A collection of papers presented at a conference on curriculum decision making are compiled in this publication. The conference, sponsored by the Alberta Department of Education, Teachers Association and School Trustees' Associations, had the primary purpose of recommending answers to the "who," "what," and "how" questions that arise in connection with curriculum decision making. In addition, it provided the opportunity for participants to learn more about the curriculum and instruction processes. Chapters I through IV contain case studies in social studies curriculum decision making, shared curriculum decision making, student and teacher involvement in curriculum decision making, and curriculum change. Chapters V and VI consist of talks on strategies for effecting curriculum change as well as offering an international curriculum perspective. A conference summary in Chapter VII notes the basic constraints, issues, and recommendations arising from the conference reports, discussions, and workshops. The final chapter is a follow-through proposal for implementing the recommendations emanating from the conference. The appendix contains a list of participants. (Author/KSM)
Curriculum

Decision -

Making in

Alberta:

A Janus Look:

PROCEEDINGS OF A CONFERENCE

SPONSORED BY:

The Alberta Department of Education
The Alberta Teachers' Association
The Alberta School Trustees' Association

RED DEER, ALBERTA MARCH 25 - 28, 1974
CURRICULUM
DECISION-MAKING
IN ALBERTA:
A JANUS LOOK

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C. D. Ledgerwood
1974
PREFACE

The Conference

"Who should make what curricular decisions and how should they make them?" This was the over-riding question faced by 165 educators and lay persons who participated in the conference "Curriculum Decision-Making in Alberta" which was held in Red Deer, Alberta, March 25 - 28, 1974. The conference was jointly sponsored by the Alberta Department of Education, the Alberta Teachers' Association, and the Alberta School Trustees' Association. It derived additional input from school system and university personnel, parents and students.

The primary purpose of the conference was to recommend answers to the "who", "what" and "how" questions that arise in connection with curriculum decision-making in Alberta. A second, related purpose was to provide the opportunity for participants to learn more about the curriculum and instruction processes.

The conference employed a case study/workshop approach. During the first two days of the conference, selected Alberta educators described curriculum projects with which they had been involved. Case studies presented at the conference included the new Social Studies Curriculum as described by Harry Sherk, Leif Stolee and Frank Crowther; the Early Childhood Services Program as described by Ron Jarman; a Cross-Age Helping Scheme outlined by Muriel Martin and Betty Ontkean; the Junior High School Group "H" Options as handled by Dave Luyten; and curriculum projects at the school system level as described by Don Dosdall and Don MacInnis.
Conference participants were divided into action groups to discuss each case study. Following the discussions, Ted Aoki, Bill Duke, George Bevan, and Ralph Sabey were called upon to pin-point the issues arising from the respective case studies. The third day of the conference was a workshop in which Ernie Ingram and Gordon McIntosh led participants in a study of the change process and, particularly, the roles of change agents.

At various points in the conference, participants had the opportunity of listening to special speakers. They heard a talk on the constraints surrounding curriculum change delivered by Eugene Torgunrud and reacted to by Bryant Stringham, Susan Zwaenepoel, Louis La Pointe, Shirley Forbes, Harold MacNeil, and Mel Silitto. They also heard the Minister of Education, the Honourable Lou Hyndman, discuss pertinent issues in Alberta education, and the Deputy Minister of Education, Earle Hawkesworth, outline an international perspective on curriculum.

Participants also had opportunities to "speak out" to each other. A series of informal, voluntary sessions featured topics suggested by participants.

As the conference drew to a close, Jim Hrabi summarized the issues and challenged participants to draft resolutions that would attend to these significant matters. Resolutions formulated by the action groups during frequent scheduled and unscheduled meetings held throughout the conference were finalized. Les Tolman, Naomi Hersom, Rudy Melnychuk, Alf McLean, Jake Harder, Ken Koch, Martin Adamson, Rick LaPlante, Merv Thornton, Lorne Bunyan, Judy Waslenchuk and Phil Lamoureux coordinated the activities of the groups and ensured their productivity.
The 104 resolutions emanating from the action groups were compressed into fourteen recommendations by Myer Horowitz and Andy Hughes during the very early hours of Thursday morning. These recommendations, and three others which came from the floor, were debated in a final plenary session chaired by Dr. Horowitz.

