.*

Other actions that will continue to be funded

Scientix, the community for science education in Europe was developed to ensure a wide uptake and dissemination of STEM education practices.

The European Commission also recognises that science events to inspire and mobilise young people, are more important than ever. The annual ***European Union Contest for Young Scientists (EUCYS)*** *is one of Europe's premier events for showcasing young scientific talent. It brings together winners of national science competitions (young people between 14 and 20 years of age) to compete with their European counterparts.*

EUCYS 2019 was organised in Sofia and EUCYS 2020 will take place in Salamanca

European Union Contest for Young Scientists (EUCYS)

Project based contest for Young Scientists aged 14 – 20 - Forerunner to IBSE!

Strengthen the efforts made in MS to attract young people to careers in science and technology.

Promote the ideals of co-operation and interchange between young scientists; to showcase the best of European student scientific achievement and as such attracts widespread media interest.

Very successful event in Sofia in September ☺

Subjects

- Projects can be submitted to the contest is all disciplines of science and technology including
- Biology, Chemistry, Physics, Mathematics
- Engineering
- Computer science
- Environmental science
- Medicine
- Social Science

European Commission

Prizes are awarded to Projects

- Main prizes are the EC monetary prizes
  - 3 First prizes of €7000
  - 3 Second prizes of €5000
  - 3 Third prizes of €3500

- Two Honorary prizes associated with the 1st prizes
  - Visit to London International Science Forum
  - Visit to Stockholm International Youth Science Seminar including tickets to the Nobel Prize ceremony

- Special donated Prizes
  - 8 projects visit CERN, EFDA JET, EMBL, ESRF, ESA, ESO, ILL, XFEL
  - Up to 8 contestants visit JRC Institutes at Ispra, Italy
  - Visits to BBI, FooddrinkEurope

Thank you for your attention!

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EC DG RTD G2