

Skilbeck's Model of School-based Curriculum
Development and the Tasmanian Primary
Education System

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Abstract

An examination of three major policy statements released by the Tasmanian Education Department since 1968 illustrates that for the last ten years Tasmanian primary schools have been encouraged to accept greater responsibility in the development of their own curricula. The arguments advanced for this devolution of authority centre around the need for qualitative change at the school level of the Tasmanian primary education system. Centralized curriculum development, the policy statements indicate, has inherent shortcomings working against qualitative change in schools. School-based curriculum development, the policy statements indicate, enables primary schools to develop a curriculum that is more closely suited to the particular children in each school. Accompanied with this argument is the one which posits the view that school-based curriculum development enhances the professional self-esteem of teachers.

Malcolm Skilbeck has developed a model for school-based curriculum development based on his experiences in schools and teacher training institutions in the United Kingdom. An examination of the model shows that it is a reaction against perceived shortcomings of centralized curriculum development and the various models used in centralized curriculum development and implementation. Because Skilbeck's model also is concerned with implementation strategies, the model provides a framework for educational management as well as curriculum development. In this regard the model can be seen as a reaction against the methods of educational management often associated with centralized curriculum development and implementation.

This study examines Skilbeck's model in terms of the factors which have influenced its development. It is also a major task of the study to critically examine the model in light of relevant literature to assess its strengths and weaknesses. To this end, literature has been incorporated into the study from the areas of curriculum theory, educational management, sociology, educational psychology, literature dealing with resistance to change and literature dealing with educational evaluation.

An examination of the agenda and proceedings of the 1978 Annual Conference of Tasmanian Primary School Principals indicates that some Tasmanian primary

school principals are looking to Skilbeck's model for a framework to guide curriculum development in their schools. This study examines the similarities and differences of Skilbeck's model with the views expressed and the recommendations made concerning school-based curriculum development in the three major reports released by the Tasmanian Education Department.

At no stage does the study attempt an empirical investigation. In conclusion, however, the study seeks to establish areas for empirical research concerning aspects of school-based curriculum development within the Tasmanian primary education system.

Chapter 1. Introducing the Task

In May and June of 1978 the Curriculum Development Centre, a national body, held a standing conference in Sydney, New South Wales, to deal with school-based curriculum development. Participants from the Education Departments from all Australian states and territories attended. We start our study by mentioning the conference in order to draw attention to an educational trend or movement which has national concern.

This concern is reflected in Tasmanian primary schools. During August 11 and 12, 1977 the Tasmanian primary school principals held their Annual Conference. A major item on the agenda of the conference was concerned with general problems associated with school-based curriculum development. On September 21 and 22 of the following year the Tasmanian primary school principals again addressed themselves to issues associated with school-based curriculum development. During their Annual Conference of 1978 the principals addressed themselves to a specific aspect of school-based curriculum development as contained in Malcolm Skilbeck's model of school-based curriculum development: situational analysis.

Contained in the collection of Readings distributed to participants at the 1978 Annual Conference of Tasmanian Primary School Principals is a paper by Malcolm Skilbeck. In the paper Skilbeck offers an explanation of school-based curriculum development which may be understood as being in part a definition. Skilbeck states: "[school-based curriculum development does] acknowledge or confer upon the school the right to design curricula utilizing whatever outside resources are available to them"¹. So school-based curriculum development can be contrasted with the situation whereby the curriculum is determined by the education authority and all schools are expected to use it as required by the education authority.

1.1 Framework of the Study

It will be our first task to trace out the emergence of a school-based curriculum development movement within the Tasmanian primary education system

¹ Skilbeck, Malcolm: School-based Curriculum Development (Extracts from 'School-based Curriculum Development and Teacher Education'; mimeograph/private circulation 1975; p. 98).

as revealed through a study of three major Education Department policy documents: The School in Society 1968, The Report on the Organization of the Education Department (1978) and Tasmanian Education: The Next Decade (1978). A study of the recommendations made and views expressed in these documents will illustrate the degree to which the Tasmanian primary education system has organized itself in order that school-based curriculum development may be facilitated.

Our next task will be to examine the factors which have influenced the structuring of Skilbeck's model of school-based curriculum development. Through this examination we will come to understand what school-based curriculum development attempts to achieve and what it is reacting against. We will then critically analyse Skilbeck's model in the light of relevant literature from the areas of management theory, curriculum theory, educational psychology, sociology, literature dealing with resistance to change, and literature dealing with curriculum evaluation. Through this analysis we will come to an understanding of the strengths and weaknesses of the model.

We will then detail the appropriateness of Skilbeck's model to the Tasmanian primary education system in the light of the recommendations made and the views expressed in the three major Education Department reports we have cited.

The conclusion of our study will bring us to a position whereby we will be able to establish areas for empirical research concerning school-based curriculum development within the Tasmanian primary education system.

Chapter 1

The Emergence of a School-based Curriculum Development Movement Within the Tasmanian Primary Education System.

In 1967 the administration of the Tasmanian Education Department initiated a full-scale review of the Department's policies and operations. A committee was set up under the chairmanship of the Deputy Director-General of Education and was given authority by the Minister of Education to receive evidence from interested individuals and public bodies and to produce a report which would cover:

1. the general aims of education;
2. generally accepted findings on children and learning related to the function of the school;
3. a set of objectives to use as a guide for curriculum development as an indicator for class and school organization and as a valuable reference for teaching and evaluation, and
4. the role to be played by the school in a democratic society.

This was known as the Committee on The Role of the School in Society. The document was to be a policy concerning the direction of primary, secondary and tertiary education in Tasmania into the nineteen eighties. We start with The School and Society Report¹ because it contains recommendations concerning qualitative change of a type necessary for school-based curriculum development.

The Report contains some fifty five recommendations concerning changes in the content and structure of the curriculum, in the content of teacher education and in the provision of facilities. The Report was to set the State education system on a course of development that has been explained by the then Deputy Director-General (Mr. P. Hughes) in terms of a planning theory advanced by C.E. Beeby². In Beeby's theory, as in the Report, the emphasis is on qualitative change, the hypothesis being that qualitative change is a sequential progression

¹ The School in Society (The Report of the Committee Set Up to Investigate the Role of the School in Society). Education Department of Tasmania, Hobart, 1968.

² Beeby, C.E. The Quality of Education in Developing Countries, Harvard University Press, Cambridge, 1966.

through four stages of development. We will not take issue with the logic and merits of the theory, but simply use the categories as a rubric that describes suggestively the state of the education system at varying stages of its evolution. The first of the stages is "The Dame School Stage"; the second, "The Stage of Formalism"; the third, "The Stage of Transition"; and the fourth, "The Stage of Meaning". Hughes¹ description of stages two, three and four follows:

II. The Stage of Formalism

The Schools are highly organised and have a rigid syllabus to which teachers adhere closely. There is strong emphasis on the "one best method", on the set text-book and on external examinations. The teacher's formal training is his one security since his general education may be little better than he expects to give his pupils and he thus prefers a closely defined schedule with emphasis on rote learning... There is a rigorous discipline applied in the classroom and this is accompanied by a close system of inspection of teachers. In general such teachers lack the confidence necessary to try unexplored pathways.

... teachers have poor general education (and require some supervision).

III. The Stage of Transition

... The official syllabus remains as a controlling agent but is more permissive. The text book is still fixed but is enriched by supplementary readers. The syllabus is wider although its main emphasis is still on the memorisation of facts. Within the narrow limits set, the teaching will be effective but lacking in recognition of emotional and aesthetic values. External controls will still be of great significance in the organisation of the schools.

... teachers have both a good general education and some professional training (and require little supervision).

¹ Hughes, P.W. Australian National Advisory Committee for Unesco: National Seminar on Educational Planning, Canberra, September, 1968. Group C, Background Papers; "Case Studies in Educational Change".

IV. The Stage of Meaning

... The goals of education are more widely conceived. "The essence of Stage IV, as its name implies, is that meaning and understanding play an increasing part in the pupil's day, and memorisation and drill, while remaining, become subservient to them. Since passive understanding is thin and narrow, the child is encouraged to build up, by his own mental activity, the intricate web of relations that constitute real meaning; in other words he is taught to think". In this stage, more attention is paid to the individual, there is a relaxed atmosphere frequently accompanied by more physical activity. These internal changes are accompanied by a relaxation of external controls, as in the lessening importance of external examinations and the emphasis in inspection on professional co-operation rather than dictation of content or method. ... teachers have a very good professional training (and have total autonomy in the classroom)".

A main objective of the Report was to bring schools to "The Stage of Meaning", a stage which we will be arguing as being necessary for school-based curriculum development. Our study does not permit a close study of all the recommendations nor does it permit a study of the extent to which the recommendations have been implemented. It will suffice, however, first to briefly mention three recommendations in summary form as they apply to a qualitative change necessary for school-based curriculum development within the Tasmanian primary education system:

1. The schools are urged to set a much higher value on genuine intellectual development and the mastery of ideas rather than the memorization of facts.
2. The Report recognizes that the learning process depends greatly on the nature and quality of the social relationship through which it is mediated.
3. The Report urges attention be paid to the wider social environment of the classroom. The tendency for schools to close themselves against the local community is condemned.

While the Report makes recommendations concerning qualitative change in Tasmanian primary schools, it is in a sense juxtaposed to school-based curriculum development in that it recommends centralized curriculum development through an

upgraded Curriculum Branch in the revised subject areas of Social Sciences (replacing History and Geography), Arts and Crafts (replacing Needlework, Woodwork, Painting, etc.) and Religious Education (replacing Scripture). (Recommendation 21)

Moreover, it is clear that the Report presupposes an objectives model of curriculum development. Recommendation 27 advocates that the curricula developed by the Curriculum Branch "... should provide statements of end points ... for schools to achieve". The Report, however, does concede that practising teachers should be involved in the development of curricula at the Curriculum Branch. (Recommendation 30)

Despite the recommendations concerning centralized curriculum development presupposing an objectives model of curriculum development, the Report makes recommendations which we will see are closely in tune with elements considered necessary for school-based curriculum development. Recommendation 10 urges teachers in primary schools to develop evaluation techniques which "... should not be restricted to formal written tests and much greater use should be made of oral methods of observational techniques and of assignments".

The Report also contains recommendations which pre-empts school-based curriculum development in terms of what will later be argued as being necessary system support for school-based curriculum development. Recommendation 37a urges that the Education Department "... provide curriculum advisers in each district to assist in the implementation of various aspects or areas of the curriculum". Recommendation 39a advocates that "there should be increasing provision for in-service education for teachers, and for much greater interstate and overseas exchange for teachers". And Recommendation 48 concerns "a residential in-service training centre for teachers (which) should be provided in a pleasant and comfortable rural setting for weekend and longer courses".

The Report, moreover, contains a recommendation which further pre-empts school-based curriculum development. It encourages school-based experiments not in curricula, but in "... the use of team-teaching, ungrading and other methods of obtaining more diverse groupings for teaching and co-operative effort between teachers ..." (Recommendation 32).

Five years after The School in Society report was released the Tasmanian Education Department's Organization Committee submitted to the Director-General of Education the Report on the Organization of the Education Department (1973)¹. The views and recommendations put forward in the Report should be seen as supplementing and complementing the views and recommendations put forward in The School in Society report: i.e. organizational changes in order to increase the quality of the teaching process in schools.

A basis to the organizational changes in the 1973 Report was a devolution of decision-making from the Education Department's Head Office to regional offices and to schools in order to increase the school's autonomy and the diversity of the education programs in schools. Significantly, there is a move towards the view that the Education Department has a major role to perform in supporting the development of school's individual education programs. The Committee expressed its attitude to this view in its Introduction to the Report:

"The review which is being made of the organization rests to a considerable extent on the assumption that the Education Department should not now be seen as a highly centralized system in which uniformity is a prime characteristic. Members of the Committee share the view that there is not one right way to run a school, one right curriculum to follow and one right approach to teaching. The assumption of the Committee is rather that schools should be able to develop in different ways so that the system of schools will be characterized by a considerable diversity. In this view the purpose of the organization beyond the school is to provide teachers and schools with the support necessary for them to carry out their task of education and to assist schools in obtaining the resources needed for the development of the educational programme". (p. 1)

Although the Report does not use the term "school-based curriculum development", it expresses definite views concerning schools' responsibilities in developing their own education programs:

¹ Report on the Organization of the Education Department (an unpublished report submitted to the Director-General of Education), Hobart, Tasmania, 1973.

"In this report the school itself is seen as being essentially responsible for the development of its own educational programme. However, the school cannot exist in isolation from the system within which it is located since it is dependent on other parts of the system for the resources which will enable it to carry out its educational programme and since the programme itself will be impoverished if the school sets itself apart from external sources of ideas. The relationship should be seen as one of interdependence since other parts of the system exist to serve the school while the school has needs which can only be met by other parts of the system. Increasing diversity, then, implies that schools need to be increasingly open to the influence of persons based outside the school and existing to give their support to the school". (p. 2)

To these ends the Report makes recommendations concerning organizational changes in the Education Department which are aimed at qualitative change in schools' education programs.

The Report makes recommendations concerning material and human support for teachers through the establishment of teachers' centres which would also serve as bases for consultants. (Recommendations 1, 2, 6, 7) The recommendations are similar to what we will later see as being infra-structural support for schools attempting school-based curriculum development.

Recommendation 10 of the Report advocates "that schools be encouraged to develop in different ways, but that this freedom of development be exercised within the limits of the resources the Department can provide". This recommendation, too, is very similar to what we will see later being argued about schools' responsibilities to the education authority when the school engages in school-based curriculum development: i.e. a school's autonomy in curriculum matters must be determined by the education authority.

The recommendation put forward by the Committee concerning schools' evaluation of their own education program (Recommendation 12) is also very similar to what we will see later argued as being a necessary element of school-based curriculum development.

The views and recommendations we have cited in the 1973 Report illustrates that there is a conscious move by the Education Department away from an objectives model approach to curriculum development within the Tasmanian primary education system. We will see later in this study arguments advanced that the objectives model of curriculum development and the technocratic management theory upon which the objectives model is based is juxtaposed to school-based curriculum development. Indeed, the school-based curriculum development movement may be seen as a reaction to felt insufficiencies of the objectives model.

Ten years after The School and Society report was released the Minister for Education accepted the next major report on Tasmanian education. This was the Tasmanian Education: The Next Decade report (TEND)¹. The TEND Report made recommendations for primary, secondary and tertiary education in Tasmania for the nineteen eighties. The TEND Report is the first significant Education Department policy document to make recommendations specifically about school-based curriculum development. The TEND Report has devoted a major section to school-based curriculum development (pp. 13 - 16).

The TEND Report commences its section on school-based curriculum development by noting that, "during the last ten years there has been a marked tendency to reduce the prescriptiveness of the central authority and to increase the schools' responsibility for determining the curriculum". The TEND Report encouraged this tendency. The advantages stated in the Report are qualitative and are very similar to those which we will see advanced in Chapter 3 of this study. The Report states:

- "1. It enables each school to provide a curriculum best suited to the needs of its own particular students.
2. And it provides a substantial professional challenge and stimulus to the teachers and to parents".

The TEND Report, however, illustrates two principal disadvantages with school-based curriculum development:

¹ Tasmanian Education: The Next Decade, Education Department; Hobart, Tasmania; June, 1978.

- "1. It may tend to produce such differing programs in schools that students who move from one school to another may experience more difficulty than usual in adjusting to programmes of the new schools.
2. And students and members of the community may have some difficulty in assessing and comparing where necessary, such as in job selection and the standard achieved by students in different schools".

To overcome the two principal disadvantages, the TEND Report recommended four areas of development in the Tasmanian education system.

The first recommended area of development concerns system support for schools in the form of published guidelines in subject areas. The TEND Report recommended the production of firm and comprehensive guidelines which clearly indicated the essential objectives, "the range of possible content and methods, the limits to the school's freedom in constructing curricula, the standards of performance to be expected and suggestions concerning appropriate resources, persons and materials". These recommendations are very similar to Recommendation 10 of the 1973 Organization Report.