Conference Publications

This compilation of conference proceedings is the first of two publications arising from the C. D. M. A. Conference. It is being distributed primarily to conference participants. A second, much briefer publication highlighting major thrusts of the conference will be prepared in late 1974 or early 1975 for much wider distribution.

With the exception of the group discussions, reactions to the Torgunrud paper, and the debate of recommendations, all conference proceedings are included in the present publication. Most of the papers that follow were prepared from tape recordings made during conference sessions. It is not surprising, therefore, that many of the papers exhibit a rather conversational tone. We make no apology for this; rather, we hope that the manner of their initial presentation and the minimal amount of editing they received will enhance the readability of the papers.

The papers are printed here in approximately the same order as their presentation at the conference. Special addresses are...

* It should be noted that the workshop conducted by Ernie Ingram and Gordon McIntosh did not lend itself to tape-recording. The ideas communicated during the workshop were substantially the same as those in a paper prepared by Ingram for publication elsewhere. That paper is printed here with permission of the author.
published as a distinct chapter, and a final chapter deals with the conference recommendations. An indication of how participants might "Follow Through . . . " on these recommendations concludes the publication.

A list of speakers and other conference participants is appended.
ACKNOWLEDGEMENTS

This monograph contains written evidence that a conference was held. What the comparatively bleak pages of the monograph may not show is that the conference was a stimulating learning experience for those who participated in it and that it provided stakeholders in Alberta education with at least a broad outline of the roles they might play in the curriculum decision-making processes.

That the C. D. M. A. Conference achieved its objectives is partly a tribute to the times. The conference theme was both topical and relevant. Conscientious educators, both professionals and laymen, were ready to address some of the perplexing issues dealt with at the conference.

However, the propitiousness of the moment needed to be recognized by people who were in a position to take advantage of it. Eugene Torgunrud and Jack Fotheringham were these people. Sensing the tenor of the times, they conceived the idea of holding a conference on the sociology and psychology of curriculum change; further, they allocated some of the resources of the Department of Education and Alberta Teachers' Association to support the conference idea.

Early in the planning stages, Stan Maertz of the Alberta School Trustees' Association was added to the planning team and I was named as coordinator of the conference. To Eugene, Jack and Stan go special thanks for help that started when the conference was just an idea, continue through the reality stage, and is still being provided now as we attempt to implement conference recommendations.
Soon after assuming responsibility for the conference, I decided that two short months of planning time did not allow me the luxury of working with a planning committee. Instead, I proceeded to discuss the conference with all who would hear me. I literally, "picked the brains" of colleagues in the Department of Education, the University of Alberta and school systems. Ideas gathered from one source were "bounced off" others. Eventually, a conference somewhat different from that which was originally conceived began to take shape in my mind.

Three drafts of the conference program were prepared. The three drafts represented very different types of conferences. Each draft was discussed at length, and modified. The final draft, a synthesis of the first three, was prepared, and speakers were invited barely three short weeks before the conference.

To thank all the persons who provided and/or reacted to ideas for the conference is not an easy task. My colleagues at the Department of Education, especially members of the Curriculum Branch, the Deputy Minister and Associate Deputy, personnel from the Field Services Branch, and the Early Childhood Services staff deserve commendation for tolerating my many interruptions of their work. Ted Aoki, Ernie Ingram, Gordon McIntosh, Naomi Hersom, Myer Horowitz, Andy Hughes, Bill Stewart, and Nico Stehr from the University of Alberta all provided worthwhile inputs during the planning phase.

Lorne Bunyan, Henry Forgues, Bruce Johnson, Rick LaPlante, Alf McLean, Rudy Melnychuk, and Judy Wasienchuk (along with others already named) met with me in Edmonton to discuss the conference. Their contributions added significant ideas to the conference format and program.
During the peak period of conference planning, I did not have a secretary. Hence, my workload had to be shared among many of the competent secretaries at the Department of Education. To these ladies and particularly to Mrs. Sylvia Baker who, through the cooperation of Les Tolman, bore the brunt of the burden, go my special thanks for helping me through some pressure-ridden days. In a similar vein, I wish to thank Clarence Emard, Coordinator, and his staff at the Red Deer Regional Office of the Department of Education for invaluable assistance provided during the conference.

