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CURRICULUM DEVELOPMENT

in

INTEGRATED SCIENCE

for

FORM ONE to FORM THREE

in

MAURITIUS

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requirements for the degree of

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GLOSSARY

A.S.E	-	Association for Science Education
C.J.S.E	-	Certificate of Junior Secondary Education
I.C.S.U	-	International Council of Scientific Unions
M.I.E	-	Mauritius Institute of Education
M.I.S.P	-	Mauritius Integrated Science Project
S.C.I.S.P	-	Schools' Council Integrated Science Project
S.T.E.P	-	Science Teacher Education Project
U.N.D.P	-	United Nations Development Programme

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A B S T R A C T

During the past decade, Integrated Science curricula and courses have mushroomed all over the world. Likewise the Mauritius Integrated Science Project came into existence in 1976. Implied is that this 'new' science course is also a 'better' course. Is it and can it be improved?

After retracing the history of Mauritian education and showing how the education system was shackled to the powers that be, mention is made of how the wind of change started blowing over the education system. The birth of M.I.S.P is hailed; its aims and objectives are then discussed. This centres on the meaning of Integrated Science, its composition and where M.I.S.P stands with regard to it.

Philosophical concerns for the nature of science, the relevance of science education as well as the social implications of science education, all these concepts are treated at length. It is the thesis of this author that if these three concerns are not taken into consideration in curriculum development work for a science course at primary and secondary education levels, then we would only be scratching the surface. In consequence, an in-depth analysis of the scientific method is called for. How far the M.I.S.P teaching approach diverges from this scientific method is then exposed.

The dichotomy between the process of science and the product of science is fully discussed. It is suggested that school science, based essentially on the product of science, despite teaching approaches to the contrary i.e guided discovery method, will do more harm than good. It is proposed that the process is the all important factor in science education. Learning through science rather than learning science is upheld to be the goal of science education. Scientific thinking should predominate over scientific knowledge at the level of education under consideration. This is said to have survival value and is viewed as the Education for Tomorrow.

Proposal for changes in the structure and contents of M.I.S.P is made. The implementation issue is emphasised, especially in terms of teacher training and examinations. These two factors are considered essential to the success of M.I.S.P. Otherwise a new orthodoxy will set in.

I N T R O D U C T I O N

In the Indian Ocean, just within the Tropic of Capricorn and about 1500 miles from the east coast of Africa, lies Mauritius. Although it is approximately 40 miles long and 30 miles wide, its area is 720 square miles. Yet its population is estimated at 910,000 in 1978 (Bi Annual Digest of Statistics, December 1978, Vol. 13, No.2, Central Statistical Office, Rose Hill, Mauritius). It is divided into (a) Indo-Mauritians, 65% (b) the general population comprising people of European descent and of mixed or African origin, 32% and (c) Sino-Mauritians 3%. Such a heterogeneity of the population is reflected in the linguistic and ethnic differences and by the plurality of religious demoninations. As a result of such varied cultural and linguistic backgrounds, a rather cosmopolitan attitude has been inculcated in the population; however a desire to preserve the cultural links with the countries of their forebears still persists.

The History of the island was one of transient settlement by the Portuguese, then came the Dutch who named it Mauritius in honour of their ruler, Prince Maurice of Nassau. The French colonized it in 1721 and re-named it the Ile de France. Finally the British conquered it in 1810. By the Treaty of Paris, signed in 1814, the Ile de France was ceded to the British and re-named Mauritius. Under the terms of surrender the cultural life of the inhabitants was safeguarded and the religion, laws, language, customs and traditions have been preserved to this day. The British

Crown Colony of Mauritius finally became an independent state in 1968. Though the official language is English, the *lingua franca* is the creole language, a sort of pidgin French which is spoken rather than written. Most of the local newspapers are written in French. Of course, the various ethnic groups more or less still treasure their mother tongues embracing a multitude of Asian dialects. Thus Mauritius is a centre of both Eastern and Western cultures in the midst of the Indian Ocean.

A brief study of the socio-economic and political bases of the colonial system of education as it has existed over the preceding historical periods and as it persists in Mauritius, may light the road ahead for reconstruction.