The second area of development that the TEND Report states as being necessary to ensure that the two principal disadvantages of school-based curriculum development be overcome is extensive pre-service and in-service education for teachers in curriculum development. We will see this point argued and developed further in Chapter 4 of this study. The TEND Report recognized that "few teachers had made a serious study of curriculum theory and practice despite having gained an elementary introduction to it during pre-service training". The TEND Report states that if school-based curriculum development is to be a part of a teacher's professional role, then more weight will need to be given to the study of curriculum theory and practice at pre-service institutions. The TEND Report is in agreement with arguments advanced in Chapter 4 of this study concerning the point that the majority of teachers increase their skill and knowledge in curriculum development through in-service education. The TEND Report doubted whether

"... existing in-service resources are adequate to cope with the very large job of teacher education needed in the area of

curriculum development. To achieve a desirable level of competence, it will be necessary to make and maintain a very extensive increase in in-service education throughout the next decade".

Frequent access to resource persons and readily available material resources are the third necessary underpinning of school-based curriculum development put forward by the TEND Report. This point, too, is in accord with what is argued in Chapter 4 of this study. The TEND Report stated that the existing level of material and human resources within the Tasmanian education system is inadequate. The TEND Report went on to recommend that the Media Centre, the Curriculum Branch and the In-service Branch be more closely co-ordinated and that the personnel in these branches be expanded to cope with the increased levels of support required by schools in their curriculum development activities. The TEND Report further recommended the:

"... establishment of a system of regular secondment of teachers to the Curriculum Branch for a two or three year period.

Consideration should also be given to the appointment in regional offices of resource persons of the rank of superintendent whose duties would solely be that of curriculum consultants to the schools of the region".

Evaluation is the fourth area of development mentioned by the TEND Report as being necessary to ensure successful school-based curriculum development within the Tasmanian education system. We will see that the recommendations made by the TEND Report regarding evaluation are very similar to the arguments advanced in Chapter 3 of this study. The TEND Report recommends that schools engaging in curriculum development ought to conceive of evaluation as being an integral part of curriculum development and that teachers ought to be centrally involved in the evaluation process. The TEND Report had this to say about the role of evaluation in school-based curriculum development:

"... Good evaluation is part of the educational process. To be most fruitful it should be a continuous process from the beginning of any curriculum development project. It should involve teachers, pupils and members of the community in the setting of appropriate goals and the determination of the matters that are to be evaluated. The process should be organized

in such a way that advice can be offered from time to time on possible and desirable changes of direction, methods or materials".

Chapter 2

Skilbeck's Model of School-based Curriculum Development

There are various categories of models of curriculum development. One category of models is concerned solely with the research and development of a curriculum and ignores the implementation processes of diffusion and adoption. The two models we will describe in this category are the objectives model and the process model.

There is another category of models which allows for the implementation processes of diffusion and adoption. Following the studies of Havelock¹, models which fall into this category have become known as the social interaction (S-I) model, the research, development and diffusion (R D and D) model and the problem-solver (P-S) model. (See Figure 1). It is quite possible for the objectives model, the process model or a compromise between the two to be incorporated into the S-I model or the R D and D model.

Here we will be concerned with describing and critically evaluating each model to increase our understanding of the model put forward by Skilbeck².

The objectives model has its origins in the United States. It has mostly been associated with behaviourist learning theories; more recently with the neo-behaviourist learning theory put forward by Gagné³.

The most important exponents of the objectives model have been Tyler⁴ and Taba⁵. With these two authors curriculum development is conceived in terms of the development of learning outcomes or objectives as a result

¹ Havelock, Ronald: Planning for Innovation through the Dissemination and Utilization of Knowledge, Anne Arbor, Centre for Research and Utilization of Knowledge, Cited in Barry MacDonald and Rob Walker: Changing the Curriculum, Open Books, London, 1976, Chap. 1.

² Skilbeck, M. "Teachers as Innovators: School-Based Curriculum Development and Teacher Education Policy"; Report submitted to the Organisation for Economic Co-operation and Development, Paris, 1974. (All references will be to this paper unless otherwise stated).

³ Gagné, Robert: The Conditions of Learning, Holt, Rinehart and Winston, New York, 1970.

⁴ Tyler, Ralph W.: Basic Principles of Curriculum and Instruction, University of Chicago Press, Chicago, 1949.

⁵ Taba, Hilda: Curriculum Development: Theory and Practice, Harcourt, Brace

of diagnosed needs. Typical are the developmental steps described by Taba¹:

- "Step 1: Diagnosis of needs
- Step 2: Formulation of objectives
- Step 3: Selection of content
- Step 4: Organization of content
- Step 5: Selection of learning experiences
- Step 6: Organization of learning experiences
- Step 7: Determination of what to evaluate and
the ways and means of doing it."

The objectives model is heavily dependent on means-ends reasoning and is heavily steeped in the long established tradition of testing of student attainment. Its chief proponents are quick to point to the success of the model when used in training of personnel such as technical operators in defence forces.

Skilbeck is critical of this model for five reasons:

1. It is imposed on a school and, thus, does not take into account the individual culture of a school. Skilbeck maintains that the curriculum should be, for the learner and teacher, made up of experiences; these should be experiences of value, developed by the teacher and learner together from a close and sympathetic appraisal of the learner's needs, and his characteristics as a learner. Thus, for Skilbeck, a school-based curriculum development model ought to concern itself with the learning situation as the major problematic area, and not materials production.
2. Because it is imposed on a school, the objectives model does not allow for the freedom for teachers and for children as a necessary condition for the full educational potential of the experiences mentioned in (1.) to be realized. "This freedom should extend to allow the teacher to define objectives, set targets, select learning content, modulate the range and tempo of learning tasks, to define what is appropriate in the form of both criteria and techniques, and to assess the extent to which the potential value of the learning situation has been realized." (p. 15)
3. Because the objectives model is imposed on a school it does not take into account the unique relationship that each school has with its environment. The school "... engages in a complex transaction with the environment

¹ Taba, Hilda: Ibid, p. 12.

which involves exchange of ideas, resources and people through a network of communication systems. The schools responsiveness to this environment, which is not at all the same thing as uncritical adjustments to its demands, depends upon its freedom to build up its own curriculum in part as an exchange system with the environment." (p. 16)

4. Skilbeck argues that the objectives model does not take into account the fact that practitioners do not readily accept the command to "specify your objectives".
5. Skilbeck argues that any model entailing a means-ends reasoning is wrong, because an objective is only meaningful in and through activity.

Underpinning Skilbeck's objections to the objectives model is the inherent difficulties that the model faces when it attempts to translate deep structures of knowledge into objectives, particularly of a behavioural kind. Implied in Skilbeck's criticism is the view that the filtering of knowledge through an analysis of objectives gives the school an authority and power over children by setting arbitrary limits to speculation and by defining arbitrary solutions to unresolved problems of knowledge. This, suggests Skilbeck, translates the teacher from the role of a student of a complex field of knowledge to the role of the master of the school's agreed version of that field.

In an attempt to understand the process model as an alternative to the objectives model, Stenhouse¹ suggests it is useful to examine what Peters² has written concerning the selection of content as a value in itself rather than a means towards the achieving of an objective. Peters is arguing cogently for the intrinsic justification of content. He starts from the position that education "implies the transmission of what is worthwhile to those who become committed to it" and that it "... must involve knowledge and understanding and some kind of cognitive perspective, which are not inert." Believing that education involves taking part in worthwhile activities, Peters argues that such activities have their own built in standards of excellence, and thus "... can be appraised because of the standards imminent in them rather than because of what they lead to."³ They can be argued to be worthwhile in themselves, rather than as means towards objectives.

¹ Stenhouse, Lawrence: An Introduction to Curriculum Research and Development, Heinemann Educational Books Ltd, London, 1975, p. 85.

² Peters, Richard S.: Ethics and Education, George Allen and Unwin, London, 1966.

³ Peters, Richard S.: *Ibid*, p. 45.

Peters is arguing that knowledge can be selected as content on grounds other than the scrutiny of the specific outcomes in terms of student behaviour.

Underpinning Peter's concern regarding the role of curriculum in schools is the analysis of the criteria for worthwhile activities and the structure of the activities. His conclusions seem to point much more clearly to principles of procedures in teaching.

It is the building of curriculum on such structures as procedures, concepts and criteria, which cannot adequately be translated into the performance levels of objectives that make possible Bruner's¹ "courteous translations" of knowledge and allows for learning which challenges all abilities and interests in a diverse group. Bruner has become the learning theorist most commonly associated with the process model of curriculum development. He has argued that learning should be thought of as the internal reorganization of a child's present understanding in response to new experiences. For Bruner, knowledge is considered as a process. Bruner develops the idea of internalization of experience with special reference to the part that language and social interaction play in the growth of understanding.

The hallmark to the process model is a socialized learning environment. Consequently, the process model places significant demands on the teacher. First, implicit in the model is the notion that both student's and teachers develop understanding; that is the teacher is cast in the role of a learner. Second, understanding is chosen as an aim because it cannot be achieved. Understanding can always be deepened. Moreover, there must always be dispute as to what constitutes a valid understanding. The teacher and the group have to accept as part of their task an exploration of the nature of the understanding.

Skilbeck does not single out the process model for criticism. In fact the process model comes very close to Skilbeck's model because it casts the teacher in the role of the student, with the teacher and the student being

¹ Bruner, Jerome S: Towards a Theory of Instruction, The Belknap Press of Harvard University Press, Mass., 1966.

partners in the learning process, and because it does not place arbitrary limits to knowledge in the form of behavioural objectives. However, for Skilbeck the process model must be incomplete, because among other things it does not entail any management strategies for the dissemination processes of diffusion and adoption within a school.

We turn now to the S-I and the R D and D models which are concerned with the dissemination process along with the design and development of a curriculum. Havelock¹ has this to say about the S-I model:

"The [curriculum] ... is presented or brought to the attention of a potential receiver population. The receiver and the receiver's needs are defined and determined exclusively by the sender. The receiver is supposed to react to the new information, and the nature of the reaction determines whether or not subsequent stages will occur. If his awareness is followed by an expression of interest, he is launched on a series of stages which terminate with acceptance or rejection of the innovation. The diffusion of the innovation depends greatly upon the channel of communication within the receiver group, since information about the innovation is transmitted primarily through the social interaction of the group members ... "

For the S-I model the role of the school is a passive one. The school simply responds to the curriculum being presented.

Havelock² has this to say about the R D and D model:

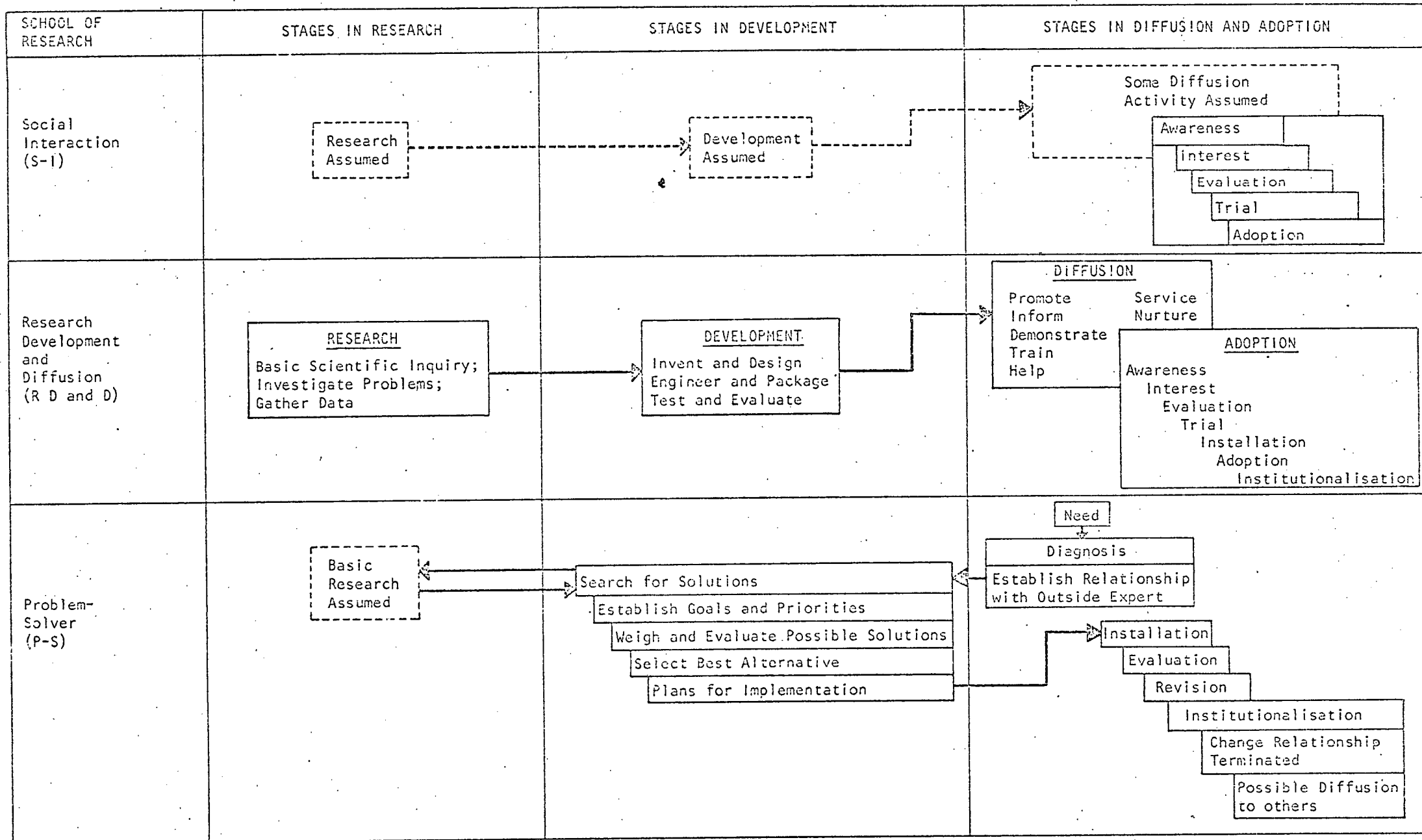
"The ... R D and D perspective looks at the process of change from the point of view of the originator of an innovation, and it begins with the formulation of a problem on the basis of a presumed receiver need. The initiative in making this identification, however, is taken by the developer, not the receiver, and in this way the R D and D school is similar to the S-I school. It differs from the S-I school, however, in

¹ Havelock, Ronald: Op. Cit. pp. 8, 10.

² Havelock, Ronald: Op. Cit. p. 10.

Figure 1.

STAGES TYPICALLY INCLUDED IN MODELS OF CHANGE WITHIN THREE SCHOOLS OF RESEARCH



that it views the process of change from an earlier point in time. The focus is on the activity phases of the developer as he designs and develops a potential solution.

Models which are included in the R D and D school depicts the process of change as an orderly sequence which begins with the identification of a problem, proceeds through activities which are directed towards finding or procuring a solution to this problem and ends with diffusion of this solution to a target group. The initiatives in these activities is taken by researchers, the developers and the disseminations; the receiver remains essentially passive.

The major emphasis is on the planning of change on a large scale. This involves detailing development, based on a scientific knowledge, and rigorous testing and evaluation ... It also involves mechanisms for distributing the innovation and installing it in a target system."

Typically, the R D and D and S-I models have during its development phase used the objectives model, the process model, or a compromise between the two models. Thus, the problems described above in relation to these models, would be contained in the R D and D and S-I models.