The monograph you now have before you was prepared largely from tape recordings made at the conference. Credit for the horrendous task of deciphering and typing the conference tapes goes to Mrs. Saralie Brown. Mrs. Brown's patience and skill in completing this task are acknowledged with thanks. This brings me to the present when a very competent young lady named Dorothy Wilk is earning my lasting gratitude by nursing this monograph into production. The quality of this publication reflects the much appreciated talents which Dorothy and her helpful allies bring to their jobs.

Thanks are also extended to Bert Figur and Eugene Balay and their staff at the Alberta Correspondence School for proof-reading the edited transcripts of the addresses that appear in this monograph.

The conference itself owes its success to many people: those who presented case studies, the expert analysts, our excellent summarizer, the group coordinators, the chairmen of plenary sessions, those who led off in the "Speed Cuts", and (by no means least) the enthusiastic
participants themselves. On behalf of the sponsoring agencies, a vote of appreciation is extended to all these people. Without their contributions, C. D. M. A. might have been "just another conference"; because of their input, Alberta may now be entering a new era of curriculum decision-making.

Doug Ledgerwood

June, 1974
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APPENDIX
CHAPTER I

THE SOCIAL STUDIES AS A CASE STUDY IN CURRICULUM DECISION-MAKING
PRESUPPOSITIONS UNDERLYING CURRICULUM DECISION-MAKING IN THE NEW SOCIAL STUDIES

Harry Sherk

It seems to me that the three of us who are making the initial presentations at the conference may be likened to three men in a jeep who are rambling along a road. We all have our hands on the steering wheel. I am peering intently into the rearview mirror. Leif Stolee is looking out the side window with a view of making an assessment of what he perceives; and being the kind of person that Leif is, he forces us to stop now and then for short periods of time, so that he can get out and, with the aid of a magnifying glass, examine certain aspects of the environment, which in this case turn out to be the social studies program. At the same time, Frank Crowther is constantly peering forward looking down the road in an attempt to see what lies ahead.

As Doug Ledgerwood mentioned in his introduction, we are not going to dwell on the social studies curriculum in detail. We are making an assumption, initially, that everyone here knows something about this program. In case that proves to be a false assumption for anyone here, there will be available to you from the lady at the registration desk, following the presentations, a short summary describing the social studies curriculum. She will also have copies of what I perceive to be the presuppositions underlying this program, as I will be presenting them to you.

I will make just one statement concerning the rationale and objectives of the curriculum in question. The handbooks for teachers of social studies both contain the following statement:
The ultimate aim of the Alberta Social Studies Program is to produce citizens who demonstrate personal, social and civic behaviour in which they constantly examine individual as well as societal values. To insure such behaviour, we must provide opportunities for students to think critically about social issues in such a way as to:

1. internalize a value system
2. demonstrate social studies skills
3. acquire knowledge

"The spiral of concept development - the interaction process" is presented in chart form in the handbooks, as well. This illustration illustrates the version carried in Responding to Change. (Please see next page).

Let us turn now to the presuppositions that seem to underly the Social Studies Program. Those that I will be identifying are not necessarily the ones that would have been cited by the persons who developed the curriculum. Rather we invoked the God, Janus, and took a look backward. I have attempted to determine what seem to have been the presuppositions, based upon the actions taken and the behaviour which resulted on the part of people who were involved in the development of this curriculum. The following assumptions appear to have been operative: (based on examination of the Handbooks for teachers and assessment of procedures followed)

1. (a) That the task of curriculum decision-making can best be accomplished by professional educators drawn from the ranks of Department of Education, university and school system personnel, and that specialized academic preparation in the discipline or disciplines concerned will facilitate this process.
   (There may be implications here relative to non-professionals - students, parents, others).

   (b) A somewhat related assumption is that curriculum decisions should have their basis in widely accepted philosophical positions and
THE SPIRAL OF CONCEPT DEVELOPMENT

The Interaction Process

Grade Themes

12. World Problems And Issues
11. World Problems And Issues
10. Canadian Problems
9. Man, Technology And Culture In Western Societies
8. Man, Technology And Culture In Afro-Asian Societies
7. Man, Technology And Culture In Pre-Industrial Societies
6. Historical Roots of Man
5. People in Canada
4. People in Alberta
3. Comparing People's Communities
2. Neighbours
1. Families

All About Me

Concepts for Values Clarification: Dignity of Man, Precision, Equality, Loyalty, Justice, Empathy, etc.
theoretical models. (Apparently these need not be fully consistent or compatible).

