

THE CASE FOR AN INTEGRATED CURRICULUM IN PRIMARY SCHOOL EDUCATION

I

Curriculum integration is one of the more recent notions of curricular organisation in the field of education. The attempt to integrate the curriculum in the primary and secondary school partly stems from the dissatisfaction resulting from the fragmentary nature of the subject-structured curriculum. This widespread interest in integrated studies has received much official support. As such, primary schools have their integrated day, the secondary schools their interdisciplinary inquiry, and colleges prepare students for a more integrated approach.¹

In this study I attempt to make a claim for an integrated curriculum in the primary school as distinct from the secondary school. The traditional view of the aims of primary education can mainly be stated in terms of the acquisition of knowledge. Consequently, there is a curriculum divided into different subjects, and instruction in each subject is imparted according to some specific time, allocated for it on the time table. My concern here is to show that in the primary school an integrated curriculum is more acceptable than a rigid subject-structured curriculum. I will first consider the scope of such an integrated curriculum. Then, I would like to specify the nature and the type of integration of the curriculum that is suitable for the primary school. Finally, given specific assumptions about the nature of the child and the nature of learning, it is my intention to state the rationale for such an integration.

The general idea of 'integration' presupposes differentiation. 'Integration' in itself is an imprecise word, the meaning of which is neither very clear nor exact. But, basically the word 'integration' would mean a unity of parts, in which the parts are in some way transformed.² In an integrated curriculum the separate subject elements are drawn together and made into a unified whole. These parts are made into such a whole by their subordination to some unifying principle.³

To begin with, it is necessary to define the scope of integration for which I will attempt to make a claim. In this sense, at the primary school level, it will be useful to

¹. R. Pring, 'Curriculum Integration' in R.S. Peters ed. *The Philosophy of Education*, Oxford (1973) p. 123.

². R.S. Peters, *op. cit.* p. 127.

³. R.F. Dearden, *Problems in Primary Education*, London (1976) p. 41.

have a 'loose' integration of subjects rather than a 'tight' one. A 'loose' integration of subjects would involve the following subjects, namely, reading, writing, arithmetic, environmental studies, art, craft, music and physical education. At any given time a large number of these subjects will be integrated. Therefore, in a 'loosely' integrated curriculum it will be possible to integrate subjects intermittently. Hence it is a flexible organisational device.

However, one must begin to question whether a reasonable justification could be sought for such a 'loosely' integrated curriculum. It is important to note that in a curriculum of this nature, not only is there a scope for integrated learning, there is also the opportunity for some form of differentiated learning, which may in fact be necessary. It is plausible to think that mathematics may require more specific attention. The reason being that mathematics as a subject involves a sequential development of concepts from the simple to complex. Therefore, it is not reasonable to assume that all mathematical concepts that a child needs to know will always emanate from integrated topics or themes. Similarly, language skills of reading and writing may call for specific instruction. Certainly, children whose language skills are less developed may need to develop these skills in an appropriate manner in a more differentiated learning situation. Furthermore, this may even provide an opportunity for more individualized attention. Whatever type of curriculum is being followed, it would not be difficult to obtain a consensus on the fact that a primary school child will need to master language and basic mathematical skills. Music could be yet another subject that could be integrated from time to time. On other occasions such learning could be differentiated within a general learning situation. Therefore, in a 'loosely' integrated curriculum the choice of subjects to be integrated at a particular time remains a more open question, which gives the teacher a wide latitude in the choice.

II

An integrated curriculum both means, and is in organisation, many different things. Consequently, it is necessary to specify the nature and the type of integration for which a claim is being made. In a 'loosely' integrated curriculum, integration could be effected through topics or themes. In this sense, a topic or a theme provides the integrating element within the curriculum. In so far as these topics or themes are explored in an interdisciplinary manner, subject divisions become blurred. Bernstein says, "when the basis of the curriculum is an idea which is supra-subject, the subject is no longer dominant, but subordinate to the idea which governs a particular form of integration."⁴ In this way, the different subjects may be selectively drawn upon for the contribution they can make for topics, such as 'water', 'transport', 'ships', 'weather', 'sea', etc.