The Schools Council and the Nuffield Foundation in the United Kingdom first used the R D and D model for its curriculum development and implementation activities. But, by the mid nineteen sixties projects, especially primary school projects were beginning to favour the S-I model, with less emphasis on mass dissemination, and more emphasis on a process of curriculum reflection. Skilbeck notes:

"After ten years of highly productive activity, there is growing evidence that the Schools' Council sees its future less in the generating of ready-made curriculum packages than in the support of local and regional initiatives, and in various other systems which will

sustain teachers as at least participants in curriculum development. In a recent Council publication, three different types of projects were identified: "(i) 'complete' course materials for pupils and teachers intended, broadly speaking, to be used in a certain order (School Mathematics Project, for example); (ii) materials as a resource from which teachers are expected to select those suitable for their own pupils (Humanities Curriculum Project, for example); (iii) exemplar materials or teachers' guides to which teachers are expected to add from other publications or their own resources (Mathematics for the Majority, for example)". The Council noted a distinct swing, in its own projects, away from the first towards the second and third of these approaches. Such a swing, in part a deliberate move designed to overcome implementation difficulties arising from the research, development and dissemination approach, also expresses teacher disenchantment with the first approach which was borrowed from the U.S.A. in the early days of the Schools Council's and the Nuffield Foundation's work in school curriculum development." (p. 6)

Skilbeck explains the Schools Council's dissatisfaction with the R D and D model:

"The ... point to make about dissatisfaction with descending models has perhaps more relevance to American than to British experience. It is the claim which is frequently made that the model has not worked, or, more precisely, that the massive investment in national projects dominated by scholars from the disciplines and by management strategies has paid inadequate dividends in the form of changed schooling. Some truly remarkable attitudes were engendered by this managerially-dominated movement, including that which treated the teacher as a functionary in a technically bureaucratic system whose alleged

incapacities could be surmounted by that system's producing 'teacher-proof' learning packages." (pp. 6, 7)

A closer examination of Skilbeck's criticism of the R D and D model is necessary because it will increase our understanding of the insufficiencies of the R D and D model and increase our understanding of Skilbeck's model.

The R D and D model is based on a technology theory of organizational management. The theory requires strict differentiation between individual and organizational behaviour. For this theory the only behaviour that derives from teachers' structured role is admitted within the definition of organizational behaviour; behaviour which is an expression of personal needs and values (i.e. a teacher's individual likes and dislikes about externally imposed curriculum) is excluded from the organizational theory. The theory is only workable, both theoretically and practically, if we can assume that what a teacher does in his formal organizational role as a teacher is both independent of and distinguishable from, what he does as a 'whole person'. As soon as we admit that a teacher's organizational behaviour is in fact influenced by his own personal needs, his own personal priorities, his own insecurities and his own personality, then we have to admit some difference between the school organization and the community. To that extent, the model is unworkable because we can no longer assume that a teacher is simply a technician applying an imposed technology, and always manifesting rational behaviour that is determinate and predictable in relationship with other members of the organization.

The problem with the R D and D model according to Skilbeck, is that the model rests on a stimulus-response psychology and a means-ends rationale. This type of psychology and rationale has proven relevance to the organization of mechanical tasks, such as those found in defence forces, but it is altogether too narrow as a basis for an educational system or a school system. Skilbeck argues that it is too narrow because it denies subjectivity and leaves no room for the self-evident fact that different teachers will perceive the same situation in differing ways and that their responses will vary accordingly.

Underpinning Skilbeck's rejection of the R D and D model and the organizational theory upon which it is based is his view that the relationship

between teachers and children will inevitably involve the inner reaches of the personality because there is usually a higher emotional investment on both sides. This is not to deny that such relationships have a structure, but rather to affirm that the interplay of stimuli and responses are intermingled with the unconscious layers of personality. Since all people are products of their own social classes and cultures, they come to their own work situations with all kinds of prejudices, preferences and predispositions that bring a flood of uncertainties into the school organizational relationship. Indeed, Skilbeck argues, since the educational enterprise depends so heavily on human (as opposed to physical) resources, its behaviour as an organization may well be attributed to the invisible hand of culture than to any rationally contrived and deliberately designed set of interlinking roles as conceived in the R D and D model¹.

We turn now to the S-I model. Skilbeck does not single out the S-I model for criticism, however the reason for his departure from the model warrants our consideration in order to better understand Skilbeck's own model. Skilbeck's observations concerning curriculum development and implementation activities of the Schools Council and the Nuffield Foundation have shown that there was a movement from the R D and D model to a situation whereby teachers were choosing pre-packaged curriculum materials or modifying pre-packaged curriculum materials to suit their individual needs. This is essentially the S-I model.

The S-I model is based on a utopian and simplistic organizational theory, commonly called the human relations theory. The theory's basic tenet is that an individual within an organization requires his personal and social needs to be met in a non-threatening organizational climate, which is supportive rather than directive. Under this theory the professional role of the teacher is greatly increased. There is an emphasis on face-to-face communication and participation across hierarchical lines. This face-to-face communication is grounded in a view of psychological health.

¹ See esp. Reynolds, John and Skilbeck, Malcolm: Culture and the Classroom, Open Books, London, 1976.

which posits a hierarchy of needs. The essential proposition is that the primary needs of security and self-esteem must be met as a precondition for effective social behaviour and personal growth. Effective work in indeterminate and complex professional situations such as schools clearly requires a high emotional investment, commitment and involvement.

It is clear that the work of schools involves constant face-to-face reciprocal interaction between teachers and children, but it is equally clear that many aspects of these relationships may have negative and threatening psychological and social consequences for teachers. If the psychological and social advantages become the absolute criteria for organizational decisions such as the selection of pre-packaged curriculum material as presented by system-based change agents as in the S-I model, these threatening aspects of these relationships might well be screened out or suppressed without regard to their nature or legitimacy. A teacher may reject a pre-packaged curriculum unit for many different personal and social reasons, and indeed the last consideration by the teacher may be its usefulness and applicability in the classroom. The human relations theory of organizational management has tended to rely on a somewhat utopian psychology that assumes that inter-personal decisions are always, or nearly always, the result of consciously modifiable motives. This kind of psychology can be misleading when it rests on the myth of the "autonomous ego" and overrates the capacities of the conscious mind. What is needed is acceptance of the fact that the capacity of a person to make decisions is always limited by non-rational distortions which originate from the relatively unmodifiable layers of the unconscious mind and its childhood experiences. These obvious shortcomings of the S-I model of curriculum development and implementation is partly the reason why Skilbeck has developed his model along lines which are essentially the same as the P-S model.

Havelock¹ describes the P-S model thus:

"In the problem-solver perspective the receiver (an individual or group) initiates the process of change by identifying an area of concern or by sensing a need for change. Once the problem area is identified, the

¹ Havelock, Ronald: Op. Cit., pp. 10, 11.

receiver undertakes to alter the situation either through his own efforts, or by recruiting suitable outside assistance. Whereas the receiver in the S-I and the R D and D models is passive, the receiver in the P-S model is actively involved in finding an innovation to solve his own problem. Specifically what the new input will be is determined largely by the receiver himself, whether or not this same input could also satisfy the needs of other receivers (i.e. mass diffusion) is not generally considered.

... this school is primarily concerned with those cases in which the assistance of outside resources is utilized; these resources are likely to be individuals or groups which can generally be referred to as 'change agents'.

The relationship between the sender and receiver is one of collaboration, and whereas in the S-I and R D and D models the receiver was referred to as the 'target system', it is here called the 'client system'. The client system may range in size from an individual person to an entire nation."

Skilbecks model is in accord with the P-S model in that Skilbeck urges first a thorough situational analysis. (see figure 1.1) Prior to the formulation of objectives, he states there is a need for the reconsideration of the whole question of the context within which and for which objectives are to be defined. Thus, the fundamental curriculum questions of what is to be taught and why become a stark reality when the teacher has to answer them rather than having them answered for him by a centralized curriculum.

For Skilbeck there is a need to engage in an analysis of the situation that the teacher and the children are in (the learning situation of the school) and the context in which the learning activities are carried out. Thus, the teacher's objectives, as a teacher and a curriculum developer cannot be

simply deduced from subjects, or accepted from the education authority, or intuited from a sense of what the child needs, or inferred from his knowledge of learning theory. Although, for Skilbeck, all of these elements have a part to play in the judgements he makes about what are the appropriate objectives.

During the process of diagnosing the existing needs through the process of situational analysis, teachers seek advice from system-based consultants, invite parents to engage in discussion and seek support from the administrative section of the education authority. (See Figure 1.1) A concomitant for Skilbeck of the situational analysis phase is a more sensitive understanding of the required objectives for the curriculum.

In the development of the objectives, Skilbeck argues that teachers have a central decision-making role to perform. They invite discussion with parents and children. Advice is sought from consultants and national government authorities. They seek support and advice from project teams, and seek support from the administrative section of the education authority. (See Figure 1.1)

Figure 1.1

SKILBECK'S MODEL FOR SCHOOL-BASED CURRICULUM DEVELOPMENT		
Curriculum Process: Decisions		
Process	Agency	Role
Situational analysis	- Teachers, heads of school departments. school principals	$D_1 D_2$
	- Pupils	D_2
	- Parents	D_2
	- Consultants (local authority) (college and university) (other schools) (research agencies)	A
	- Administration	S
Objectives	Teachers	D_1
	Pupils	D_2
	Parents	D_2
	Consultants	A
	National governments and government departments	A
	Project teams	S A D_2
	Administration	S
Design	Teachers etc	D_1
	Pupils	D_2
	Parents	D_2 S A
	Consultants	A
	Project teams	S A D_2
Implementation	Teachers etc	D_1
	Pupils	D_2
	Administration	S
Evaluation	Teachers etc	D_1
	Pupils	D_2
	Consultants	A
	Government departments	S A
	Administration	S

NOTE: For simplification this diagram does not specify either the full range of agencies or of development roles. Agencies include: teachers' and resource centres (Administration; Government departments); examination boards (Administration; Government departments); inspectors (Administration; Government departments); employers; parent teachers associations; trade unions, etc.

Support	- S	Decision	- D ₁
Advice	- A	Discussion	- D ₂

Elsewhere Skilbeck¹ furthers his meaning of the objectives phase of his model. However, he substitutes the word "goal" for objectives. There is no explanation for the substitution and we can assume that he is using the two words interchangeably. Skilbeck adds:

"Goals statements need not refer to ends or outcomes, which are frequently beyond and outside the processes of learning and teaching. We may think of goals as culminations; for example, in carpentry, the finished chair is one goal for a particular part of a year's work. It is not the only goal (and perhaps not the most important since other goals will include pupil satisfaction, increased aesthetic sensibility, a growth in skills of various kinds, etc.). It is part of a continuing process, not an end point (since better chairs and other, more demanding, objects can be made, and in making the chair the pupil should develop an interest in 'going on'). We may also think of goals as qualitative aspects of learning experience, which will manifest themselves progressively.

In short, the advice often given by technologists to teachers, to specify all their goals in advance, in terms of discrete items of measurable behaviour, is fatuous. Despite its claims to practical utility, it is quite impracticable. Some goals may be formulated in this way, but they refer only to a very small part of what is important in education".

¹ Reynolds, John and Skilbeck, Malcolm: Op. Cit., p. 110.

Within the design phase Skilbeck¹ assumes that basic research has taken place. That is, schools use and modify curriculum materials to suit their own needs. He explains what he means by the design phase:

"The selection of subject matter for learning, its arrangement into a sequence of teaching episodes, and the choice of appropriate supporting materials and media of presentation, is what we mean by programme building. There is, however, a tendency to regard it as "non-teaching" time, rather than to treat it as an integral part of the teaching process. The preparation of lessons and learning materials provides opportunities for teachers to think out, in a concrete and systematic way, the cultural meanings and symbols which pupils will encounter in their learning. For example, curriculum content and teaching methods may present knowledge either as a finished product or as the outcome of continuing inquiry; they may either mask assumptions and blur distinctions or provoke critical appraisals.

These are polarisations intended to suggest that the programme building stage of the curriculum design process presents opportunities to consider the way in which learners will receive and respond to materials and methods which may be taken for granted by the teacher".

During the design phase Skilbeck assigns teachers the central decision and making role. Teachers invite discussion from parents, children and project teams; they seek support from parents and project teams; and seek advice from parents, consultants and project teams. (See Figure 1.1)

The implementation phase again requires a central decision-making role by teachers; they invite discussion from children and seek support from the education authority. (See Figure 1.1) Skilbeck² describes the implementation phase thus:

"The task in this phase of curriculum design is to anticipate the plan for the installation of the

¹ Reynolds, John and Skilbeck, Malcolm: Ibid., pp. 110, 111.

² Reynolds, John and Skilbeck, Malcolm: Ibid., p. 112.

curriculum in the school or the classroom. Two kinds of task stand out: identifying difficulties and possible resistance, and planning the resources and the organisational changes that might be needed. In a design model it is important to anticipate difficulty rather than to trust to the experience and goodwill of others or one's own native wit and judgement. There is now a considerable literature on problems of implementing organisational and institutional change to which reference ought to be made in any piece of systematic curriculum planning which goes beyond lesson planning".

During the evaluation phase teachers are again assigned the central decision-making role. They invite discussion from children and seek advice from consultants and government departments and the administration section of the education authority. Skilbeck¹ has this to say about the evaluation phase:

"A change in the curriculum has effects which go beyond the selection and teaching of new content. Thus it requires more comprehensive forms of evaluation than have been common in schools hitherto. Even the simplest exercise in curriculum design will incorporate a scheme of some sort for evaluating performance. What is inadequate is to confine this evaluation to an assessment of pupil learning. Wider tasks of evaluation include:

- (1) Providing for on-going assessment which permits further changes in the objectives and programmes in the light of classroom experience.
- (2) Assessing a wide range of outcomes, such as pupil attitudes, reactions of other teachers, and the impact of the curriculum changes on the school organisation as a whole.
- (3) Keeping adequate records which are based on the response of a variety of participants, not only those most directly involved in the change.

¹ Reynolds, John and Skilbeck, Malcolm: Ibid., pp. 112, 113.

- (4) Developing a range of assessment procedures appropriate to the outcomes which are being analysed."

Skilbeck stresses that it is necessary to avoid the temptation to conceive of his model as entailing a logical order in the five stages. He is critical of attempts to produce systems diagrams of the curriculum process. He cites the evidence offered by Taylor¹ to indicate that despite the enticements of the technological approach, teachers do not, in fact, proceed in a linear fashion from goals to evaluation. Skilbeck argues that there may be sound institutional and psychological reasons for intervening first at any stage. Moreover, in a practical planning operation, Skilbeck suggests the different stages can be developed concurrently. Thus, Skilbeck's model does not pre-suppose a means-ends analysis. Albeit, it encourages teams or groups of curriculum developers to take into account different elements and aspects of the curriculum development process, to see the process as an organic whole, and to work in a moderately systematic way.

Skilbeck indicates that this model differs from the previous models described in at least four ways:

- "(1) It identifies the learning situation, not materials production and change strategies, as the major problematical area of curriculum development; encourages developers to think educationally about the situation which is to be changed not about how to implement pre-designed models and techniques of change; and suggests, in a preliminary way, a number of relevant categories in the situation, to which teachers ought to be attending.
- (2) It accepts that practitioners do not readily accept the command to 'specify your objectives', and encourages them to enter the model at whatever stage they wish, e.g. the real problem as perceived by the teacher may be inadequate examinations, or poor text materials - either can be the starting point of developmental thinking.
- (3) It is not committed to means-ends reasoning but accepts

¹ Taylor, P.H.: How Teachers Plan Their Courses, National Foundation For Educational Research; London; 1970.

that an end - an objective, for example - is only meaningful in and through activity.

- (4) It makes no assumptions about the depth and scale of school-based inquiries into any one of the stages identified beyond the basic point that effective and justifiable school-based curriculum development requires that criteria be formulated and schools assisted in their endeavours to satisfy these criteria." (p. 15)

Skilbeck seeks to install the curriculum development decision-making within the school because of the inadequacies which we have explained of the descending models and for other reasons which we will explain in chapter three. He must, then utilize a management model which allows the school to be the initiator and prime developer of the curriculum change process and not conceive of the school as being a target for change by other groups in the education system. The P-S model satisfies these requirements because it allows for initiation of small-scale change by an individual school.