2. That the province has the responsibility and the right to make curricular decisions that prescribe or at least restrict the decision-making roles of other educational agencies, including school systems. (This assumption has legal support).

3. (a) That a major part of the task of curriculum decision-making can be delegated to classroom teachers; that teachers have the desire and the capability of accomplishing the task; that the required time and resources will be available to them; and that there will be administrative support from school boards and their supervisory personnel to facilitate such undertakings.
   (NOTE: Local development of the curriculum is implied in the wording of course outlines and in the fact that up to 1/3 of class time is unstructured in the provincial curriculum).

   (b) A related assumption is that the people who will be called upon to implement curriculum change ought to be involved in pertinent decisions concerning such changes.

4. That "trial run" of a curriculum in a few pilot classes conducted mainly by teachers active in the development of the curriculum is likely to provide adequate information and data upon which decisions concerning province-wide implementation can be based.

5. (a) That a number of agencies or institutions exist in the province with the capability of undertaking a comprehensive program of teacher preparation or re-education to facilitate effective implementation of the curriculum.

   (b) That these agencies will be ready and willing to undertake the task so as to accomplish it at the time that it will be needed.

6. That a wide variety of resource materials is available, and that these can be evaluated and selected for use by the classroom teachers concerned; that existing materials can be adapted for use with a curriculum which is considerably different in focus from the one previously in use; and that the publishing industry will recognize and quickly respond to the need for new types of resource materials designed for effective use with the new program.

   Mr. Chairman, I have presented six major presuppositions that I have been able to identify. There are many other assumptions or presuppositions which could be mentioned, and which possibly will be stated in your deliberations during this conference. I think that it is
time now for the next driver to take over, I will move out of the way and call on my friend, Mr. Leif Stolee.
PROBLEMS RISING FROM CURRICULUM DECISION-MAKING IN THE NEW SOCIAL STUDIES

Leif Stolee

Problems Encountered While Introducing the New Social Studies Curriculum

I assume that the reason I am here is that I was the social studies supervisor for the Edmonton Public School Board during the time when the new social studies was being introduced. It was quite an experience because, unlike the experts from the Department of Education or the University, I had no place to hide. Now that I am an assistant principal in a high school and my problems are undisciplined students rather than bewildered teachers, I can remember with a certain degree of detachment some of the more hair-raising experiences; but at the time I certainly did not find them amusing.

What I propose to do this morning is to briefly outline some of the problems I ran into and to make some suggestions that I believe would have made the transition far easier. You have to bear in mind that I am speaking about my own experiences and that I am not making an assessment of the present state of affairs. Miracles can and will happen, and things may have turned out just wonderful.

The contrast between the objectives of the new program and the methods of implementing it was so startling to me that I was early converted to the belief that the Department and universities operate from cloud nine, far removed from the classroom and completely divorced from the realities that the majority of teachers face as they go about their daily task.

Take the well-known problem of overlap. Certainly if the curriculum was to be overhauled from K to 12, this was an excellent
opportunity to eliminate a great deal of it. However, for reasons far too long for me to explain here, the new curriculum had such a serious degree of overlap that we, as a large school system, were obliged to make certain that we were within our rights to issue orders to our teachers to prevent the possibility of overlap between the grades. We simply could not permit a situation to continue where three out of the four suggested areas of study for the new grade 6 course were also specifically recommended as Grade 7 and Grade 8 areas of study. Nor could we tolerate the fact that five out of the nine value issues selected for the grade 9 course partially or seriously overlapped the value issues laid out a year earlier in the senior high curriculum guide for Grade 10. Philosophize as you will about freedom of choice, in a large city with many feeder schools the teachers simply cannot keep switching their courses around every year to meet the changing backgrounds of different students. Neither their nerves nor the classroom resources can stand the strain.

The problem of overlap, however, was a simple organizational matter as compared to the fundamental defect in the Department's theory of curriculum building: the fallacy that every teacher is, wants to be, and should be a curriculum builder. The reason why the Department gets away with expounding this theory is that it is based upon one of our most cherished but foolish beliefs about ourselves as teachers. It is almost a professional obligation for us to believe this pious bit of self-deception. For years at the annual assemblies of the ATA, resolutions have been passed that have implied that if only the Department would end its restrictive control over the curriculum, that a veritable renaissance of creativity would engulf the province from Manyberries to Fort McMurray.
In fact the whole idea is ridiculous, for to be a professional does not mean that you must be able to create the tools of your trade. The medical profession does not demand that the majority of its members mix their own drugs nor fashion their own instruments but only that they be competent in their use.

