

SCIENCE AND TECHNOLOGY EDUCATION FOR GLOBAL CITIZENSHIP

What is education for global citizenship

- Involves altering the traditional mode of instruction to one which effectively links the subject content to be studied with relevant local and global issues.

- Based on globalization which can be defined as a set of processes through which activities, decisions, and events which happen in a certain part of the earth will have important impacts among the people and communities in other parts.

- Slogan “think global...act local has strongly influenced the thrust in global citizenship education today.
- It requires a different approach to education where students are actively engaged in in-depth coverage of topics of national and global relevance.

Global issues and challenges

- Many challenges that we face as a small island developing state are global in scope and scientific in nature.
- E.g. Issues such as global warming and climate change, atmospheric and water pollution, depletion of water and energy resources, use of bio-technologies such as GMOs, stem cell research, cloning.

Facing the challenges

- Requires a response from our education authorities.
- This response must include a science curriculum that promotes the development of scientific literacy in our students.
- The trend of the ‘mass dropping’ of the science subjects at senior secondary schools must cease.

- Citizenship implies participation in the decision making processes that contribute to the development of societies.
- The low levels of scientific literacy in the St. Lucian population “...excludes them from the decision making processes associated with many controversial applications of science and technology” Ronald Johnston

Issues with current science education that work against the development of global citizens.

- Inappropriate science teaching strategies which favour content presentation at the expense of developing students' understanding of the social relevance of the subject.

- Low science qualifications and poor attitudes to science of many primary school teachers.
- So the level of science proficiency that would allow the kind of science instruction that would contribute to the development of scientifically literate citizens is lacking.

Focus on preparing students to pass examinations

- Excessive pressures on principals and teachers to live up to expectations of student passes are sometimes unrealistic.
- Leads to inappropriate teaching strategies.

Perceptions of science as a school subject

- Over emphasis on learning the complex technical language of science in school curricula at the expense of establishing relevance and meaning.
- Compounded by the focus on breadth of content in the school curriculum.
- Inadequate facilities for science in schools where the unfortunate perception is relayed that the students are not able to do the pure sciences.

What can be done?

- Review of science curricula to focus on depth rather than breadth.
- This would allow teachers to use the inquiry-based strategies that would facilitate student awareness of important local and global scientific issues
- Schools adequately equipped with the necessary facilities to facilitate effective instruction based on the new curricula.

- Make science compulsory for all students at the CSEC level.
- A re-thinking of the purposes of examinations and the uses made of examination results.
- The quality and qualifications of our teachers have to be improved, as well as suitable remuneration for their tremendous efforts.