Skilbeck does not state what organizational theory upon which his model is based. He simply states that his is a management model. We have shown that he is very critical of the technology theory upon which the R D and D model is based. We also have shown that he avoids the shortcomings of the human relations theory upon the S-I model is based. With all the problems which come to be associated with an interpretation, an interpretation of Skilbeck's model in terms of the organizational theory upon which it is based is given.

There are at least three well defined organizational theories. We have described the human relations and the technology theories. Before we can attempt an interpretation of Skilbeck's model in terms of its organizational theory, we need to describe another organizational theory. This is the bureaucratic theory. It has its origins in the theory developed by Max Weber¹. In the bureaucratic theory formal structure is the key notion and it is defined as the distribution of formal authority. The formal structure therefore refers to the hierarchical arrangements of positions that devolves in pyramidal form from the top echelon. It is usually defined by regulation and often

¹ Weber, Max, in H.H. Gerth and C.W. Mills (Eds and Trans); From Max Weber: Essays in Sociology; Oxford University Press; New York; 1946.

represented by an organizational chart. The formal structure may be seen as the vehicle by which formal authority is ascribed to each member of the organization as well as the means by which he is child accountable for its exercise to his superior and so on all the way up the hierarchy to its apex. According to this theory, the behaviour of an organization depends on the distribution of authority.

It is our interpretation of Skilbeck's model that it partly encompasses the bureaucratic organization theory. We state this because Skilbeck allows for the different levels of authority within a school; that is, he recognizes different levels of authority from teachers, to heads of departments, to principals to an education authority.

We also interpret Skilbeck's model as partly encompassing the technological organization theory. Implied in Skilbeck's model is the view that the school organization has goals and the school organization requires some "techno-logic" by which the goals are translated into operational functions and methods. However, it is not possible, we believe, to interpret Skilbeck's model as maintaining the technologic function to be of major importance. Certainly, there is no suggestion that the major concern is to program the operation by a means-ends reasoning.

We also interpret Skilbeck's theory as embodying aspects of the human relations theory. Some evidence we can cite for this view is where Skilbeck is developing a case for school-based curriculum development and he states: "The remarkable upsurge in recent years of the phenomena of power-sharing, participatory decision-making, populist resistance to technocracy, and other aspects of the so-called counter-culture which directly challenge the values, assumptions and procedures of hierarchy ... They indicate deeply felt needs and wishes and wishes for involvement and engagement in social action which are peculiarly attractive to teachers who have the mental and emotional power to become engaged ..." (p. 8)

Our interpretation then of Skilbeck's model of school-based curriculum development is that it encompasses elements in varying degrees of three

organizational theories. And certainly, recent studies¹ suggest that this is a sound approach to management; that is, there is no "one" best way. These studies have established that the inter-relationship between the three aspects of organization - the authority structure, the technology, and the social system - is contingent upon environmental factors and on the nature of the organization's tasks.

2.1 Situational Analysis

Skilbeck describes the situational analysis phase both external and internal to the school. For convenience we shall deal first with the external situational analysis. Skilbeck describes this as entailing:

- "i. cultural and social changes and expectations including parental expectations, employer requirements, community assumptions and values, changing relationships (e.g. between adults and children), and ideology;
- ii. educational system requirements and challenges; e.g. policy statements, examinations, local authority expectations or demands or pressures, curriculum projects, educational research;
- iii. the changing nature of the subject matter to be taught;
- iv. the potential contribution of teacher support systems e.g. teacher training colleges, research institutes, etc.;
- v. flow of resources into the school." (p. 12)

In a recent study of the relationship between the school and the community Bridge² endorses Skilbeck's concern for an analysis of the community's assumptions and values. Bridge states that teachers ought to first recognize

¹ Burns, Tom and Stalker, G.M.: The Management of Innovation; Tavistock Publications, London; 1961

and

Lawrence, Paul R. and Lorsch, Jay W.: Organization and Environment; Irwin; Illinois; 1969.

² Bridge, R. Gary: "Parent Participation in School Innovation"; Teachers College Record; Vol. 7, No. 3; February, 1976; p. 368.

that "parents" are not a homogeneous body. Bridge argues that it is erroneous to talk about "parents" or "the community", but rather we ought to consider that these aggregates are in reality composed of various clienteles or segments. Bridge argues that teachers ought to realize, as social scientists have done, that among indicators often used to operationally define clienteles are ethnicity, religion, "intact" versus single parent families, educational background and income, also the most significant delimiters of clienteles are attitudes and childbearing values - which are of course correlated with the other indicators.

Leichter¹ and Moock² have examined the relationship of families and schooling, with special reference to task specialization and role differentiation within families. This research shows that:

1. mothers are straddled with most of the family's primary involvement with schools;
2. the specialization of labour between mothers and fathers is probably greater in working-class homes than middle-class homes; and
3. middle-class fathers are probably more involved in schooling matters than are working-class fathers.

Leichter's and Moock's research supplements and complements Skilbeck's stated concern for an analysis of community assumptions and values in that it indicates that in most "intact families", mothers carry the chief responsibility for making day-to-day schooling decisions and processing school information, but when a perceived crisis occurs, or a non-routinized decision must be made, fathers may be drawn into the picture. Mothers, in short, probably make the family's initial decision to support or resist a change in the school's curriculum.

A sociological study by Wilson³ of the conditions which facilitate community participation in urban renewal and development projects throws further light on Skilbeck's analysis of community attitudes and values. Wilson's research

¹ Leichter, Hope Jensen: "Some Perspectives on the Family as Educator"; Teachers College Record; Vol. 76, No. 2; December, 1974; pp. 175-217.

² Moock, Peter R.: "Economic Aspects of the Family as Educator"; Teachers College Record; Vol. 76, No. 2; December, 1974; pp. 266-278.

³ Wilson, J.Q.: "Planning and Politics: Citizen Participation in Urban Renewal"; in H.B.C. Spiegel (ed): Citizen Participation in Urban Development Washington, D.C.; NTL Institute for Applied Behavioural Science; 1968; p. 48

shows that:

"... lower-income neighborhoods are more likely to produce collective action in response to threats (real or imagined) than to create opportunities. Because of the private-regarding nature of their attachment to the community, they are likely to collaborate when each person can see a danger to him or to his family in some proposed change; collective action is a way, not of defining and implementing some broad program for the benefit of all, but of giving force to individual objections by adding them together in a collective protest."

In short, Wilson's research shows that it is easier to organize lower-income parents for resistance than assistance.

Further endorsing Skilbeck's concern for an analysis by teachers of community values and assumptions has been recent input-output studies of schooling effectiveness in several countries. (Coleman, et al¹, Mayekse, et al², Emmerij³, Douglas⁴ and Jenks⁵). These studies provide some idea of just how important family background is when it comes to a child's academic achievement. Taken en masse these reports show quite strikingly that family background factors (e.g. socioeconomic status, parents expectations for the child, and family structure) account for more of the unique variance in school achievement than do all the schooling input factors put together (e.g. teachers' level of training, per pupil levels of expenditures).

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- ¹ Coleman, James S. et al: Equality of Educational Opportunity; U.S. Government Printing Office; Washington, D.C.; 1966.
 - ² Mayekse, T. et al: A Study of Our Nation's Students; U.S. Government Printing Office; Washington, D.C.; 1973.
 - ³ Emmerij, Louis.: Can the School Build a New Social Order?; Elsevier Scientific Publishing Co.; Amsterdam; 1974.
 - ⁴ Douglas, J.W.B.: The Home and the School; Macquibbon and Kee; London; 1969.
 - ⁵ Jenks, Cristopher et al: Inequality: A Reassessment of the Effect of Family and Schooling in America; Allen Lane; London; 1974.

Recent demographic models of status attainment (i.e. how people attain the social-occupational-income positions they come to occupy in adulthood) provide additional empirical evidence of the importance of family factors. Duncan et al¹ have shown a child's likelihood of attaining a given level of education is highly predictable from a knowledge of just three family background characteristics:

1. father's occupational status;
2. father's education; and
3. number of siblings.

The Duncan et al study show that the higher the father's occupational status, the more years of education he attained, and the fewer number of siblings a person has, the higher the likelihood of attaining a given level of education. We may assume, by adding in other factors such as sex², race³, and parents' aspiration and expectations for the child⁴, we can predict with even greater accuracy the educational level that a child will achieve.

Getzels⁵ notes that the influences which shape children are labelled socialization when they occur in the context of the home, and education when they occur in the schools, yet the underlying principles are the same. The point of Getzels' observation is that discontinuities between the lessons of the home (particularly with regard to language and value codes) and the lessons of the schools limit the academic performances of some children. Getzels' observations are reinforced by the research of Bernstein⁶ who has shown that lower social class children tend to use only a restricted language code whereas middle-class children use both a restricted and an elaborate code, so they do better in school where elaborate codes are emphasized.

¹ Duncan, O.D. et al: Socioeconomic Status and Achievement; Seminar Press; New York; 1972.

² Alexander, K.R. and Eckland, B.K.: "Sex Differences in the Education Attainment Process"; American Sociological Review; Vol. 39; 1974; pp. 668-682.

³ Porter, J.N.: "Race, Socialization, and Mobility in Education and Early Occupational Attainment"; American Sociological Review; Vol. 39, 1974; pp. 303-316.

⁴ Sewell, W.H. et al: "The Educational and Early Occupational Status Attainment Process: Replication and Revision"; American Sociological Review; Vol. 35; 1970; pp. 1014-1027.

⁵ Getzels, J.W.: "Socialization and Education: A Note on Discontinuities"; Teachers College Record; Vol. 76, No. 2; December 1974; pp. 218-225.

⁶ Bernstein, B.: Language and Poverty: Perspectives on a Theme; Markham; Chicago, Ill.; 1970.

The point which is made by research is that the family and the school are not equally powerful; that the family makes a significant difference to a child's performance in school. Thus, any planned school-based change to the curriculum should build on or redirect the resources of the family. The research we have cited endorses Skilbeck's concern for an analysis by teachers of community assumptions and values in order to get the school and the home moving in the same direction.

Skilbeck advocates an analysis of parental expectations of the school's curriculum. His concern is endorsed by Gallup¹ in a recent United States survey which shows that 64 per cent of the parents of public school children said that they wanted more information about schools, and when asked, "What kind of information would be of particular interest?" the most frequent answer was information about the curriculum.

Skilbeck advocates an analysis by teachers of the potential contribution of teacher support systems. Owen is less than enthusiastic about the capacity of local teachers' centres in assisting schools in their development of school-based curriculum. Owen draws on experience in the United Kingdom when he states that the defined aims of teachers' centres include assisting schools to develop a school-based curriculum. Owen² asserts that:

"... teachers' centres do not yet provide local teachers with direct experiences in curriculum-building. Teachers do, of course, come together in order to study, to appraise and to make the first range of decisions about the possible acceptance or rejection of ideas which have a national origin. But, the leaders of teachers' centres are not bound to have either an experience or a skill in curriculum affairs. And certainly there is not yet any training for them in helping teachers to build anew."

Skilbeck adds that teachers' analysis of the potential contribution of teacher support systems ought to extend to research institutions. Recent literature

¹ Gallup, George H.: "Sixth Annual Gallup Poll of Public Attitudes Towards Education"; Phi Delta Kappan; Vol. 56; 1974; pp. 20-32.

² Owen, J.G.: The Management of Curriculum Development; Cambridge University Press; London; 1973; p. 69.

casts doubt on the direct contribution that system-based research and development centres can make in assisting schools with curriculum matters. The generic role of research has never been seriously questioned in that most of the literature on the subject agrees that it is reasonable to assume that a curriculum based on sound educational research will have added prospects of success. However, recent literature focuses on the difficulties that R and D centres have in relating and communicating the results of research to teachers concerned with the development of a curriculum.

Rutherford¹ argues that research outcomes have been of little service to curriculum development in recent years is due to symptoms also manifest in the failure of system-wide curriculum development generally: the lack of curriculum research; the character of the research, which inappropriately tends to use the agricultural control-plot methodology and competitive studies of ideas, methods, and materials; and the fact that developers often come from fields outside of education and may be unaware of or resistant to the available curriculum research.

Chase² points to another reason for the failure of research to directly assist schools in the development of a curriculum. He shows that development commonly begins without adequate research on its principal conceptual organizers. Chase begins with the assumption that curriculum development is, at the heart, concerned with remaking curricula. He argues that for any goal other than the mere updating of content, or methods, this fact means the use of new or renewed curricula conceptions of, for example, learners or society. The conceptions, Chase maintains, are often based on researchable factors. But, partly because of the pressure for action in development, the research is rarely done. Teachers often assume the role of skeptics and rightly call such development efforts that do not investigate their principal organizing terms, "bandwagoning".

¹ Rutherford, J.: "Changing the Attitudes of Curriculum Developers Toward Curriculum Evaluation and Research"; in F.M. Connelly (ed): Curriculum Theory Network; 1971; Monogr. Suppl.: Elements of Curriculum Development; pp. 15-20.

² Chase, F.S.: "Educational Research in the Sixties"; in F.M. Connelly (ed): Curriculum Theory Network; 1971; Monogr. Suppl.: Elements of Curriculum Development; pp. 142-163.

Skilbeck urges that an analysis of the flow of resources into the school be undertaken by teachers during the situational analysis of factors external to the school. There is some evidence¹ to suggest that a curriculum developed during a time of a massive injection of additional money into an education system greatly enhances the prospects for successful curriculum development within a school.

Concerning the situational analysis of factors internal to the school, Skilbeck advocates the following areas of analysis:

- "i pupils: aptitudes, abilities and defined educational needs;
- ii teachers: values, attitudes, skills, knowledge, experience, special strengths and weaknesses, roles;
- iii school ethos and political structure: common assumptions and expectations including traditions, power distribution, authority relationships, methods of achieving conformity to norms and dealing with deviance;
- iv material resources including plant, equipment, and potential for enhancing these;
- v perceived and felt problems and shortcomings in existing curriculum." (p. 12)

Skilbeck assigns teachers a decision-making role and states that during the analysis they need to discuss children's needs with the children. Leithwood and Russell² in their study of the problems associated with educational innovations concur with Skilbeck and go on to state:

"The teacher must be represented in the decision in a primary way for several reasons. ... the teacher has a better opportunity than many other educators to determine changing student needs as expressed in the classroom ... The difficulties involved in diagnosing

¹ Allwood, Leon M. (ed): Australian Schools: The Impact of the Australian Schools Commission, Melbourne, Australian International Press and Publications, 1975.

² Leithwood, K.A. and Russell, H.H. "Focus on Implementation", Interchange, Vol. 4, No. 1, 1973, p. 14.

existing knowledge precisely should not be underestimated; perhaps it is recognition of these difficulties that makes 'discovery' learning so widely used in schools. Essentially, discovery learning allows the student to find meaning in new information by relating that information, idiosyncratically, to his own existing cognitive structure ... since the process of diffusing educational innovations is hampered by the lack of means of diagnosing relevant knowledge, the problem seems best solved by creating a setting in which the teacher identifies the problems in need of solution and creates, adapts, or adopts solutions that he both understands and feels meet the needs in question."

Skilbeck states that teachers should examine their own "values, attitudes, skills, knowledge, experience, special strengths and weaknesses, roles". The reasoning behind this analysis is partly in order for teachers to understand their own ability to cope with change. The assumption is that change will bring with it professional and personal stresses. Hearn¹ furthers some advice in that he has indicated the timing of a curriculum change is closely related to its success. He is arguing that the philosophical nature of a new curriculum ought not to be too great a break from that preceding it. That is, Hearn is arguing for a "wave method" in a program of "rolling reform" of curriculum development within a school. Toffler² in a study dealing with individual's abilities to cope with change supports this view. Toffler has suggested that individuals have a unique, optimal rate of information throughput: too low a rate leads to boredom and too high a rate leads to a condition of trauma with many somatic manifestations, which he labels "future shock".

Skilbeck states that the situational analysis internal to the school should include an analysis of the "perceived and felt problems and shortcomings

¹ Hearn, N.E. "The Where, When and How of Trying Innovations", Phi Delta Kappan, February, 1972, p. 359.