Contrast the situation of the doctors with that of the elementary teachers when the new curriculum was sprung upon them that bitter fall. The handbook contained pages of aims, diagrams, objectives, definitions, and philosophy but only three model units for six grades. The poor teachers, who had other subjects to teach plus supervision at recess and noontime, were expected to create the new curriculum before they could teach it.

I will never forget those large zone meetings at which 100 to 150 unsuspecting teachers would turn up cheerfully and expectantly to get the new handbook, nor their confusion when they passed through it, nor their utter disbelief and dismay when we pontificated as to what was expected of them. Our Lord asks somewhere in the Gospels, "Which of you, being asked by his children for bread, will give them stones?" And that is exactly what we gave them. But we wrapped it in a glossy cover and smothered it with professional jargon.

I don't think that we fooled many teachers. On the whole the elementary teachers are a pretty bright bunch, and they soon realized that their educational leaders had blown it again. The hopeful were disappointed, the cynics were not surprised, and a large majority just didn't bother to turn out to the social studies meetings once the word was out that we had very little to offer except words on our part and blood, sweat, toil and tears on theirs. Indifference is a great antidote to salesmanship without substance.
The matter of books and resources presented another of our major problems. The pendulum swung from one extreme to another; and rather than having one primary text as a fount of all knowledge, we found ourselves faced with such a plethora of books that it was very difficult to make reasonable choices. For example, for Grade 7, 32 books were recommended; for Grade 8, 88 books; for Grade 9, 33 books; for Grade 10, 66; for Grade 11, 63; and for Grade 12, 58; for a grand total of 340 books.

Theoretically, again this was an excellent move as it clearly gave the teachers the opportunity to select materials they felt best suited their programs. However, in actual fact two grave weaknesses invalidated the process. In the first place we did not have unlimited funds, and therefore we were forced to be highly selective; secondly, no real, serious evaluation or description of the books appeared in the guide nor were these books tested as to their reading level. Surely the Department should have realized that if the curriculum committees did not have the time nor resources to do a proper evaluation of these books, that it was far less likely that the classroom teachers would have the time to carry out this vital task, even if they could get their hands on the books.

As a result of this approach, I would estimate that thousands of dollars of school board or student money was spent on books listed in the curriculum guide that proved either ineffective or too difficult for the students to read. The highly recommended Asian Studies Inquiry Program was an excellent example of materials that proved too difficult for the average Grade 8 student. At the Grade 12 level, where four books were recommended as primary resources out of the total list of fifty-
eight, two of them proved to be highly disappointing. Political Thinking by Tinder was far too philosophical to be of real value in dealing with the concepts laid out in the curriculum guide, and Ideologies in World Affairs by Gyorgy and Blackwell was analyzed as being at the university graduate reading level.

Another problem related to the multi-text approach that the Department seemed incapable of recognizing, at least to the degree of doing anything rational about it at the time, was the question of how to keep the recommended lists in the curriculum guides up to date in view of the many new books appearing on the market. Standing resource committees made up of selected teachers should have been set up for each grade level to seriously and systematically evaluate all new materials. Each spring a supplementary resource list should have been published containing the new recommended books for each grade, and books already on the list that were found to be unsuitable or surpassed by better books should have been removed.

I also noticed that teachers were quite distressed by the fact that from Grades 7 to 11 the Department recommended that "no more than five copies of any one title be purchased". This recommendation, which must of necessity play havoc with any ideas we might have about nurturing or sustaining Canadian publishing houses, is based upon the current theory that a class should use six or seven books at the same time while the teacher orchestrates the learning.

There is nothing wrong with this approach if one has the temperament of an aircraft controller, but it certainly should not have been given official status by being placed in the handbook. It is just a fact of nature that many good teachers under the approach envisioned by the Department become harried, uncertain, disoriented and highly uncomfortable;
whereas if their classes can use a single book at a time, they are confident, effective, and know what they are doing, where they are going, and how to get there.