⁴. R.S. Pring, *Knowledge and Schooling*, London (1976) p. 41.

However, due consideration must be given to the selection of topics or themes. In this respect, it would be useful to maintain 'negotiable learning situations' within the topic-centred approach. This would be best described as a situation which is midway between a position where the teacher stage-manages and selects all topics, and an extreme non-manipulative situation, where the child selects whatever topics are of interest to him/her. In this sense, 'negotiable learning situations' are preferable to both these two extremes, as it avoids both extremes, and the resulting consequences. In a 'loosely' integrated curriculum, if all the topics are selected by the teacher, learning would be a teacher-initiated process. This would close up the child's options to select his/her own learning experiences, as it does not provide an opportunity for such a course of action. Again, it is more likely that the teacher will select topics for their educative value, and their perceived interest for the child may even be a secondary consideration. On the other hand, if all learning is pupil-initiated, the child is bound to select topics purely for their interest rather than for their educational value. Therefore, in a 'negotiable learning situation', the child could select topics which would interest him/her. The teacher on the other hand would select topics which would be in the child's interest, and which may also be of interest to the child.

Difficulties are however likely to occur in such a mediatory relationship. Who specifies the limits of such a participatory situation? How are these limits specified? No doubt, there will be a greater tendency for the teacher to exert authority, and conversely a lesser probability on the part of the children to participate actively in a given situation. The teacher, being an adult, would be more inclined to think that he/she knows more than the child. Again, the teacher is all the more likely to think that he/she knows what is best for the child, which probably could not be conclusively argued against.

A meaningful arrangement would be one in which the teacher and the students play participatory roles, discuss, and select topics for a prescribed time limit. This could take the form of an open negotiation, to which the teacher and students have some partial commitment.⁵ Through such a process of open negotiation the teacher and the students could arrive at an agreement on the number of topics to be selected. The moral sensitivity of the teacher to this situation would undoubtedly give the necessary balance to the process of negotiation.

However, this position warrants a justification. It is important to note that when certain topics are selected by the child, it gives him/her an opportunity for self-expression. Clearly, this indicates that the child's own concerns play a part in structuring his/her own learning. Bonnett correctly argues that learning would be more meaningful if children are allowed to experiment and genuinely experience the

⁵. Peter Woods, 'Negotiating the demands of School Work' *Journal of Curriculum Studies* vol. 9-10, (1977-78) p. 309.

consequences of their own decisions.⁶ In this sense, the challenges which arise from the topics selected by the children would be relevant to their interests.

On the other hand, teacher-selected topics become significantly important for several reasons. One has to admit that within a learning situation, there must be some discrimination, balance and order. If all learning is initiated by the child, the same topics may even be repeated in successive years without much progressive learning. As evident, primary schooling extends to a duration of five to six years and within this period there must be some progressive learning, which would entail a progressive understanding of facts. If topics are repeated learning may entail disinterest, and may even lead to frustration. However, it is not impossible to explore some topics in succeeding years in a progressive manner.

More importantly, the topics selected by the teacher will be in the child's own interest. Perhaps, these could be topics of current practical importance. Scriven's curricular concepts in terms of 'Education for Survival' is worth considering here. To name but a few, 'environmental pollution', 'health foods', 'drugs abuse', 'pests and parasites' are some such topics that may be tackled in an integrative manner. In a discussion situation, the teacher could explain the relevance of such topics to children. In this way, they would come to understand and value what is being learnt, and consequently learning will become a valued pursuit.

Nonetheless, one cannot ignore the fact that a child may want to study subjects rather than topics. Just as children who are taught through a subject-structured curriculum often become interested in topics, it seems likely that children taught through a topic-centred curriculum will sometimes become interested in subjects. If a child's interest is to study subjects, and if such knowledge is less relevant to the contemporary context, one must decide whether the child be taught less relevant knowledge or whether the child should be apprised of the more vital knowledge, which is almost basic to one's survival, through a topic-centred curriculum. If we accept the fact that the child should be taught more relevant knowledge, then it becomes apparent that such knowledge cannot be imparted within a subject-structured curriculum. But such knowledge could be significantly imparted through a topic-centred curriculum. It is evident that the advantages of a topic-centred curriculum, which I will emphasize later will not accrue through a subject-structured curriculum. It follows logically that in the absence of a curriculum integrated around topics this option will be foreclosed. In this sense, the advantages of a topic-centred curriculum outweighs the value for a subject-based curriculum. Therefore, even if a child develops an interest for subjects, he/she should be apprised of the value of learning such topics rather than subjects.