² Toffler, A. Future Shock, New York, Random House, 1970.

in existing curriculum. This view is supported by Brewer¹ who has indicated that one of the factors conducive to the successful system-wide implementation of a Social Science curriculum in Tasmanian primary schools was the "dismal" state of the subject area which the curriculum replaced. Research by Greiner² in planned organizational innovation supports Skilbeck's suggested area of analysis. Greiner found that four of the eight cases surveyed of what he classified as "successful" planned organizational innovation were preceded by a build up of outside pressure and internal tension due to dissatisfaction with current practices. He suggests that outside pressure may raise a system's level of anxiety, increase its search for relief, and hence, make it susceptible to influence. Hearn³ supports these findings, and adds:

"Changes can be made more easily ... if there is a felt need or a 'tension point' in the system."

The suggested analysis of the school's ethos and political structure receives developing support in recent literature. Hearn⁴ has shown that changes in senior personnel offer exceptionally propitious times to introduce curriculum change:

"Commonly the new people are seeking new ideas in order to make an immediate impact on the system. Also, there is a period of expectancy on the part of school constituencies that new initiatives will be taken. The 'honeymoon period' is well established as the time to undertake substantial changes."

Hearn further supports Skilbeck's areas of analysis of the school's ethos and political structure where he states that a staff which is strongly cosmopolitan is one which is likely to adapt to planned change. Hearn⁵ notes:

¹ Brewer, Warren B. An Analysis of the Implementation of a Statewide Social Studies Programme Using Miles' Typology of Change Strategies, unpublished M.A. (Ed) dissertation, Simon Fraser Uni., 1974, p. 38.

² Greiner, Larry E. "Antecedents of Planned Organizational Change", Journal of Applied Behavioural Science, 3, No. 1 (1967), pp. 51-85.

³ Hearn, N.E. Op. Cit., p. 360.

⁴ Hearn, N.E. Ibid, p. 359.

⁵ Hearn, N.E. Ibid, p. 359.

"Travel tends to broaden one's tolerance of new ideas. Therefore the ideal staff for innovation is one that has had considerable travel experience, has attended professional meetings outside the state, and has had teaching experience in other systems. The same principles apply to administrators."

Hearn¹ is in further agreement with Skilbeck when he states that the age composition of a staff is also an important variable associated with the success or failure of a curriculum innovation within a school. Hearn notes:

"Youthful staffs, especially administrative staffs are usually associated with adoption of innovations. However ... often older administrators are also risk takers. The older administrators, those who have 'arrived' and are personally secure, or who are near retirement and have little to lose, also bring with them the maturity and necessary skill to innovate. Youth brings enthusiasm and energy, but associated traits of impatience and naivete tend to cause as many problems as they solve. Such administrators are often the hit-and-run innovators. Their ambition to get ahead and make headlines tend to put them in the class of educational rapists who leave behind them a trail of prostrate communities subdued for personal gain."

Other studies concerning organizations other than schools give an insight into the kind of school wherein planned change is most likely to succeed, and further support Skilbeck's concern for an analysis of the school's ethos and political structure. Burns and Stalker² and Mann and Neff³ support the notion that organizational members who have been asked to make frequent changes in their work patterns in the past are more likely to carry out an innovation than members who have been infrequently requested to alter their performance.

¹ Hearn, N.E. Ibid, p. 359.

² Burns, T.B. and Stalker, G.M. The Management of Innovation, London, Tavistock Publications, 1961.

³ Mann, F.C. and Neff, F.W. Op. Cit.

A past history or prevailing atmosphere of change, in short, may contribute to future successful change.

Increasingly, literature on planned educational change focuses on the individual school's organizational climate. Early literature on planned organizational change was vaguely aware of the need to recognize the organizational climate in which the planned change must operate. For example, Halpin¹ defines the concept of the climate of a school as its 'personality'. This is less than satisfactory. Halpin admits:

"The blunt truth is that we do not yet know very much about how to change a climate. More research is needed before any one of us can risk a headlong plunge into action programs in this area."

Recent researchers, however, have developed instruments and factors to analyse the culture of school organizations. (Halpin and Croft², Jackson³, Sarason⁴, Smith and Keith⁵ and Bentzen⁶). This recent research has recognized the complexity of the problems associated with planned change within schools, and have recognized that a major source of that complexity, and one little understood is the school culture itself. Collectively these studies endorse Skilbeck's concern for a situational analysis of the school ethos and political structure.

Among the authors who have attacked the system of interacting variables as they are manifested in schools are Jackson⁷ and Sarason⁸. Their studies of

¹ Halpin, A. "Changes and Organizational Climate", Journal of Educational Administration, Vol. 5, No. 1, May, 1967, p. 11.

² Halpin, A.W. and Croft, D.B. The Organizational Climate of Schools, United States Office of Education, Washington, D.C., 1962.

³ Jackson, Philip W. Life in Classroom, New York, Holt, Rinehart and Winston, 1968.

⁴ Sarason, Seymour B. The Culture of the School and the Problem of Change, Boston, Mass., Allyn and Bacon, 1971.

⁵ Smith, Louis M. and Keith, Pat M. Anatomy of Educational Innovation: An Organizational Analysis of an Elementary School, New York, John Wiley, 1971

⁶ Bentzen, Mary M. Changing Schools: The Magic Feather Principle, New York, McGraw-Hill, 1974.

⁷ Jackson, Philip W. Op. Cit.

⁸ Sarason, Seymour B. Op. Cit.

school life not only help us to engage in post-implementation speculation, they also inform us of methods which can be used to overcome the entailed management problems. The thrust of their argument is the need to include considerations based on the knowledge of the school culture as a facet of the inquiry; a thrust which allows us to make systematic judgements about method, instrumentation, appropriate theory, proposition, as well as a way to inform conclusions.

Only occasionally in the literature of planned change within schools is it recognized that the school culture contains conflict. The school has however, within its structure, the mechanisms to contain it, expose it, and deal with it. Griffin and Lieberman¹ argue in support of Skilbeck that the conflict within a school culture is a phenomenon to be studied and analysed as it relates to the planned change within a school. Griffin and Lieberman argue that schools have reward systems for members, usually precedential and rooted in the history of schools, rather than carefully conceptualized and verbalized. Griffin and Lieberman suggest that in coming to grips with the problems of the school's planned curriculum change there is a need to recognize that the conflict within the school culture often may be more recognizable than definable. The authors, however, argue in support of Skilbeck in-so-far as the impact of the conflict within the school culture and the associated in situ reward system upon the process of the development of a school-based curriculum must be seen as critical.

Skilbeck assigns an advisory role to system-based consultants in assisting a school during the situational analysis phase of his school-based curriculum development model. There is a large body of literature dealing with the roles and effectiveness of system-based consultants. A more searching study of this literature will be dealt with below in this study. Here it will suffice to note what Hearn has stated in support of Skilbeck's statement concerning the role of the system-based consultant during initial phase of the planned curriculum change. Hearn² notes that:

¹ Griffin, Garry A, and Lieberman, Ann. Behaviour of Innovative Personnel, Washington, D.C., ERIC Clearinghouse on Teacher Education, 1974.

² Hearn, N.E. Op. Cit., p. 361.

"One of the oldest methods of initiating change is to import an expert. Not only can the expert be a source of new ideas and a trainer in new methods, he also legitimizes the 'innovation'. That is, research has shown that people tend to respond to the outsider with well-developed and well-presented ideas."

2.2 Objectives

Skilbeck assigns a decision making role to teachers, senior staff and principals in the development of objectives for the school-based curriculum. In the wide range of literature appropriate to the subject there is a range of opinion concerning the degree of participation of the members of the various levels of the school organization from the classroom teacher to the principal. Some authors have maintained that teacher or subordinate participation is necessary for only certain decisions, for example, defining the need for change (National Elementary Principal¹); selecting or developing alternative change possibilities (Dentler²); adopting a specific change, or determining the strategy of a particular element of the change (Byerly and Rankin³). Macdonald and Ruddock⁴ and Hoyle⁵ propose the use of a number of development teams representing a cross-section of the teacher/administration team, but practitioner dominated.

Contrary to the trend towards involvement and participation, some writers have maintained that critical decisions about the planned change must be made by the administration (senior staff, or, in particular, the principal).

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- ¹ National Elementary Principal: "A Point of View About School Organization and Leadership". The National Elementary Principal 41, No. 3, Dec., 1961, Chaps. 1, 2.
 - ² Dentler, R.A. Strategies for Innovation in Education: A View From the Top, New York, Columbia Uni. Teachers College Press, 1964.
 - ³ Byerly, Carl L. and Rankin, Stuart C. "The Detroit Nongraded Program". In Richard I. Miller (ed): in The Nongraded School, New York, Harper and Row, 1967, pp. 26-46.
 - ⁴ Macdonald, B. and Ruddock, J. "Curriculum Research and Development Projects: Barriers to Success", British Journal of Educational Psychology, Vol. 41, June, 1971.
 - ⁵ Hoyle, E. "How Does the Curriculum Changes 1. A Proposal for Inquiries", Journal of Curriculum Studies, May, 1969.

(Bishop¹, Brickell², and Heathers^{3 4}). Typical of the authors who argue for thoroughgoing 'top-down' management is that offered by Brickell who claims that individual teachers control only a segment of 'the ball game'; what they do not control can make the difference. Principals are the designated responsible leaders of the school, and the development of any curriculum within a school must first meet with his approval.

Skilbeck does not categorically state the degree of participation of the school staff at the various levels in the school organization. He does, however, seem to suggest that those closest to the children, the teachers, should have a central role to play in decision-making about the development of objectives. Evidence for this view comes where Skilbeck states:

"The curriculum is, for the learner and the teacher, made up of experiences; these should be experiences of value, developed by the teacher and learner together from a close and sympathetic appraisal of the learner's needs and his characteristics as a learner." (p. 1)

Leithwood and Russell⁵ are in accord with Skilbeck's view. The authors add some clarity to the problem:

"Problems are encountered by primary initiators of change, whether they be teachers or senior administrators. The teacher, although sensitive to student needs, must go through the principal to gain necessary administrative support. This is much easier to do when the principal

¹ Bishop, David W. "The Role of the Local Administrator in Reorganizing Elementary Schools to Test a Semi-departmentalized Plan"; Journal of Educational Sociology 34; April, 1961, pp. 344-348.

² Brickell, H.M. Organizing New York State for Educational Change; Albany, N.Y.: State Education Department, 1961.

³ Heathers, Glen. "The Role of Innovation in Education"; The National Elementary Principal 43; September, 1963, pp. 9-14.

⁴ Heathers, Glen. "Research on Implementing and Evaluating Co-operative Teaching"; The National Elementary Principal 44; No. 3, January, 1965, pp. 27-33.

⁵ Leithwood, K.A. and Russell, H.H. Op. Cit, p. 14.

is a change leader and understands the nature of the requested change. Nevertheless, teacher-initiated change may be more often successful than 'top-down' change. Not only is the change likely to be relatively sensitive to perceived student needs but the teacher who implements the change has a commitment to make it work by virtue of his participation in its initiation (much of this the result of the understanding that may accompany such participation). This does not suggest that the skilful administrator cannot encourage school-initiated change in a direction he considers appropriate, however, without the aura of 'external imposition'."

Because of the doubts regarding the effectiveness of the system-based R and D centres in effectively relating the results of the work to the schools, as described in Chapter 3.1 above, several authors have suggested 'action research' as an answer to the problem. Shumsky and Murkerji¹ state:

"Teachers are hesitant to transplant research findings from a laboratory to their own classroom. To bridge the chasm between research and classroom practice, researchers have been emphasizing what is commonly called action research. In action research, the educational practitioner, or teacher, is the researcher. The laboratory is the field situation, or classroom, in its complex and natural setting. Because the research is tailor-made for a specific, realistic setting and because the research involves the regular personnel in their usual, ongoing relationships, there is no question of applicability.

Action research is based on the assumption that the involvement of teachers in a scientific study of an on-the-job problem is a promising approach. Our experience as consultants in action research shows that this involvement is also a source of great

¹ Shumsky, A. and Murkerji, R. "From Research Idea to Classroom Practice"; The Elementary School Journal; Nov., 1962, pp. 85-86.

difficulties. It may, therefore, be useful to further examine the concept of teacher-involvement.

Unlike the research worker who has a temporary and detached relation to the laboratory, the teacher-researcher is intimately involved with his laboratory-classroom. More than that, he is intensely aware of himself as a central, active agent in his field situation.

To the teacher, action research means that his way of teaching, his relations with his pupils, and the subject matter he is to teach are in a process of change."

The approach described by Shumsky and Murkerji is in accord with the problem-solving approach described in Skilbeck's model, in that the objectives for the curriculum are a result of teachers' situational analysis. Skilbeck posits the idea of project teams and consultants advising and supporting teachers during this phase of his model. Leithwood and Russell¹ have described a situation similar to that advanced by Skilbeck. The two authors state that:

"... a consultant and an R and D person were asked to join the group to help develop skill in identifying and writing objectives in student performance terms and in building evaluation devices into the product of their efforts. The task of specifying objectives proceeded slowly over a one-year period and involved the typical problems usually encountered by teacher groups engaged in such activity: how to keep means and ends distinct; inefficient group dynamics, even though there was an elected chairman; determination of degree of goal specificity; sufficient time to do all the work since no programs were available to suit their needs as they perceived them; the relationship and ordering of skills in the reading domain; insufficient work by some members of the group; impatience with the lack of short-term payoff in the classroom. Never-the-less, by the end of the school year a series of objectives had been agreed upon."

¹ Leithwood, K.A. and Russell, H.H. Op. Cit., p. 19.

Skilbeck conceives of parents being invited by teachers to discuss matters relating to the development of curriculum objectives. Research by Kohn¹ and Bridge², however, show that not all parents are interested in participating in school decisions, and that not all parents are well enough informed to participate in school decisions. This research illustrates the unfortunate fact that 'disadvantaged' families are usually the least informed about matters of schooling, due mainly to the fact that they are relatively ineffective gatherers of school information. The result is that 'advantaged' clienteles have the largest impact on a school where the community has been involved, unless extraordinary efforts are made to involve others.

2.3 Design

Skilbeck advocates the consideration by teachers of "means-materials, e.g. specification of kits, resource units, text materials, etc." during the design phase of his school-based curriculum development model. In effect, this entails the selection and adaption of externally developed curriculum materials.

Schwab³ points to some important problems posed to teachers who seek to use externally developed curriculum materials. The problems concern the learning and developmental theories upon which the materials are based. Schwab maintains that learning and developmental theories are only one of several starting points for the design of a curriculum; and moreover an individual learning or developmental theory only gives a partial view of its subject. Schwab shows that each learning theory represents one of several possible starting points for curriculum development. Thus, a theory of inquiry represents a subject-matter starting point and a theory of ego development represents a psychological starting point. Furthermore, Schwab argues, there is considerable variation within each such starting point. Thus,

¹ Kohn, M.L. Class and Conformity: A Study of Values; Homewood, Ill., Irwin-Dorsey, 1969.

² Bridge, Gary R. Op. Cit.

³ Schwab, J.J. "The Practical Arts of Eclectic", School Review, 1971, No. 79, pp. 493-542.

there are multiple theories of subject matter and there are multiple theories of ego development. Schwab maintains that the various starting points may be likened to the major directions on a compass and the multiple theories within each to slight movements of the pointer. Furthermore, Schwab adds, each theoretical view is associated with a particular range of curricula possibilities. Schwab shows that within the above-mentioned subject-matter starting point it is possible that a theory of inquiry will maximize student understanding of how knowledge is developed and changes, and will minimize content coverage, while it is possible that a theory of logic of the inter-relationship among concepts and between these and the world will maximize concept coverage at the expense of an understanding of how concepts arise and function in inquiry.

For those involved in school-based curriculum development who seek to use curriculum materials developed externally there are self-evident problems arising from Schwab's statements. Schwab argues that school-based curriculum developers first need to recognize that the error of externally developed projects is not that they are necessarily very selective and single-sided in their theoretical orientation. However, ordinarily they will be so if the developer is to have an adequate theoretical base for the program. Rather, a problem resides in the pleas that accompany the materials and that are aimed at the user. These pleas leave the impression that the theoretical merits of the project are not only applicable to almost all facets of a broad audience but also displace all of the project's theoretical competitors.

