

SPEECHES

SPEECH BY THE HONOURABLE LIVINSTONE N. COAKLEY MINISTER OF EDUCATION & CULTURE AT THE OPENING CEREMONY

I am indeed happy to have the opportunity to welcome you and to share a few moments with you on the Government's view and focus on science education.

Today we live and work in a world that is fast developing into a technological and highly scientific society. My Government has taken note of this trend and has taken steps to improve our forward thrust in the area of science. Many new and innovative ideas are being introduced and present science courses are being updated. You will recognize readily that this is a costly process and we welcome workshops of this nature that will help us to cut some of the cost of materials that will be needed.

Ours is a science-oriented society. Our boys and girls become familiar at an early age, at their own level of comprehension, with the multitude of ways in which the products of science become a part of their lives. At the adult level, those of us who will guide these children are aware of the ways in which science has drastically altered the dimensions of the world and of our lives. Therefore, we no longer hear the query of a hundred years ago, or even only a generation ago, of "Why should we teach science?"

Common agreement among educators has resulted in including the natural and physical sciences as one of the basic areas of the science school curriculum. But since far too many people think of science solely in terms of its launching of space capsules, its invention of new drugs, and its contribution to material comforts, the task of the science teacher must be carefully considered. The development within the pupil of a scientific attitude should be the goal of the science teacher.

The aim of an adequate science programme is to stimulate interest in the forces, phenomena, processes, materials, and living things, that make up a large part of children's everyday world. It is the aim of our science curriculum to help children acquire those scientific understandings, attitudes and skills which will foster personal development and full participation in a changing Bahamian society.

Recently my Government has initiated programmes and projects that will develop our students to what we hope will be a competent level of knowledge and appreciation for the world of science. Briefly, I would like to give you some idea of what steps we have taken to update and develop science education in our schools.

My Government is carrying out a major re-evaluation of both the content of and prevailing negative attitude toward the sciences and technical and vocational education, especially in the fields of agriculture and fisheries. No efforts will be spared, therefore, in determining the role of education in these areas and in accomplishing established goals.

In the primary schools the first structural curriculum for science education is soon to be introduced. It will cover grades one to six. At the junior secondary level three of the sciences are offered, namely General Science, Health Science and Biology. A few of these schools also offer Agricultural Science to their students. Curricula in these areas are presently being revised. Specialist teachers in the areas mentioned above are found in all of the junior high schools and central secondary schools with the exception of Agricultural Science. Specialists in this area are found in those schools which have Agricultural Science programmes. Students may write the Bahamas Junior Certificate Examination in General Science, Health Science and Biology at the end of grade nine.

Science subjects offered at the senior secondary level are as follows:

- (a) Bahamas Junior Certificate level in General Science, Health Science and Biology:
- (b) General Certificate of Education "Ordinary" level in Human Biology, Chemistry, Traditional Biology, Physics and Integrated Science:
- (c) The Senior Secondary Agricultural Science syllabus was introduced at the beginning of this school year. Prior to this time, the Junior Secondary Agricultural Science syllabus was used as a basis for starting the programme in the senior secondary school. The syllabus is geared toward meeting the needs of the vocational and academically inclined students in this field:
- (d) Marine Science is being gradually introduced into secondary schools in the Family Islands, and plans are also well underway for the development of Marine Science in one of the senior secondary schools in New Providence. My Government hopes to implement this programme in other senior secondary schools in the very near future. Qualified staff has been employed to work in this area.

There is an abundance of things in our Bahamian environment to interest and challenge us - things to watch, things to experiment with, things to investigate, and things to discuss. All the world lies before the student, to be explained and understood in its parts, and more important still, in the inter-relationship of these parts. Thus, an organized presentation is essential if the present generation is to grasp not merely facts, but inter-relationships as well.

One of the goals in my Government's ambitious programme is to restore the dignity of work with one's hands as well as one's brain. We are committed to making the fullest and most economic use of the cost of facilities and equipment for technical and vocational education.

I am pleased to say that within our midst are a number of industries that operate primarily on the scientific level. Among these are oil refining, oil trans-shipment, cement, rum and salt production. We are also blessed with the constant input by renowned scientists using the natural resources in our waters and land throughout the Bahamas, the Bahamas National Trust and the Agricultural Complex - BARTAD - on Andros. A growing number of Bahamians are entering the field of science and are lending their expertise to these industries. My Government is now in the process of getting our returning scientists into our educational system where they can share their knowledge and skills with our hopes for the future of our young people.

Our society and government today are convinced that education pays both economically and socially, and all evidence seems to support our convictions. Therefore, it is imperative that we continue to strive towards the improvement of our education in the field of science. My Government has begun and will continue to make strides to develop the area of science in the future. We are aware that scientific literacy is an asset to modern living. It is hoped that through our efforts to improve upon our present scientific status, all our citizens will be able to fully appreciate our world of technological and scientific advancement.

My Government would not advocate that teachers should sacrifice subject competence for psychological sophistication - but the time has arrived when we should expect a sounder appreciation of methodology and the nature of the learning process. We would like to see more of a commitment to the desirability of shaping growth in our pupils in such a way as to promote the ability to adapt to the pace, changing conditions, and demands of today's world. My Government sees science education containing materials and ideas that will help our students to facilitate transferability of knowledge, flexibility of thinking, tolerance of differing points of view, and the ability to accurately distinguish between the relevant and the irrelevant.

We are accountable to our society to see that students are prepared to deal with the ever present challenges that will confront them, whether these be social, intellectual or vocational.

A course in Science may be successful only if it affects a person so that he develops a true scientific attitude. A person who has developed such an attitude reacts toward his environment in distinct ways - ways totally different from those of a person who has no understanding of scientific value.

Today, I am extremely proud and my Government is grateful that such an esteemed body as the Commonwealth Secretariat has chosen our country to hold such an important regional workshop as this one. We are happy to play host and we are sure that all of our people will continue to give you the Bahamian hospitality that we are famous for - friendliness, warmth, and our sea, sun and sand. I hope that some of our sand will remain in your shoes and you will return to our lovely country in the very near future. May your work, discussions and social inter-mingling be productive and fruitful during the two weeks of this workshop.

It is my pleasure now to officially declare the Commonwealth Caribbean Regional Seminar/Workshop on Low-Cost Teaching Equipment open.