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ANALYSIS OF EXPERIENCE IN CURRICULUM REFORM IN SCIENCE

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1. PREAMBLE

Twenty years ago I went to Ceylon and since that time I have been working in developing societies in curriculum reform in Science, in teacher training and other aspects of education. In reviewing this experience, in very personal terms, I am but fulfilling the terms of my invitation. My experience and my interpretations of it I have written about in various places, to several of these I take the liberty of making reference.

2. THESIS

Experience, both as it developed and in retrospect emphasises three main points, each of which is relevant to the improvement of science education. These points are:-

- (a) It is a serious mistake to believe that change can be total or rapid (1,2).
- (b), The social background of science education has received too little attention though it is of extreme importance (3,4).
- (c) Science education must be seen as an agent of social change (5) and not merely in terms of science itself.

These points are interwoven with each other so much so that their relationships are, in some ways, of greater importance than any one of them. I start by saying again that science education must be seen as an agent of social change, its aims and outcomes must be described and defined in social terms and the curriculum work associated with it must be a continuing social evaluation. The significance of the socio-economic setting, which is the matrix in which education goes on, needs no emphasis. It provides both the opportunities and the barriers which help and hinder the general processes of science teaching.

3. THE ACCEPTANCE OF CHANGE

Developing societies are seeking raised standards of living through the applications of science to the problems of living. These raised standards can only result from economic changes which are themselves dependent upon certain social changes, notably the development of new motivations, new social organisation and new social climates.

Unfortunately there are many people in developing societies who want a raised standard of living, but do not want the social changes associated with it, which they see as threats to their traditional position

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