Schwab argues that the conceptual remedy for the theoretical single-sidedness of the externally developed curriculum materials is based on the recognition of the limitations of theory in comprehending actual classroom practices. Developers of school-based curriculum ought to recognize that while different starting points and different theories are appropriately separated in external development, they cannot be separated in instruction: the actual practice of curriculum and instruction represents a nexus for the full set of starting points and their alternatives. Schwab contends that school-based curriculum developers ought to recognize that a child or a classroom is everything all the theories collectively say they are; and they may be more. As Schwab points out, theory abstracts from phenomena and, thereby, leaves an unexplained background. It is the totality of the explained and the unexplained that the teacher treats in his curriculum planning.

Connelly¹ is in accord with Skilbeck in that both argue that teachers need to be involved in a problem-solving situation to ensure full commitment and understanding by teachers in choice of externally developed curriculum materials. Connelly argues that the range and complexity of problems encountered by teachers in their choosing of the materials is enough to cause them to reject them without hesitation. He argues that the materials need to be chosen as a solution to a problem. For Connelly, the problem needs to be linked with the curriculum's objectives. Connelly has developed a three-phase model to assist teachers:

- "1. A choice point: refers to a philosophical, psychological, sociological, or methodological issue that underlines particular curriculum developments. Each choice point contains a set of alternatives, each of which has different possible curricula consequences.
2. Deliberation: refers to the process by which teachers consider the relative curriculum merits of the available choices ...
3. Choice: ... refers to the particular choices made by teachers in the light of the deliberation."

Connelly sees a major problem posed for teachers involved in school-based curriculum development is to be able to rationalize the theoretical and practical aspects of making choices and of selecting among materials. Connelly sees a second problem as the education of teachers in the habits of mind appropriate to deliberating about the curriculum's use of ideas, materials, circumstances, and the means to achieve the resulting images of the classrooms. Yet, Connelly argues the problems confronting developers of curriculum in schools as being conceptual, and for the most part, require conceptual re-orientation and training. He sees the material consequences as being easily adaptable to existing physical structure, in Canadian schools, at least (i.e. to schools and to pre-service and in-service training institutions).

There exists in the literature some debate concerning teachers' use of externally-developed curriculum material as opposed to teachers designing

¹ Connelly, Michael F. "The Functions of Curriculum Development", Interchange, Vol. 3, Nos. 2-3, 1972, pp. 170-172.

and constructing their own materials. Skilbeck does not see the problem as being dichotomous, but sees value in teachers using and modifying externally developed materials and teachers developing their own materials. Brickell¹ and Havelock² on the other hand, have argued for practical assistance for teachers in terms of specially prepared learning materials in developing teachers' confidence and alleviating resistance to change during the early stages of the change effort. These authors argue that if teachers have to develop their own materials or engage in lengthy search activities it slows the rate of adoption. Here, however, it should be noted that two authors are using a R D and D model of curriculum development. They are concerned with the rate of adoption of externally developed materials whereas Skilbeck is concerned with the quality of learning/teaching program as manifested in the school's curriculum. Leithwood and Russell³ are closer to Skilbeck's P-S model in that they maintain that when teachers develop their own materials there will be a greater chance of adoption. Their study shows that where teachers engage in this latter activity their commitment to the change effort is greater because they have invested more time and emotion into the change process. Having developed the materials, teachers will not wish to see them fail. Two questions are central to the debate:

1. Can the teacher build curricula with the resources and skills normally available; and
2. Should the teacher have primary responsibility for program development or develop curricula with experts in curriculum development?

Concerning skill, Leithwood and Russell⁴ cite examples of teachers having built curricula within a school. Albeit, time is more difficult to acquire than skill. Yet, Lust⁵ and Lester⁶ have shown where schools have manufactured 'new' or additional time by using volunteers in non-teaching roles, and by astute management of the resources of para-professionals in schools. However, Connelly⁷ argues the most important factor in the facilitation of school-based

¹ Brickell, Henry M.: Op. Cit., p. 13.

² Havelock, R.G.: The Change Agents Guide to Innovation in Education, Educational Technology Publications, Englewood Cliffs, New Jersey, 1973.

³ Leithwood, K.A. and Russell, H.H. Op. Cit., pp. 19-20.

⁴ Leithwood, K.A. and Russell, H.H. Op. Cit., p. 22.

⁵ Lust, A. "Utilisation of the Teacher Aide", in Keith Tronc: Focus on Change, Sydney, McGraw-Hill, 1974, pp. 121-122.

⁶ Lester, R. "Voluntary Teacher Aides", in Keith Tronc, Ibid, pp. 122-124.

⁷ Connelly, Michael F. Op. Cit., p. 172.

curriculum development will be the provision of teachers' additional time off from classes, or be paid for the extra effort entailed. The X answer to the second question requires a more complex analysis of the purposes and implications of school-based program development. Leithwood and Russell¹ argue that it is quite true that a curriculum developed solely by teachers may lack subject-matter integrity at some points, a situation that is less likely to happen if the curriculum is developed by subject-matter experts. However, the two authors argue teacher responsibility for curriculum does not imply that subject-matter experts cannot be invited to assist in the task. This view is certainly in accord with Skilbeck who advocates that system-based consultants and project teams advise and support teachers and discuss with them aspects of the curriculum.

Skilbeck advocates a decision-making role by teachers and senior staff during the design phase of his school-development curriculum model. Many authors support the importance that Skilbeck places on the participation of teachers during this phase of the curriculum development. Goodlad and Anderson², Oliver³ and Gale⁴ have used one or more of the following arguments:

1. participation leads to higher staff morale, and higher staff morale is necessary for successful implementation;
2. participation leads to a greater commitment, and a higher degree of commitment is required for effective change;
3. participation leads to a greater clarity about the curriculum, and clarity is necessary for implementation; and
4. beginning with the postulate of basic resistance to change, the argument is that participation will reduce initial resistance and thereby facilitate successful implementation.

Taba⁵, as we have noted describes curriculum development within a model that is juxtaposed to that of Skilbeck's, yet her observations concerning teacher

¹ Leithwood, K.A. and Russell, H.H. Op. Cit., pp. 19-21.

² Goodlad, John I. and Anderson, Robert H. The Nongraded Elementary School, New York, Harcourt, Brace and World, 1963.

³ Oliver, Albert I. Curriculum Improvement, New York, Dodd, Mead, 1965.

⁴ Gale, Richard D. "The Administrative Role in Initiating a Nongraded School". In Richard I. Miller (ed): The Nongraded School, New York, Harper and Row, 1967, pp. 16-28.

⁵ Taba, Hilda: Op. Cit., pp. 452, 472.

participation should be noted:

"... insisting on a 100 per cent participation (in curriculum planning and implementation) from the start is a strategical error which creates many problems (even if it were possible). One of these is the inclusion of many 'reluctant dragons' who ... dampen the atmosphere and impede progress."

And again:

"Much grief has come from indiscriminate participation of everyone in everything ... Clearly there is a distinct function for all groups in the total job of curriculum development and the decisions on participation must rest on who can best do what."

Taba, however, is concerned with the development of a curriculum per se, while Skilbeck is concerned with qualitative change to teaching process, and sees teachers' development of a curriculum as part of that qualitative change.

Concerning teacher participation during the design phase of the curriculum development effort, Leithwood and Russell¹, while agreeing with Skilbeck add a further dimension to the need for total teacher participation. Their arguments have a psychological base and have to do with cognitive motivation.

"One of the most important reasons for teacher responsibility in program development relates to the concept of cognitive innovation and meaningful learning ... The difficulties involved in diagnosing existing knowledge precisely should not be underestimated; perhaps it is recognition of these difficulties that makes 'discovery' learning so widely used in schools. Essentially, discovery learning allows the student to find meaning in new information by relating that information, idiosyncratically, to his own existing cognitive structure. This process is time-consuming but may be one of the few ways meaningful learning can occur where related student knowledge cannot be predetermined diagnostically. Similarly,

¹ Leithwood, K.A. and Russell, H.H. Op. Cit., p. 20.

since the process of diffusing educational innovations is hampered by the lack of means of diagnosing relevant knowledge, the problem seems best solved by creating a setting in which the teacher identifies the problems in need of solution and creates, adapts, or adopts solutions that he both understands and feels meet the needs in question."

Underpinning Leithwood's and Russell's comments are the problems associated with teachers' resistance to change which Skilbeck concerns himself with during the implementation phase of his model.

Skilbeck sees project teams and consultants as advising supporting and discussing with teachers aspects of the school-based curriculum. Leithwood¹ supplements and complements Skilbeck's idea of system-based support for schools by advocating system-based resource centres. Here teachers can review materials, modify it if need be and receive support and advice from consultants in order to meet their perceived needs in schools.

Marsh² and Brickell³ have stressed the importance of teachers visiting and actually observing similar curricula in other schools and education systems. Here the two authors add a further dimension to Skilbeck's suggested support for teachers. The two authors suggest that first-hand experiences are of significant importance in assisting teachers in curriculum innovations. They suggest that observations made by teachers in other schools and education systems will be much more creditable for the visiting teachers than if the same information had been conveyed to the teachers by senior staff within their school.

A number of authors have reported on the advantages of electrical media in

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- ¹ Leithwood, K.A. "Evaluating Achievement of Educational Objectives", Orbit 9, 1971, pp. 10-11.
 - ² Marsh, Paul E. "Wellsprings of Strategy: Considerations Affecting Innovations by the P.S.S.C.", in Matthew B. Miles: Innovations in Education New York, Teachers College Press, 1964, Chap. 10.
 - ³ Brickell, Henry M. "State Organization for Educational Change: A Case Study and a Proposal", in Matthew B. Miles: op. cit., Chap. 20.

assisting teachers in the design of a curriculum. (Gerbner¹, Creshkoff² and Edling³). Typical of this media is video-tape. Here again, another dimension is added to Skilbeck's account of how teachers can be assisted in the design of a school-based curriculum. Admittedly, the space of Skilbeck's paper does not allow him to explore the full range of assistance which teachers can receive.

Skilbeck advocates that teachers facilitate support advice and discussion from parents during the design phase of his school-based curriculum development model. Pomfret⁴ supports Skilbeck's view of parent involvement. Pomfret has shown that if the school community has an overall involvement in the development of a school's curriculum, it results in the community perceiving the school in a more favourable light, and thus treats the school with greater respect which leads to a more positive view of the curriculum by the children.

Rubinstein⁵ also supports Skilbeck's view of parent involvement, albeit with a cynical vein:

"It is important to recognize that community control is essentially an administrative and political strategy for school change. Few of its proponents expect that community control will break new ground in technical educational theory. But all of them expect that it will display a sensitivity to the special needs of its children

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- ¹ Gerbner, George G. "The Role of Media in Communicating Results of Research"; in W.C. Meierhenry (Ed.): Media and Educational Innovation; Lincoln, Nebraska; University of Nebraska, 1964.
 - ² Creshkoff, Lawrence. "Television and the Continuing Education of Teachers: A Feasibility Study of the Potential of Network Television for Dissemination of Educational Research Information"; New York; Teachers College, Columbia University; August, 1967.
 - ³ Edling, Jack V. "Role of Newer Media in Planned Change"; in W.C. Meierhenry (Ed.): op. cit.
 - ⁴ Pomfret, A. "Involving Parents in Schools: Toward Developing a Social Intervention Technology"; Interchange; Vol. 3, Nos 2-3; 1972; pp. 115-129.
 - ⁵ Rubinstein, A.T. "Visiting Ocean Hill-Brownsville in November, 1968 and May, 1969"; in A.T. Rubinstein (Ed.): Schools Without Children: The Case for Community Control; New York Monthly Review Press; 1970; pp. 228-246.

and a willingness to experiment with the alternative solutions that have already been developed, together with an awareness of the results which mark projects hopeful or futile."

Brewer¹, on the other hand is less enthusiastic about parent support and involvement in the design of a curriculum. Brewer is concerned with the design of a system-wide curriculum. He explains:

"Community ... involvement ... did not occur ... (in the implementation of the Tasmanian Social Science Program). The activities of this stage did not seem to suffer as a result of this omission."

2.4 Implementation

Skilbeck describes this phase of his model as entailing:

"Problems of installing the curriculum change, e.g. in an ongoing institutional setting where there may be a clash between old and new, resistance, confusion, etc. In a design model, these must be anticipated, pass through a review of experiences, analysis of relevant research and theory on innovation, and imaginative forecasting." (p. 13)

Skilbeck, then, sees teachers' resistance to change as being a central problem to the implementation phase of his model.

Early literature in the area of resistance to change had its roots in agriculture-based or technology-based innovations. Consequently, its application to planned change in curricula was often speculative. Rogers² places great importance on the role of the early adopters, i.e. those teachers willing to try out changes immediately. Rogers argues that the managers of educational change should be concerned with facilitating the influence that the early adopters

¹ Brewer, Warren B.: Op. Cit., p. 115.

² Rogers, E.M.: Diffusion of Innovations; New York; Free Press; 1962.

have on their colleagues. In a later study Rogers¹ describes these early adopters as follows:

"Innovators are venturesome individuals; they desire the hazardous, the rash, the 'avantgarde', and the risky. Since no other model of the innovation exists in the social system, they must also have the ability to understand and use complex technical information."

Rogers then lists the following characteristics of the early innovators.

"They generally are young. They have relatively high social status in terms of education, prestige and income. Impersonal and cosmopolite sources of information are important to them. They are cosmopolite. They travel widely and participate in affairs beyond the limits of the system. They exert opinion leadership. They are likely to be viewed as deviants by their peers."

Hearn² adds the early adopters is most likely to be "... a youngish man with a doctor's degree, born in a rural area, who has travelled extensively."

Rubin³ is little less speculative when he suggests that every education system has this type of person and adds:

"We have greatly overestimated a teacher's psychological resistance to change. A significant proportion of teachers respond readily to an improvement program and are even hungry for it."

More recent studies are more deeply rooted in psychological theory. Leithwood and Russell⁴ have shown that a teacher's acceptance or rejection of a curriculum innovation depends on the matching, or congruency between the curriculum and the teacher's relevant cognitive structures. The research

¹ Rogers, E.M. "What are Innovators Like?"; in Theory Into Practice; Vol. XI, No. 5, 1972; pp. 252-255.

² Hearn: Op. Cit., p. 359.

³ Rubin, L. A Study of Teacher Retraining; Santa Barbara; University of California, Center for Co-ordinated Education, 1969.

⁴ Leithwood, K.A. and Russell, H.H.: Op. Cit.

and reasoning supports Skilbeck's arguments for involving teachers in a central decision-making and problem-solving situation during the total school-based curriculum development effort.

A closer examination of theories of cognitive motivation will throw greater light on Skilbeck's insistence on involving teachers in a problem-solving situation. Theories of cognitive motivation are useful in explaining why circumstantial differences are appropriate to the level or degree of innovativeness by teachers. Two features of cognitive motivation often identified (McReynolds¹) are the minimization of unassimilated perceptual material and the optimization of innovation rate. The first of the features suggests that acceptance of new ideas can be assimilated to existing cognitive structures. High innovators are more likely to possess a greater range of related cognitive structures to which the innovation may be assimilated and made meaningful. When an innovation is being introduced to teachers less capable of assimilating and making meaningful the innovation, ways of bridging the gap need to be found if implementation is to be successful.

Characteristics of both teachers and the curriculum interact to determine essential characteristics of the information that must be present if teachers are to adopt and support the newly developed curriculum, according to McReynold's theory of cognitive motivation. Thus, there is a need to bring teachers close to all aspects of the curriculum during its developmental phases. In fact, McReynold's theory of cognitive motivation is in accord with Skilbeck's case for centrally involving teachers in the development of the school-based curriculum. According to McReynolds this is conducive to intrinsic cognitive motivation and allows for individual matching of teacher's relevant cognitive structures and the curriculum. Of course, a concomitant is the reduction of teachers' resistance to change.

