



Committee: UNESCO

Topic A: Promoting science education in developing countries

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The UNESCO was founded back in 1945, but it was not until 1948 that it was inaugurated; the specialized agency's permanent headquarters building is located in Paris, France. The organization counts with 11 associate members and 193 members states. UNESCO stands for United Nations Educational, Scientific, and Cultural Organization. The UNESCO tries to achieve their objectives through five major programs: culture, education, natural sciences, communication/information and social/human sciences. UNESCO is dedicated to guide people in a more effective management of their own development, through cultural values and natural memories. This organization, is focused on innovation, new ideas, creativity, share knowledge and protect human rights, it trains and supports teachers, researchers, artists, and journalists. The UNESCO has seventeen sustainable development goals that are trying to achieve, some of those goals are: no poverty, good health, peace, and justice, quality education, no hunger and more, to achieve these goals we need to build stronger partnerships with citizens, governments, and businesses.

For UNESCO promoting science education at all educational levels is fundamental, and it has been a priority since its inception. Many developing countries, over the last two decades have invested in improving access to, and enhancing science education. In many developing countries, there is now some experience with some science education systems at the secondary and higher levels, the impact that these brought has not always been good and

lived up to the expectations. The most initiatives have been taken for the secondary science levels. The context of science education development in developing countries, reviews. How the circumstances for the following development is not the same, they have changed. National science policy, and science education objectives, the policy issues discussion leads to the exploration of how aims are derived, questions about the process are raised. Promoting education in developing countries is a brilliant idea, and everyone likes it, but is hard to accomplish that kind of goal because of the availability offered by the country, not all the countries have the same social and economical levels.

Science education development takes an expansion of school enrolment since the 1960s is a characteristic from the majority of the developing countries; the most rates of growth have always been higher at secondary levels because is where the most science is taught. New methods tended to assume motivated and qualified teachers working with the adequate resources. The post-independence emphasis in many African countries on getting

better the unemployment through bringing more vocationally and better material into the school curricula was noticed by Yoloye and Bajah (people that have reviewed and evaluated the science education in Africa). An issue that is more severe than in the past is the participation of disadvantaged groups in science education.

National science policy and science education aims. The objectives given in all the different national systems have a variety of sources. Rowntree (1974) developed a typology that differences three different origins, those are:

- Expectations about future needs in society (this one mixes the ones that arise from the science policy debate with the ones that reflect educational concerns with citizenships),

-Analysis of the activities of subject matter of specialist (this second one utilises a conventional view educational practice that is focused on training),

- Analysis of the structure of subject matter itself(this last one relies on philosophical discourse to be able to identify the inherent logic of a subject that needs certain selection of context).

Orientation of science education. The range of aims given for the secondary science programmes in different systems is really extensive, as expected. Science courses at the lower secondary level will normally include knowledge of some basic scientific facts and the ability to apply them; at the upper secondary level there are more likely to be more aims that look up to develop theoretical understanding and formal reasoning abilities. The situation is made even more complex by the fact that the objectives can be achieved. Malaysian secondary science resources developed in the 1970s shared a lot of common goals with the ones of Nuffield programmes in the United Kingdom but the form of the resources that were developed differed considerably from the programme referred before.

Factors affecting achievement in science education. Heyneman and Loxley's study back in 1983 examined a range of school variables and regressed the science achievements scores against the in 13 different developing countries. The very large literature that now exists effectiveness is difficult to resume. More than 50 experimental studies now exist relating to the developing countries; all these studies are diverse in a methodological way, some of them vary in terms of specification and independent variables. The synthetic reviews have additional problems that make it really hard to decide the importance that we need to give to the findings that appear true in some systems but not in all systems.

Implementation and organizational issues. Many models have been developed for all kinds of

phases at the innovation process. In the most general level are the ones that can be identified overarching theories, encompassing initiation, implementation, development and evaluation outcomes. The models that have the most widely quoted and the most initiative in literature are the ones related to the work of Havelock, Chin and Benne. The latter classified innovation strategies into normative-re-education, rational-empirical, and power-coercive. This has led many attempts at synthesis and several subsequent formulations. Lewin in his work on science education development marks the innovation process in five key phrases, which are:

1. Project initiation
2. Contextual constraints
3. Course development process
4. Implementation strategy
5. Examining assessment policy

Social and economic levels in all of the developing countries. Each country counts with different economic, in every country there are groups of people, the ones that are an elite' group, meaning that they have the economic and social resources to have what we can call a good life-style, they can allow themselves to have a good education meanwhile we can the group of people that can not allow themselves everything that the other groups in their civilization can, they have to work double and harder so they can be able to get at least something for their loved ones.

There are many solutions that we can do to help people that live in a developing country to get the science education that they deserve because education reduces poverty and increases economic, so they can have a better future, the best solutions are: reduce the cost of

education, educate the parents, a new educational system and improve the resources that we have. Finally, always remember that is very important to help and that every single action counts.

References:

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