

Performant STEM/Science education: what links between formal and informal science education in Asia and the Pacific region science centres and museums?

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It is widely recognised that Science education is pivotal in the development of human resources who will be able to innovate and invent the technologies of tomorrow and solve technological issues of the future. However, science education is still under-performing in many countries and its performance is even dropping in few. Moreover, less and less youth choose studies and careers in science, and science and STEM careers have become less attractive. So who will solve our problems in the future?

Asia and the Pacific region scores extremely well on international science and mathematics tests like PISA or TIMSS with the top 2 being Singapore and Japan and 7 others countries of the region in the top 10 (PISA, TIMSS 2015). Interestingly, the region also hosts very innovative and popular science museums and centres. Therefore the hypothesis of this paper is that science education should be provided in a formal and informal way with schools and science centres and museums working hands in hands. However what are the schemes for both in terms of mandate and policies and how do they practically collaborate in the different country of Asia and the Pacific region?

A regional survey was conducted from January to March 2019 through UNESCO network of Science Museums and Centres asking in order to understand if there were any necessary and sufficient conditions in terms of relationships and coordination, policies and framework between informal and formal science education. The preliminary results and analysis will be presented in this paper.