⁶. Michael Bonnett, 'Child-Centredness' and the Problem of Structure in Project Work,' *Cambridge Journal of Education* vol. 16, No. 1 (Lent Term, 1986) p. 5.

P.H. Hirst contends that when units of teaching fall within one form of knowledge, it enables the development of one kind of conceptual structure, and therefore the control of learning is considerable.⁷ Such units will be single-form units. Hirst refers to topics and themes as 'inter-form units'. He maintains that there is no clear rationale for such 'inter-form' units unless there are significant links between the elements from the different forms of knowledge. One would want to think that if there are significant links between the subject elements, one could justify the 'inter-form' unit. He does not deny that a large variety of inter-form units could be composed. Hirst's position here seems to be more a critique of the nature of the topics rather than a critique of the topic approach itself. If this is the case, I suppose there will be no difficulty in selecting curricular topics which draw on the different subject elements. One could leave out narrow and restricted topics and select 'wide ranging' topics. Topics like 'health foods' or 'environmental pollution' could make 'significant links' between different elements from different forms of knowledge.

Though 'inter-form' units draw together elements of different forms, the different elements do not break down into separate studies. Rather, such topics are ways of showing how different subjects interconnect in the pursuit of particular questions.⁸ Within the unit, the elements of one form cannot be properly or meaningfully understood without reference to knowledge of elements of one or the other of the forms. For instance, if the topic is 'environmental pollution', a scientific knowledge of the various gases which pollute the atmosphere and their composition requires a geographical understanding of population growth, the effects of industrialization, and urbanisation. Some mathematical knowledge may enter into, and is necessarily presupposed by such scientific knowledge. An economic grasp of the effects of pollution on man, fauna, and flora could only be understood in relation to the scientific knowledge in terms of the various gases. This signifies that 'inter-form' links do provide 'significant links' between the elements from the different forms. Therefore, in a 'negotiable learning situation' the teacher could select topics which are more 'wide-ranging' and this question could be taken care of.

Again, Hirst is of opinion that a 'wide-ranging' inter-form unit cannot hope to cater to systematic attention to links across a whole range of elements from many forms. Thus, learning within an 'inter-form' unit will be of a limited nature.⁹ This position cannot be conclusively argued against. To be more explicit, a study of topics or 'inter-form' units will not bring about a knowledge of systematic development of concepts within the different subjects areas. But, it is plausible to assume that a primary school

⁷. P.H. Hirst, *Knowledge and the Curriculum* London (1974) p. 149.

⁸. *ibid.*

⁹. *ibid.*

child needs to acquire only a general understanding of broad concepts, and not a systematic development of concepts within the different forms of knowledge. If this is the case, then the learning that is acquired through the study of topics within the integrated curriculum would seem to satisfy the learning requirements of a primary school child, provided of course that some attention is given to the selection of topics. In addition, in a 'loosely' integrated curriculum, since the subjects are integrated intermittently, some attention can also be given to the differentiated structures of the various forms.

Hirst admits that in the early years of education, a curriculum organised into subjects would seem inappropriate as children are unable to acquire certain forms of knowledge, as they lack certain prior concepts from some other form of knowledge.¹⁰ This indicates that a child will learn certain things earlier and some later. Hirst, however, rejects the notion that on these grounds the child needs an integrated curriculum. In making this statement he does not solve this issue, but he only ignores it. If as he admits, a subject-structured curriculum is not appropriate at the primary school level, then a more acceptable alternative must be found, as the primary school needs to have some sort of curriculum. The primary school curriculum need not necessarily reflect the units of teaching at high school or, for that matter, at the university. It is fair to assume that curricular content and curricular organisation should reflect some difference. It cannot be conclusively argued, that a logical curriculum pattern needs, to be followed at the primary school. If a more flexible arrangement is desired, one may have to choose the integrated curriculum.