From my observations I became convinced that in spite of what the curriculum experts say, the great majority of teachers want to have a good textbook as the primary resource for their classes. They want class sets so that each child can work on his own, do his homework, and still be taught as a member of the group.

They want the textbook so that they may have the necessary time in which to teach and to concentrate on the learning process rather than spend all their time scrounging around, lifting a section from this book and a chapter from that, wrestling with stencils, cursing Gutenberg, and trying to create a worthwhile course by digging through a grab-bag of different books, references, and magazines.

They want the textbook as the backbone of their course, and they want the freedom to be able to go beyond the textbook whenever something better turns up or if they wish to pick some flowers of wisdom along the wayside. We removed the backbone from the social studies curriculum. No wonder that the rest of the body behaved in such a "twitchy" fashion.

It may be that by now some of the teachers have been weaned from the textbook, but I have my doubts when I listen to them talk in the staff room. I sympathize with the unconverted majority. I doubt that a busy teacher will ever be able to effectively replace a good author and educational editor when it comes to preparing the basic materials for a course.

The greatest weakness that I found in the method of building the curriculum was the absence of any serious and practical field testing of
the product before it was sprung on the province. What we got was a group of teachers called pilots who really did not pilot the course but who built it from some rather vague plans handed down by the curriculum committee. What emerged, naturally, was a rough-hewn, jerry-built course which was now really ready for the pilot or field-testing stage. Another two or three years could have been profitably spent to work out the wrinkles and bugs, but at this point the Department printed up the guide and the new course became operational on a province-wide basis. It seems that we are always in a rush, and this is not the first time that the Department has published the curriculum guides before the pilot teachers have even had a chance to report back on the completed year. Time should be made available so that modifications and improvements can be incorporated into our new courses before they become official. In this way we would avoid the needless frustration and high waste that haunt our new courses during their first years of operation at the school level. In Edmonton, at least, we found ourselves doing a great many things that should have been done by the Department through its curriculum committees and its pilot courses.

In summary of the total situation, I would say that the Department has given us some excellent philosophy, some admirable objectives, and some new insights as to what teaching should be; but at the same time it has given us a very incomplete curriculum as far as the practicalities and content are concerned. This method of approach to curriculum building places far too great a strain upon the teachers who have to deal with the day-to-day realities of the classroom situation. We have come to the
point where the teachers actually cringe when they hear of another curriculum change in the social studies. They feel like the Hebrews in bondage in Egypt being forced to produce their quota of bricks a day and then being denied the necessary straw and clay.
Introduction

My task is to discuss the prospects of the 1971 Alberta social studies curriculum. In one sense, I suppose, my assignment is to predict the extent to which the presuppositions and assumptions, as outlined by Dr. Sherk, stand up against the problems of implementation, as outlined by Mr. Stolee. I shall attack my task in the following way. First, I shall describe the present Alberta social studies scene as I see it. Then I shall deal briefly with the variables of accreditation. On the basis of these preliminary descriptions, I shall then present to you my considered opinions of what I think are the future prospects for the curriculum.

In dealing with the present status of the social studies in the schools of the province, I am indebted to two principle sources of data: first, the expressed opinions of Messrs. Olstad, Schreiber, Toews and Kowalchuk who are, like me, social studies consultants working out of the regional offices of education; second, a number of recent research projects conducted either at the University of Alberta or under the auspices of the Department of Education.

Present Status of the Social Studies

There exists a very wide diversity in what has been accomplished with the 1971 curriculum from one divisional level of the school to another and also within divisions.
It is significant for our purposes, I think, that research efforts have established quite firmly that this diversity is not significantly related to acceptance or rejection of the way in which the new curriculum emphasizes valuing. Rather, it has been quite clearly established that almost all teachers at all grade levels are in basic agreement with the values rationale of the curriculum and with the idea that to give students structured experiences in decision-making is a necessary and viable educational objective. In endeavouring to find just why some teachers have really risen to the occasion and accepted the challenge of the new curriculum and why others have not been able to do so, we therefore have to look beyond its valuing orientation.

The regional office social studies consultants are of the opinion that the fullest implementation of the new social studies curriculum has taken place in our junior high schools. This observation is substantiated by a recent province-wide survey of school superintendents, who indicated that they generally are pleased with the quality of social studies that is being taught under the new curriculum in comparison to what was being accomplished prior to 1971, and that the objectives of the new program are generally being successfully met.