According to McReynold's theory of cognitive motivation, relevant cognitive structures are subject to wide individual variation. Skilbeck has stated

¹ McReynolds, P. "The Three Faces of Cognitive Motivation"; In H.I. Day, D.E. Berlyne, and D.E. Hunt (Eds): Intrinsic Motivation: A New Direction in Education; Toronto; Holt, Rinehart and Winston; 1971; pp. 33-45.

that teachers' resistance and confusion should be anticipated. However, as a corollary to McReynold's theory of cognitive motivation, teachers, when ostensibly resisting change, should not be labelled low-innovators; rather an examination should be made of the way in which the information concerning the new curriculum has been presented to the teacher, or the way in which the information has matched the teacher's individual relevant cognitive structures. Thus, the categorizing of acceptors and rejectors of curriculum innovations becomes analogous to attributing ineffective teaching strategies solely to a child's stupidity.

While the high-low innovation categories may have descriptive utility, it may also impose subtle restrictions on thinking about the problems of school-based curriculum development. These restrictions come from defining the problem in such a way that it defies solution. ("It is inevitable that low innovators will be slow adopters. Nothing can be done!"). But, if the problem is restated to include the diagnosis of teachers' cognitive characteristics and information designed to suit the innovation, then it is more amenable to solution.

At issue here is problem recognition by teachers. Such recognition is motivated at the individual level by a state of disequilibrium created during the design stage of school-based curriculum design and implementation. A condition of disequilibrium, can be understood as being one in which the individual confronts information that cannot be entirely assimilated in his present cognitive structures and hence requires cognitive accommodation to be made more meaningful.

McReynold's study shows that during the implementation phase of Skilbeck's model it is the interaction between the information concerning the curriculum design and the teacher's present cognitive structures that determines whether that teacher will be motivated to exert the effort necessary to make the information meaningful. All information can be described in terms of the relative proportion that is perceived by the potential implementator (the teacher) as being familiar and readily assimilable into existing cognitive structures as compared with the proportion that is perceived as being unfamiliar and requiring cognitive accommodation. Too small a proportion

of readily assimilable information leads to a rejection of the newly-designed curriculum on the grounds that there is nothing new in the idea. On the other hand too great a proportion of novel information, necessitating excessive accommodation, causes the so-called 'resistance to change' because the newly-designed curriculum has not acquired meaning in the teacher's frame of reference, or it is mistrusted, or the teacher is not motivated to try to understand it. Similar effects can be seen from the amount of information, its complexity in the sense of the number of elements or facets it contains, and its complexity in terms of the rate at which it arrives. Psychological theorists have long argued that some degree of novelty or complexity arouses interests, while high amounts can induce withdrawal or avoidance, usually labelled anxiety or fear. (Toffler¹). Implementation of the newly-designed curriculum will obviously not occur if anxiety or fear is felt by the teachers. Implicit in much of the literature on planned change within schools is the view that teachers have mechanisms to protect themselves from these psychological states. These mechanisms amount to 'dropping out' of considering change and a concomitant veneration of the status quo; or often there is a regression to earlier curricula types.

During the implementation phase of his model Skilbeck assigns the key decision making role to teachers. He does not distinguish between classroom teachers, senior staff and the school principal. Leithwood and Russell and the psychological theory of McReynolds show why classroom teachers should be involved in a decision-making role. There is, however, a body of literature which argues that the central decision-making role ought to encompass the school principal too. (Leiberman², Leithwood and Russell³ and Klingenberg⁴).

¹ Toffler, A. Op. Cit.

² Leiberman, Anne: "The Power of the Principal: Research Findings"; In Carmen M. Culver and Gary J. Hoban, (Eds.): The Power to Change; New York; McGraw-Hill; 1973.

³ Leithwood and Russell: Op. Cit., p. 14.

⁴ Klingenberg, Allen Jay: A Study of Selected Administrative Behaviour Among Administrators from Innovative and Non-Innovative Public School Districts; Washington, D.C.; Bureau of Research Office of Education; U.S. Department of Health, Education, and Welfare; May, 1967.

Leiberman examined the assumption of the principal as key ^{be} exploring the question of whether or not the behaviour and attitudes of the principal influence the behaviour and attitudes of the teacher in his school. That is, if the principal is in fact the most significant leader in the school, then it would be reasonable to assume that his influence would be evident among those whom he leads. Leiberman tested this assumption by researching more than 700 teachers in thirty one primary schools. She found much to substantiate the assumption that the principal can be the key agent for change in the school when he plays the role of leader; that is, she found that when the principal shares decision-making with his staff and when he involves himself and the teachers in organizing the school to deal with its problems, the teachers respond with higher morale and greater professionalism. Under such leadership, then, teachers become more willing to engage in the process of bringing about fruitful change in the school.

Leithwood and Russell further explicate the central role of the principal during the implementation of a school's curriculum:

"His function as change agent is facilitated by direct communication access to senior administrators, teachers, students, parents and outside agencies ... The teacher, although sensitive to students needs, must go through the principal to gain necessary administrative support. This is much easier to do when the principal is a change leader and understands the nature of the requested change."

The Klingenberg study established characteristics of a principal's leadership that positively assisted and promoted planned change within the school. These can be summarized as:

1. They tend to rely upon a greater number of information sources.
2. They have more years of school administration.
3. They have more years of total professional educational experience.
4. They have a greater involvement of their teaching staff in curriculum change, and
5. They have a greater recognition of the worth and dignity of their teaching staffs.

Skilbeck argues that consideration needs to be made by those involved in school-based curriculum development to 'personnel deployment and role definition, i.e. curriculum change as social change'. Leithwood and Russell¹ also argue that successful interpretation and installation of the curriculum only comes when there is a substantial change in role responsibilities by those people involved. Leithwood and Russell maintain that:

"... if information about the change is to be put in a context meaningful for the potential client, the original agent needs to invest some of his agent roles in the potential client. If the original agent is the principal, the teacher must become agent at the level of classroom decisions. If the original agent is the superintendent, the principal must become agent at the level of school decision-making."

Skilbeck assigns system-based consultants, supervisors and superintendents a supportive role during the implementation of the school-based curriculum. The intricate problems associated with the role of the system-based personnel in generating awareness of planned curriculum change in schools has led Orlich, May and Harder², following some quasi-experimental studies, to hypothesize:

"Systematic changes may be introduced and diffused by using change agents specifically prepared with a set of new techniques."

Other writers are less cautious concerning the role of the outside change agent during the implementation stage. (Brown³, Bennis⁴, and Carlson⁵).

¹ Leithwood, K.A. and Russell, H.H.: Op. Cit., p. 16.

² Orlich, Donald C, May, Frank B., and Harder, Robert J. "Change Agents and Instructional Innovation: Report 2"; Elementary School Journal; Vol. 73; 1973; p. 397.

³ Brown, George I. Operational Creativity: A Strategy for Teacher Change; Santa Barbara, California; University of California; 1966; presented at the Meeting of the American Educational Research Association, at Chicago, Illinois; February, 1966; cited in Neal Gross, Joseph B. Giacquinta and Marilyn Bernstein: Implementing Organizational Innovations; New York; Basic Books Inc., 1971; Chap. 2.

⁴ Bennis, Warren G. Changing Organizations; New York; McGraw-Hill; 1966.

⁵ Carlson, Richard O. "Barriers to Change in Public Schools"; In R.O. Carlson, (Ed.): Change Processes in the Public Schools; Eugene, Oregon: Center for the Advanced Study of Educational Administration, Uni. of Oregon; 1965.

Yet, a great deal of this literature turns out to be speculative or hortative in nature, lacking a research base, or a penetrating understanding of the psychological processes involved in the processes of planned change within the school. For example, Bennis after noting (p. 175) that the problem of implementation is a 'continually vexing one', nevertheless proceeds to claim without supporting evidence:

"... The change-agent can be crucial in reducing the resistance to change." (p. 176).

Carlson, without evidence to support his contention concerning the outside change-agent, specifies:

"Part of the explanation of the slow rate of change in public schools according to many students of organizational change, lies with the absence of an institutionalized change agent position in public education. A change-agent ... can be defined as a person who attempts to influence the adoption of decisions in a direction he feels is desirable. He is a professional who has as his major function the advocacy and introduction of innovations into practice ...". (pp. 4-5).

Some authors have insisted that while an outside change-agent is necessary, he should be somebody who carries a high prestige status within the education system, a superintendent (Johnson, Carnie and Lawrence¹, and Lipham²). The Johnson et al and Lipham studies show superintendents to promote positively the curriculum change in a school and thus become successful change agents when they are more outgoing, more assertive, more venturesome, more imaginative, more inclined to experiment, and more relaxed.

Following reasoning behind the Leithwood and Russell study and McReynold's theory of cognitive motivation, it can be argued, however, that the superintendent as a change agent, by virtue of his authority and distance from the classroom, is in danger of creating a dysfunctional amount of

¹ Johnson, Homer M., Carnie, George M., and Lawrence, Clifford J. "Personality Characteristics of School Superintendents in Relation to Their Willingness to Accept Innovation in Education"; Fagan, Utah; Department of Educational Administration, Utah State University; July, 1967.

² Lipham, James M. "Leadership and Administration" in Daniel E. Griffiths, (Ed.): Behavioural Science and Educational Administration; The Sixty-Third Yearbook of the National Society for the Study of Education; Chicago, Illinois; The Uni. of Chicago Press, 1964.

disequilibrium amongst teachers. Although, in many instances he may be in the best position to facilitate the implementation of a school-based curriculum. It can be argued, however, that the superintendent must present information about the curriculum to teachers in a way that recognizes the user's relevant cognitive characteristics. The need for change may not be at all clear from the teacher's point of view and certainly differences in perspective are unlikely, at first glance, to make alternative solutions equally probable to teacher and superintendent alike. The pressure the superintendent may exert, by virtue of his position, on the teacher to accommodate excessively to new and large amounts of information can easily lead to at least mild forms of trauma. Leithwood and Russell show (p. 16) that one of the best ways of minimizing this problem is for the superintendent to work through the principal.

To summarize the issue of the role of system-based personnel in the implementation of a school-based curriculum the views of Owen¹ should be noted:

"We are, then, unclear at the moment whether enthusiasm and youth, theoretical knowledge and the wish to reform are in any way better forms of support - in human terms - for curriculum development than experience, wise interpretation of the past, a certain amount of caution about the acceptance of novelty, and considerable experience in working with and for teachers."

Novotney² states that teachers are more likely to adopt and implement a curriculum if the change agent is someone they trust. He argues that teachers trust teachers more than either principals or administrators and are, hence, more likely to adopt another teacher's idea. This argument supports Skilbeck's idea of assigning teachers the central decision-making role during the implementation phase of his model. It is, however, an argument in support of Leithwoods and Russell's and McReynold's notion that the trust dimension can be characterized in terms of the congruency between the newly-designed curriculum and individual teacher's cognitive structures. A teacher acting

¹ Owen, J.G.: Op. Cit., p. 106.

² Novotney, J.M. (Ed.): The Principal and the Challenge of Change; Payton; Ohio; Institute for the Development of Educational Activities; 1971.

as a change agent is more likely to present a new idea to another teacher in a context which makes the idea more relevant to the perceived needs of another teacher than is the principal or administrator.

2.5 Evaluation

Skilbeck lists the "problems of continuous assessment" as being of central concern during the evaluation phase of his model. Here he is in accord with recent literature on the subject which points to the need to distinguish between the process and the product of children's learning. Leithwood and Russell¹ argue that in spite of the importance of processes, the criterion against which the effectiveness of a learning program must be judged is the outcome of the children's learning, or the product of those processes. Yet, Leithwood and Russell state, it seems too difficult to defend an absolute distinction between process and product, since a product such as "children's achievement", as it can be measured, is only a static, and therefore artificial record of continuous learning and performance. The two authors argue that an operational distinction can be made where classroom treatments are defined as products, activities preparatory to such treatments as processes, and student achievement as the outcome criterion against which product and process are judged. Leithwood and Russell go on to state that when the product is defined as classroom treatment the limitations of both product and process evaluation become evident. Thus, for the two authors, evaluation concerned with children's achievement, is an assessment of unique, partly non-repeatable treatments when those treatments are each considered as a unit.

It is generally recognized that the evaluation phase of curriculum development within a school contains many problems. Recognizing the complexity of the problem, Stake² has suggested that theories, test scores, statistical processes, and many other tools of the educational researchers are simplifiers, "simple

¹ Leithwood, K.A. and Russell, H.H.: Op. Cit., pp. 21, 22,

² Stake, R.E. "Toward a Technology for the Evaluation of Educational Programs" in R.W. Tyler, R.M. Gagne, and M. Scriven (Eds.): Perspectives of Curriculum Evaluation; Chicago; Rand McNally; 1967; pp. 1-12.

representations of the complex". They help us, Stake claims, by reducing a complex phenomenon to something we are able to understand and come to grips with, but they also mislead us by suggesting that the phenomenon being studied is much less than it really is.

Scriven¹ also is aware of the complexity of the problem. He distinguishes between the goals and roles for evaluation and throws some light on the problem isolated by Skilbeck. Scriven comments:

"We do not see evaluation broadly enough. Both description and judgement are essential ... in fact, they are two basic acts of evaluation. Any individual evaluation may attempt to refrain from judging or from collecting the judgements of others. Any individual evaluation may seek only to bring to light the worth of the program. But their evaluations are necessarily incomplete."

Skilbeck places the classroom teacher in a decision-making role during the evaluation phase of his model. He does so in order that evaluation will become an integral part of the learning program, adding to the qualitative improvement of the program. Neagley² has argued that the teacher should be the evaluator, and in this respect is in accord with Skilbeck. Neagley, however, points out that this will differ from objective evaluation. Brewer³ also agrees that teachers' objectivity in evaluating a learning program is a doubtful issue:

"There are significantly few examples of evaluation of curriculum innovation of this comprehensive type. Certainly the teacher's evaluation will be influenced by many other elements derived from his personality, life experience and school environment, such as:
his physical and emotional health;
his training;

¹ Scriven, M. The Methodology of Evaluation; A.E.R.A. Monograph Series on Evaluation, No. 1; Chicago; Rand McNally; 1967; p. 39.

² Neagley, R.G. and Evans, N.D. Handbook for Effective Curriculum Development; Prentice-Hall; New Jersey; 1967; p. 276.

³ Brewer, Warren B.: Op. Cit., p. 124.

his dependency on the system;
 the experience of his colleagues in relation to the innovation;
 the learning environment;
 the type of assistance he is given ...
 when he applies a value judgement to that assessment of his pupils. In some cases an innovation will be adopted despite the fact that the teacher knows that it is making no significant contribution to the children's learning in his situation. This is not skipping the trial stage, rather it is the result of applying a wide range of personal, professional and system variables to this decision-making process."

Leithwood and Russell¹ state that their research has shown contrary to Neagley's and Brewer's view, that teachers are able to evaluate objectively the effectiveness of a curriculum in terms of children's progress by using criterion-referenced measurement. Glass² supports this view when he states:

"Judgements, attitudes and satisfaction are subjective. However they can account for the success or failure of a program and they can be objectively measured; hence they deserve the educators' attention."

Skilbeck advocates that during the evaluation phase of his model discussion ought to occur with the children. Leithwood and Russell³ support this view and go on to state:

"... the teacher is in an excellent position to monitor the effectiveness of any innovation in meeting the student needs. He is also in a good position to suggest alternative solutions by virtue of his first-hand observations of student reaction."

¹ Leithwood, K.A. and Russell, H.H.: Op. Cit., p. 23.

² Glass, G.V. "Two Generations of Evaluation Models"; in P.A. Taylor and D.M. Cowley (Eds.): Readings in Curriculum Evaluation; Iowa; W.C. Brown Co., 1972, p. 59.

³ Leithwood, K.A. and Russell, H.H.: Op. Cit., p. 19.