III

It is important to note that any learning strategy should have a purpose and a value of its own. The notion of an integrated curriculum at the primary school could be justified if it provides a more acceptable alternative to the traditional subject-based curriculum. Hence, it is necessary to state a rationale for such an integration.

Firstly, to attempt to justify the claim for an integrated curriculum, the question of 'unitary mental abilities' seems pertinent. The assumption made here is that the child's mental abilities are of a unitary nature and the integrated curriculum is considered more suitable to develop these abilities. The assumption that mental abilities like imagination, critical thinking, inquiry, etc. are of a unitary nature is to suggest they are common to all intellectual pursuits, and in this sense could give unity to the child's thinking. In a subject-structured curriculum, the development of mental abilities will be specific to the different forms, and consequently, it would not develop these 'unitary mental abilities'.

¹⁰. Hirst *op.cit.* p. 142.

According to Hirst, the logical structure of the forms constitute the structure of the mind. Since the structures are different, the mental abilities which operate within any one form are different from the mental abilities which operate within any other form. On account of the content of the structure the same mental ability assumes a difference. Therefore Hirst rejects the notion that there is some general way in which mental abilities could be developed.¹¹

However, it may be argued that even within a subject-structured curriculum the primary school child will only be able to acquire some basic elements of the different forms. If, as Hirst admits, some forms of understanding appear later than others, then, the child's concepts will be less structured and less refined than those of an adult. If we accept the fact that differentiation of knowledge is a progressive process, an elementary knowledge of the subjects will not be sufficient to develop mental abilities specific to the different forms as in the case of an adult. Moreover, as the subject structures are less developed, the mental abilities which operate in any one form will also be less developed. I shall argue that mental abilities in a cruder form may cut across the different subjects and therefore it is possible to speak in terms of 'unitary mental abilities'.

Hirst maintains that enquiry methods are superficially similar across different forms of knowledge.¹² One would want to question whether at a child's level, imagination, or critical thinking could not similarly cut across the different subjects. Perhaps these could also be considered as general abilities.

To elaborate the above fact, it will be necessary to restrict one's inquiry to a specific mental ability. Accordingly, 'imagination' could be considered a general ability. As Mary Warnock says, imagination is the "power to see possibilities beyond the immediate..... and to begin to explore something imaginatively; it is to see it stretching out into unexplored paths whose ends are not in sight."¹³ The child imagines about what a child perceives, observes, and thinks, and the boundaries of thought will ever expand.

It is possible to assume that at the child's level the power of imagination involved in imaginative writing and imaginative scientific investigation would be a general ability, and not specific to either of them. When an adult is involved in imaginative writing, this imaginative ability will be linked to some conceptual structure. This indicates that the power to direct one's thoughts, to gauge one's possibilities, to

¹¹. Hirst *op. cit.* p. 141.

¹². *ibid.*

¹³. Mary Warnock, *Schools of Thought* London (1977) p. 142.

imagine creatively and to be able to explore the topic at depth will be linked to a specific topic, and therefore to a specific form of knowledge. Similarly, imaginative scientific investigation will also be related to a particular discipline. The assessment of a problem, the setting up of hypotheses, testing hypotheses, seeking solutions, and making generalizations will be specific to a particular form of knowledge. Hence, the power of imagination which operates within the different forms of knowledge will be different according to the particular content.

On the other hand, in a child, imaginative writing and imaginative scientific investigation will be more or less a general ability, common to both subject areas. For instance, if the child is writing imaginatively about 'tigers' or is engaged in a simple investigation about the 'concept of volume', the imaginative ability will be a general one. Since the child's conceptual structures are less differentiated, so too are his/her mental abilities. Consequently, imaginative writing will not be different from imaginative scientific investigation. Then, it will be plausible to assume that in both instances what was operative could be referred to as a 'unitary imaginative power'. Accordingly, imagination or any other mental ability will spill over the subject divisions. However, Hirst would also agree that a child's conceptual structures are less differentiated. But he may consider this as a limitation and insist that the child's reasoning should be rectified through differentiated inquiries of various kinds. He may even maintain that differentiated learning is more useful, and if they are in a cruder form, they need to be developed.