At the upper elementary level the situation is not quite so bright, and at the lower elementary level teachers appear to have made even less progress in meeting the challenges thrust upon them by the curriculum. In fact, perhaps 15 to 20 percent of elementary teachers at the primary levels seem to be not really teaching social studies at all; and in at least 50 percent of elementary classrooms, the new social studies is being taught in only a superficial way. The interesting thing about this is that the impact of the rationale of the new social
studies is obvious in the teaching methodologies of these teachers and in their attitudes towards many related aspects of instruction; but the bare reality of comprehensive curriculum development supposedly essential to the teaching of the curriculum is not reality in at least half of our elementary classrooms. This is not to say that elementary teachers do not want to do the job of curriculum development. I believe that they do. They have had three or four years of what appears to be considerable frustration, as Leif has outlined; but in spite of this apparent frustration, teachers remain positive in their attitudes towards the curriculum and optimistic in their hopes for its future in their hands. If they are offered the right types of leadership to develop units of study or work on other curriculum projects, they are usually more than happy to get involved and see what can be accomplished. And they certainly appreciate the freedom that the curriculum permits them in selection of content. In a nutshell, the antithesis appears to be that teachers are grateful for the inspirational and creative efforts of those who devised the curriculum's rationale; but especially at the elementary levels, it seems that more than inspiration is needed to convert theory into sound instructional practice.

I think it might be useful for the purposes of this conference if I digress for a minute and outline the more obvious reasons why the curriculum seems to have entrenched itself more firmly in junior high schools than elementary schools. First, of course, secondary social studies teachers are, by and large, more specialized in their training and teaching assignments than are elementary teachers. It follows that they will have a more vested interest in endeavouring to do a completely professional job in teaching social studies than will elementary teachers. Second, as I think Leif inferred, the particular inquiry
approach that many teachers think of as synonymous with this curriculum has created overwhelming organizational problems for many teachers, but more so at the elementary than the secondary level. Most teachers find it extremely difficult and frustrating to organize elementary students to work individually or in groups to acquire information and learn concepts and generalizations using, as materials, only single copies or perhaps two or three copies of a number of different print and non-print items. Teachers realize that the whole idea of resolving value issues without having established an appropriate knowledge basis isn't a viable educational objective. It seems to me that the fact that most elementary teachers have not been able to contend with the types of organizational problems that they think the curriculum has imposed upon them has meant that in many cases they haven't really been given the opportunity to contend seriously with the values-orientation and decision-making basis of the curriculum. This, of course, is a problem that can be overcome; and herein lies one reason why I personally am very optimistic about the curriculum. It is beginning to become clear, I think, that there are as many alternative teaching styles suited to the teaching of the valuing process as there are good teachers. Certainly, the multi-resource and small-group-research approach is one viable methodology. But it is not inherently suited to the majority of teachers, especially at the elementary level, nor is it suitable for certain topics of study. For the sake of teachers, further clarification on this issue of the nature of inquiry is definitely required, and when it comes, it should assist to resolve much of the frustration that many teachers are still enduring in their efforts to teach the new social studies.
Thus, as Leif has outlined, appropriate resources have until recently been difficult to locate at all grade levels, but more so at elementary than junior high grade levels. Moreover, at the middle and upper elementary grade levels, even where good print materials have been available, they have often been difficult to use to accomplish, say, value objectives, because of the organizational problems I mentioned a minute ago. Now, fortunately, the publishing industry is responding well to our needs; and if availability of materials is the problem, then the problem is quickly diminishing in significance.

Certainly, teachers at all grade levels have been contending since 1971 that if they just had the materials and the model teaching units to fit the new curriculum, then their problems would be over. They may be right, too; but before accepting this conclusion, please consider the following statement from the most recent edition of Social Education, the prominent American social studies publication:

Even more tragic, it now appears that in spite of the development of an impressive collection of multi-media, inquiry-oriented instructional materials, few teachers know about the materials, even fewer use them, and social studies classrooms remain relatively unchanged and untouched by what we have called "New Social Studies" ...... A recent educational testing service survey concluded that the "new curriculum projects... appear to have made little or no impact on student preparation (in the social studies)..." and that the curriculum did not "differ in any striking way from that which has been traditional in the United States for twenty five years".