Skilbeck perceives the role of the teacher to be central during the evaluation phase to ensure continual reconstruction of the curriculum. Leithwood and Russell¹ agree and add:

"... mechanisms are necessary to ensure that a change will be in a continual process of revision in the light of formative evaluation data ...".

Skilbeck assigns a supportive and advisory role to system-based personnel. Leithwood and Russell² again support Skilbeck's view and describe an example of how this was achieved during the development of a school-based curriculum in which they were involved:

"The fall of the next school year (1971) saw some confusion over direction and purpose again and, at this point, the principal exercised more direct leadership than had been necessary until that time. With the help of the R and D person, the group began to systematically write exercises and test items for each of their objectives and to attach standards to each objective by trying out their test items in class and assessing item difficulty by analysis of results. By this stage, the final product of the work was easily discerned by all involved and the highest degree of motivation to complete the task was reached since its inception a year and a half earlier."

¹ Leithwood, K.A. and Russell, H.H.: Ibid., p. 19.

² Leithwood, K.A. and Russell, H.H.: Ibid., p. 19.

Chapter 4

Skilbeck's Model and the Tasmanian Education System

Skilbeck's model of school-based curriculum development seeks to provide a curriculum which is for teachers and children made up of experiences of value which have been developed by the teacher through discussion with parents and with assistance from various support personnel. This is the rationale behind the situational analysis phase of his model: i.e. a close and sympathetic appraisal of the children's needs. The model is an attempt to provide more scope for the continuous adaption of the curriculum to children's individual needs, as much as a reaction against descending curriculum models which are perceived as being ill-fitted to respond to individual differences in either children or teachers. Embodied in the rationale is the belief that the children's differences of experience, social class intelligence, motivation, interest, and learning styles are of crucial importance in learning. The model also embodies the belief that qualitative improvement in education depends on the establishment of an interpersonal relationship as a setting and a context for learning in order that opportunities exist to structure learning tasks according to the individual needs of teachers and children. The model attempts to provide the opportunity for schools to modify, extend, adapt and otherwise re-order externally developed curricula in order to ensure that the school's curriculum is in a continuous process of being related to the individual needs of teachers and children. /

We have seen in Chapter 2 of this study that the Tasmanian primary education system has been encouraged by the Education Department to reach a similar level of educational development as has been described as pertaining to exist in Skilbeck's model. The School in Society report (1968) sought to bring schools to the Stage of Meaning as described by Beeby wherein "... more attention is paid to the individual, there is a more relaxed atmosphere frequently accompanied by more physical activity. These internal changes are accompanied by relaxation of external controls, as in the lessening importance of external examinations and the emphasis in inspection on professional co-operation rather than dictation of content of method"¹. To effect this

¹ Loc. Cit.

end the Report recommends attention be paid to the wider social environment of the classroom. The Report condemns the tendency for schools to close themselves against the local community. The Report recommends school-based experiments in "... the use of team-teaching, ungrading and other methods of obtaining diverse groupings for teaching and co-operative effort between teachers ..."¹.

The Organization of the Education Department report (1973) contains recommendations and views very similar to the level of educational developed as just described as existing in Skilbeck's model. For example, the views expressed in the Introduction to the Report should be noted:

"... there is not one right way to run a school, one right curriculum to follow and one right approach to teaching. The assumption of the Committee is rather that schools should be able to develop in different ways so that the system of schools will be characterized by a considerable diversity ... the school itself is seen as being essentially responsible for the development of its own education programme"².

The Tasmanian Education: The Next Decade report (1978) expresses an advantage of school-based curriculum development that is very similar to that which Skilbeck's model attempts to achieve. The TEND Report states:

"It enables each school to provide a curriculum best suited to the needs of its own particular students"³.

Embodied in Skilbeck's model is the belief that teachers ought to have sufficient autonomy to develop learning programs to realize the full educational potential of the collective experiences which children bring to school. This autonomy is seen as being necessary to allow the teachers to define objectives, set targets, select learning content and modulate the range and tempo of learning tasks, to determine what is appropriate in the form of both criteria and techniques, and to evaluate the extent to which the potential value of the learning situation has been realized. Skilbeck's model, as we have seen, is a reaction against perceived shortcomings in externally developed curricula. Externally developed curricula has a role to play in Skilbeck's model, but the

¹ Loc. Cit.

² Loc. Cit.

³ Loc. Cit.

model embodies the belief that the role should not be at the expense of the spontaneity, flexibility and diversity in the learning process which comes from school-based curriculum development. Teacher involvement in the process of curriculum development is more consistent with a professional self-image, with a sense of professional achievement and with a more complex sense of personal value and worth than is the functionary image engendered by teachers' total use of externally developed curricula, according to Skilbeck.

The School in Society report sought to bring Tasmanian primary schools to a level of educational development in terms of teachers' autonomy as that just described as existing in Skilbeck's model. The Report made recommendations for qualitative change in the primary education system which would bring primary schools to the Stage of Meaning as postulated by Beeby:

"... teachers have a very good professional training and have total autonomy in the classroom"¹.

To this end the Report expressed the belief:

"The Report recognizes that the learning process depends greatly on the nature and quality of the social relationship through which it is mediated"².

The Report on the Organization of the Education Department expressed views and made recommendations aimed at increasing the autonomy of primary schools. In the Introduction to the Report the view was stated:

"The review which is being made of the organization rests to a considerable extent on the assumption that the Education Department should not now be seen as a highly centralized system in which uniformity is a prime characteristic"³.

We have seen that Skilbeck's model advocates teacher autonomy because it enhances a professional self-esteem on behalf of teachers which, according to Skilbeck, in turn enhances the quality of the relationship between teachers and children. The TEND Report too shares this belief. It states:

"... [school-based curriculum development] provides a substantive professional challenge and stimulus to the teachers and to parents"⁴.

Skilbeck's model requires the school to engage in complex transactions with

¹ Loc. Cit.

² Loc. Cit.

³ Loc. Cit.

⁴ Loc. Cit.

the environment and the education system which involves exchange of ideas, resources and people through a network of communication systems. In this respect Skilbeck's model does not preclude curriculum development at other levels of the education system other than the school, nor does it seek to deny a creative role to other professionals in the education system. The model requires policy makers in the education system to allocate different types of curriculum decisions to different levels of the education system. This involves the designing of the necessary structures to sustain curriculum development at various levels of the education system. Embodied in Skilbeck's model is the view that in simplistic terms school-based curriculum development entails that of all the various levels of curriculum decision-making from the school to the national level, the school and the school teacher ought to have the primary responsibility for determining curriculum content, the learning resources needed for this content and the teaching, learning and evaluation procedures. As a corollary to this view the model prescribes that school-based curriculum development cannot be implemented except by taking into account and if necessary redefining the responsibilities of individuals and branches concerned with curricula in the various levels of an education system. The model embraces the point of view that school-based curriculum development is an intellectually and onerous task which calls into play all of the teacher's competencies and skills. Thus, the model requires the use of quite substantial support structures.

We have seen the beginning of an infra-structure of support systems be recommended in The School and Society Report, where Recommendation 39a urges that the Education Department "... provide curriculum advisers in each district to assist in the implementation of various aspects or areas of the curriculum"¹. And Recommendation 39a advocates that "there should be increasing provision for in-service education for teachers and for much greater inter-state and overseas exchange for teachers"². And Recommendation 48 which urges the establishment of "a residential in-service training centre for teachers (which) should be provided in a pleasant and comfortable rural setting for weekend and longer courses"³.

The Report on the Organization of the Education Department also recognized the

¹ Loc. Cit.

² Loc. Cit.

³ Loc. Cit.

need for the development of an infra-structure of support services for schools as they gained greater autonomy in curriculum matters. The Report put forward very similar views to those offered by Skilbeck in relation to the school's increasing dependence on education system support as they developed greater autonomy in curriculum matters. The Report stated that as schools increased their autonomy with the curriculum they in turn would need to open themselves to the support services provided by the education system. To effect these views the Report made recommendations concerning human and material support for teachers principally through the establishment of teachers' centres which would among other things serve as bases for consultants.

The TEND Report details in greater length recommendations which the Committee considered necessary for material and human support for schools engaging in school-based curriculum development. The Report advocated the production of firm and comprehensive curriculum guidelines for teachers. Moreover, the Report stated that the existing level of human support in curriculum matters for schools was insufficient. The Report made recommendations concerning the upgrading of an infra-structure of support services for schools. It recommended that the Media Centre, the Curriculum Branch and the In-service Branch be more closely co-ordinated and that the level of personnel in these branches be increased. The Report further recommended that there be a system of regular secondment to the Curriculum Branch and consideration be given to the appointment in regional offices of resource persons of a superintendent seniority who would become curriculum consultants to schools.

We have seen that Skilbeck's model resulted from perceived insufficiencies of the technocratic management styles upon which the Tyler/Taber objectives model and the Research, Development and Diffusion curriculum models were based. We have argued that Skilbeck's model can be interpreted as encompassing elements of the Bureaucratic, Technological and Human Relations organization theories. We have seen that the Organization Report was a conscious effort to move the organization of the Tasmanian Education Department away from a technocratic organizational style as depicted in The School and Society Report to a style of organization that can be described as being more closely akin to that in which we have interpreted as existing in Skilbeck's model.

Elsewhere in Skilbeck's paper, Skilbeck comes to grips with an associated

problem confronting an education system engaging in school-based curriculum development. Skilbeck conceives of school-based curriculum development as entailing rethinking at all levels of an education system. The institutions and the individuals concerned with teachers' professional training and development in both pre-service and in-service areas need to be a part of the change effort according to Skilbeck.

Traditionally, Skilbeck recognizes teachers have not been trained as curriculum developers in either pre-service or in-service institutions, despite having received a basic understanding of curriculum theory necessary for classroom practitioners in either or both of the institutions. Skilbeck argues that teachers being prepared for a profession whereby they exercise responsibility for all major curriculum decisions, even under various kinds of constraints, ought to have a very different professional education than teachers being prepared for a professional role whereby all major curriculum decisions are made for them. In the former case teachers ought to be trained in the use of curriculum materials and come to understand the factors which influence the structure of curriculum materials.

School-based curriculum development, Skilbeck argues, is so radical in its longer term implications for qualitative change that re-thinking at every stage of the teacher training process is required from initial selection to certification and subsequent in-service education. Skilbeck suggests that initial selection should not attempt to be based on scientific process but rather the prospective teacher's self-image, motivation and professional commitment. Since a substantial proportion of teachers leave the profession within five years of service, Skilbeck argues in-service education should be keyed to self-selection through professional engagement. Thus, for Skilbeck, initial courses should be based on a study of the foundations of curriculum development with an emphasis on the team-based role of the young teacher. These initial courses should be practically linked to problems young teachers face in curriculum during their early years of teaching.

Thus, the primary focus for teacher education for school-based curriculum development, Skilbeck argues, should be the post-experience or the in-service stage of the teacher's training. By the time this stage is reached the teachers membership of the profession will have stabilized. Many of the

teacher's career lines will have emerged and the teacher will have a clearer perception than the trainee teacher can have of the practical constraints and opportunities affecting any work that the teacher may undertake in curriculum development.

Skilbeck warns that school-based curriculum development does not imply a uniform role for all teachers and that not all teachers need or are ever likely to become expert in all aspects of curriculum development.

We have seen in Chapter 2 of this study how the TEND Report recognized that developments in pre-service and in-service education for teachers as being necessary to ensure successful school-based curriculum development. As with Skilbeck the TEND Report recognized that few teachers had made a serious study of curriculum theory and practice despite having been introduced to an elementary study of the subject during their pre-service education. The TEND Report argued that if curriculum development is to become a part of the teachers' role then more weight will need to be given to that area of study at pre-service institutions. The TEND Report, as with Skilbeck, argued that the major thrust in teachers' education in curriculum matters should come through in-service education when teachers had become more settled in their careers.

Conclusion

During this study we have noted that the Tasmanian primary school principals have expressed their concern and interest in school-based curriculum development by including the general subject as a major item on the agenda for their 1977 Annual Conference. The following year the principals moved towards a point whereby they have inclined towards a view of school-based curriculum development that is similar to that described by Skilbeck. The principals included as a major item on the agenda of their 1978 Annual Conference one aspect of Skilbeck's model: i.e. situational analysis.

We have traced out in this study a movement towards school-based curriculum development within the Tasmanian primary education system as revealed through the views expressed and the recommendations made in three major departmental reports. We have seen that The School in Society report (1968) assumed a Tyler/Taber rationale, or an objectives model of curriculum development and implementation. The Report, however, did make recommendations concerning school-based experiments in classroom management and teaching methods. It also recognized the need for system-based human support in curriculum areas and an upgrading of in-service facilities for teachers. Taken as a whole we have seen that the Report aimed at qualitative educational change which would enhance teachers' autonomy and bring them to a stage of professional development very similar to that required by Skilbeck's model.

The Report on the Organization of the Education Department (1973) we have seen as making recommendations and expressing views which would direct the Education Department away from a technocratic style of organization which had been presupposed in The School in Society report and to style of organization that is very similar to that which is required by Skilbeck's model. We have cited recommendations made in the Organization Report which aimed at encouraging school autonomy in curriculum matters. The Report also made specific recommendations concerning the development of an infra-structure of support services for schools which they would need as they gained greater autonomy in curriculum matters. The Report also expressed the view that as schools increased their autonomy in curriculum matters they would in turn become more dependent on the education system in terms of human and material support, and would consequently need to be more open to this support. We have seen that this, too, is very close to that which Skilbeck's model requires.

The TEND Report (1978) devoted a major section to school-based curriculum development. It expressed views in favour of school-based curriculum development that are very similar to views expressed by Skilbeck: i.e. school-based curriculum development provides learning experiences which are better suited to individual schools than those that can be provided by imposed curricula; and school-based curriculum development is more conducive to enhancing teachers' professional self-image and development than the situation whereby teachers teach according to the requirements of an imposed curriculum. The TEND Report made recommendations concerning material and human support for schools, curriculum evaluation and pre-service and in-service education for teachers. We have illustrated how these recommendations are aimed at bringing about a situation that is very similar to that which Skilbeck's model requires.

We have critically examined Skilbeck's model of school-based curriculum development first by comparing it with other models of curriculum development: i.e. the objectives model and the process model. We have seen that Skilbeck claims that his model is more than a curriculum development model. It is a management model, because it also involves implementation. We have compared Skilbeck's model with other curriculum development and implementation models: i.e. the Research, Development and Diffusion Model and the Social Interaction model. We have examined the organizational theories upon which the R D and D model and the S I model are based. We then placed Skilbeck's model in the context of the Problem Solver model and examined the organizational theory upon which the P-S model is based.

It has been a major task of ours to critically examine Skilbeck's model in terms of a range of literature encompassing sociology, educational psychology, literature dealing with resistance to change and literature dealing with curriculum evaluation. Our examination revealed that Skilbeck's model is well in tune with recent research and thinking in a range of areas.

From this study we have established that there are marked similarities between what Skilbeck's model requires and the direction in which departmental reports show the Tasmanian primary education system is moving. We may now state that the Tasmanian primary school principals who have chosen Skilbeck's model are being guided by a model which is sound when critically analysed in the light of the relevant literature, and is compatible with what the policy statements of the Tasmanian Education Department require.

In this study we have not attempted to delve into the area of empirical research. Yet, the study exposes some aspects of school-based curriculum development within the Tasmanian primary education system which are demanding of empirical study. What Skilbeck's model requires to be done, and what the actual outcomes of the recommendations made in the departmental reports we have cited may not match what actually happens in the primary schools using Skilbeck's model or aspects of Skilbeck's model. The following areas are deserving of research:

1. The levels of teachers' pre-service and in-service training.
2. The state of curriculum studies in pre-service institutions and the In-service Branch.
3. Teachers' abilities and the effectiveness in diagnosing a situation, preparing objectives, designing schemes of work, devising implementation procedures and evaluating the effectiveness of the treatment.
4. The levels by which the schools are provided with the necessary resources and support structures by the education system.
5. The levels of abilities of schools to use the resources and support structures provided by the education system.

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