Furthermore, one needs to inquire whether 'unitary mental abilities' could be developed through the subject-structured curriculum. As is evident, the subjects are differentiated and the child receives instruction in the separate subjects without much connection. Consequently, the subject-structured curriculum trains the child to think in terms of the subjects in a more or less differentiated manner. Since it is more attuned to the development of different mental abilities, there is little reason to think that 'unitary mental abilities' will be developed.

In connection with the point at issue, the claim that Warnock makes needs to be considered here. She thinks that the imaginative faculty enables one to perceive things, not in isolation but in a connected form. Warnock admits that only when something is learnt 'in depth' could a 'quality in education' be achieved. According to her, too many subjects would prevent the child from learning things at a deeper level. It is this 'in depth' knowledge that would 'fire the child's imagination'.¹⁴ If imagination as a general ability could be developed through a deeper knowledge of topics, we could reasonably assume that other mental abilities too could be developed in somewhat the same manner. This fact justifies the claim that unitary mental abilities could be developed through an integrated curriculum. If this is the case, then we could

¹⁴. Mary Warnock, "Towards a Definition of Quality in Education," in R.S. Peters, ed. *The Philosophy of Education*, Oxford (1973) p. 119-120.

also assume that 'unitary mental abilities' could not be developed through a subject-structured curriculum.

Michael Scriven's claim for a 'survival curriculum' is a notion that needs to be looked into, in an attempt to justify the integrated curriculum. In this sense, topics of social relevance which are necessary for our survival could form the basis of an integrated curriculum, and subject divisions should take a back seat. Scriven makes a strong claim when he suggests that most of the conventional elements in the traditional subject-structured curriculum is not relevant to learning in a society which exerts pressure on one's survival. Consequently, "Education for Survival" should replace education for adjustment. "Education for Survival" will need a survival-oriented learning, and he indicates that such learning is necessary even for young children.

The main argument that Scriven makes is that a different kind of knowledge needs to be imparted to children. This suggests that different qualities of the mind must be developed in order that the child may survive in the present day world. If the subject matter of different subjects do not directly cater to the pressing problems of social living and undermines survival, it becomes imperative that the nature of the existing curricula must be considered. These necessary qualities of the mind could be interpreted as more general skills, which enable the child to appraise problematic situations, to cope with stress situations, and to be able to communicate with others in a satisfactory manner. Scriven argues that "to survive in a defensible society", what is needed are "relevant parts of many subjects and not a study of different subjects."¹⁵ He further contends, that the omission of this vital knowledge from the curriculum is particularly harmful, and the urgency of learning these concepts demands that they should be on the curriculum.

According to Hirst, the fundamental development of the mind is brought about by the acquisition of the forms of knowledge. Presently, if what is considered essential is the development of certain skills and abilities which would equip the child to tackle survival problems, one cannot justify the development of abilities purely in terms of the forms of knowledge, if the former abilities too are not developed. The child may excel in these subjects, but it may not help him/her to cope with pressing problems in day to day living, for which he/she has not been educated. In this sense, the school has failed to impart the much-needed knowledge, skills and attitudes in order to survive in society. It has been argued that a curriculum, to be educationally defensible, means in part to be what will improve life as a whole - which means that knowledge and skills must be taught with an eye to the future.¹⁶ Clearly, in this sense one cannot justify a curriculum whose main focus is only on the development of the mind in terms of the

¹⁵. Michael Scriven, 'Education for Survival', Maurice Belanger and David Purpel ed. *Curriculum and Cultural Revolution*. Berkley: McCutchan (1972) p. 172.

¹⁶. Mary Warnock *op.cit.* p. 26.

different forms of knowledge. Obviously, if the required knowledge is not imparted within a subject-structured curriculum, and if such knowledge is considered as vitally important, one must necessarily consider a curriculum in which such a need is met. Therefore, the possible alternative is a curriculum integrated round such survival topics, and which could be explored in an inter-disciplinary manner.

In a subject-centred curriculum there is a lesser possibility of incorporating survival topics, as compared to the integrated curriculum. True, certain topics of the survival curriculum could be dealt within the different subject areas in a subject-centred curriculum. For instance, 'food production and storage' could be learnt within geography, 'health foods' could be studied within the purview of health studies etc. Still, these topics will not be dealt with meaningfully or in depth within the subject-centred curriculum, as the emphasis will be on the subject matter knowledge and not on the topic for its survival importance. Furthermore, the objectives of survival education are somewhat different from the objectives of liberal education. Since the educational objectives differ, the type of curriculum is bound to be different. This means that most topics in the survival curriculum which are considered vitally important cannot be studied within the subject-centred curriculum as they are either not incorporated or not emphasised.

The integrated curriculum which I have outlined caters to Scriven's position as well as to Hirst's position, and also recognises the value of the child's interests. The topics selected by the teacher could consist of curricular concepts which Scriven has argued for. At the same time it could incorporate topics which would fall within the subject-centred curriculum for which Hirst makes a claim. However, it is important to note that one cannot accommodate the complete curriculum outlined by Scriven within 'negotiable learning situations'. It only indicates that there is a greater provision in the integrated curriculum to teach survival topics rather than in a subject-centred curriculum.

In order to justify the claim for an integrated curriculum, it is possible to bring in the question of children's interests. One must admit that children's interests can be accommodated somewhat in a subject-centred curriculum. For instance, a teacher could select topics within history from the point of view of interest to the students. However, in an integrated curriculum there is more scope for the consideration of children's interests than in the subject-centred curriculum. An integrated curriculum is not an interest-based one. If we accept the fact that some interests of children have an educational value, we must also admit that they merit some consideration. Again, if we assume that the integrated curriculum is one such curricular device which ensures this, then I think one could make a fair claim for a curriculum which is integrated.

Children's hobbies and other related activities which they take 'an interest' in, may be referred to as 'interests'. 'Interests' could be referred to as fairly settled dispositions. 'Interests' form a valued part of the child's life as they are significantly important to the child. In a subject-centred curriculum what is central to education is the transmission of subject matter knowledge. Therefore, what is in the child's interests

take precedence of the child's interests. A curriculum which denies the child the opportunity to pursue his/her interests limits the child's freedom of choice. If we concede that every individual has the right to self-determination, we must admit that in the education of the child his/her interests must be considered.

However, not all interests of children are desirable or educationally significant. Some are desirable and worthy of being pursued, while others are not. The possibility of undesirable interests is not a sufficient justification to undermine the view that children's interests must not be considered in curricular organisation. Neither can one allow the child to pursue all his/her interests, specially those which are undesirable.

In 'negotiable learning situations' within the topic-centred approach, the topics selected by the children will become centres of interest. Certainly, within an integrated curriculum of this nature the child will come to understand the nature of their interests. More importantly, they will come to learn and value what is appropriate. It must be noted that 'negotiable learning situations' are also possible to some extent within the subject-structured curriculum. For instance, in planning project work, field trips etc. the teacher may encourage the active participation of the children in the process. Therefore, some amount of negotiation will be involved.

Elsewhere Hirst and R.S. Peters maintain that children's interests might have some educational value as such interests may lead them to more important goals. But they assert that the content of the curriculum could not be determined purely by children's interests.¹⁷ Within the integrated curriculum that I have specified, the possibility to impart knowledge as Hirst and Peters expect, though in a less structured form, is possible. At the same time it allows the child to pursue his/her interests in part. It is important to note that both the child's interests, and what is considered important in the child's interests is taken care of. Therefore, the integrated curriculum though it is not purely an interest-based one, still provides the framework within which the child's interests may be considered. This, I believe, is a more reasonable approach to education rather than one which ignores the child's interests completely.

In this study, then, I have attempted to show that the integrated curriculum is more acceptable than a subject-structured curriculum in the primary school. I have also shown that 'negotiable learning situations' within the topic-centred approach could combine elements of an interest-based education, subject-based education, and also 'survival education'. Part of the present analysis is to indicate the possibilities of a piecemeal approach which I think is more suitable for the primary school.

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¹⁷. P.H. Hirst, R.S. Peters, *The Logic of Education*, London: p. 37.