This statement is very interesting in the context of what I have been saying, because Alberta teachers have not been permitted as their American counterparts apparently have, to teach the new social studies
using elaborate curriculum projects as a vehicle. But it is my contention that there have been basic changes in the nature of social studies instruction in at least half of our classrooms as a result of the introduction of the 1971 curriculum. It is indeed very possible that where our teachers have been successful as time goes on, it is at least in part because they have been forced by the nature of the curriculum and departmental handbooks to develop their own programs. In so doing, they have been forced to examine the dynamics of their own behaviour and the nature of their interactions with students, and to come to grips with abstract but vital concepts like value clarification, value concepts, and affective domain. These concepts, what they imply, and the interpersonal dynamics that I spoke of do not appear to be the kinds of things that can be extracted from a cookbook and transplanted into teaching practice.

High School Accreditation

I would like to present a synopsis of what is happening in our high schools. First, there is no question that the 1971 curriculum has had less impact at the senior high than the junior high level. To a large extent this is probably because high school teachers have not really had to concern themselves until recently with the worrying idea that if they weren't teaching the new social studies, then they weren't doing their jobs. This, of course, was very largely because departmental exams did not attempt to deal with the basic distinguishing features of the curriculum.

Now, of course, we have accreditation. Accreditation seems, at first sight, to offer high school teachers the opportunity to really "do their
own thing" with the new social studies, by taking advantage of its rationale and flexibility, their own university specialization, and all the additional research findings and ideas that have come our way since 1971. But already there are indications that the issue of accountability may prohibit a movement of this type in schools; it seems and rightly so, of course, that high school teachers are going to be forced to evaluate student progress and attainment in terms of clearly recognized criteria; but the clearest criteria to many parents, school trustees, school administrators and even some teachers and high school students are those which emanate from knowledge of disciplinary content as the principle social studies objective. The extent to which high school teachers and school systems will be able to build into their instructional model the types of safeguards that will permit them to teach the new social studies and at the same time meet the expectations of their various publics is at the present time a very interesting question.

Future Prospects

It may appear from my descriptions that I believe the future of the 1971 Alberta social studies to be not very bright. In some ways this is so, because we can now see in hindsight that parts of it just aren't viable. But I certainly wouldn't apply this generalization to the total curriculum. I see no indication whatsoever that this curriculum will have the same fate as the Enterprise of the thirties. The deficiencies in the handbooks can be quite easily resolved; and the problems of methodology, overlap, evaluation and other points mentioned by Leif are not, in my opinion, likely to have any kind of long-term detrimental impact because they are resolvable, too. In fact, assuming that these are the
main obstacles to be overcome, I am quite optimistic about the future of the basic premises of the curriculum.

Still, a great deal of work has to be done if the curriculum is to yield its full potential. In some ways the initial implementation process, under the leadership of Doug Ledgerwood, Gene Torgunrud, and others, may have been very well handled. Unfortunately, the dissemination process seems to have largely stopped there, at the completion of Stage One. And so now, three years later, when you pick up the ATA Magazine or the "new" social studies, you find that people are still pointing out philosophical contradictions in the handbooks or arguing about how the curriculum should have been developed and implemented. You seldom see references to the many excellent aspects of classroom instruction that are appropriate to the teaching of the curriculum in its present and more advanced stages of the dissemination process. The leadership and the change agent mechanisms to facilitate the continued implementation of the curriculum have just not been developed in keeping with the changing needs of teachers; and negative critics, many of whom don't know what they are talking about, have been permitted to have an undue influence on teachers' perceptions of what is possible and what is desirable. As an instance of this, my colleagues and I find that, in visiting schools to evaluate programs and do developmental work with teachers, teachers in many cases are doing an excellent job with the curriculum and enjoying what they are doing. They still however, feel very insecure about it because of their awareness that criticism has been leveled at the curriculum. They just don't believe that they can be doing the right thing. We must bear in mind, also, that the kindergarten, as an innovation, is said to have taken more than fifty
years to complete the innovation diffusion continuum in the United States while the new math is said to have taken only six years. In looking at the social studies in this context and considering current perceptions of the relative worth of the other two innovations, one can only say that we cannot afford to reject the basic premises of the curriculum itself simply because after three years of attempting to cope with it, teachers are still encountering problems. Neither can we afford to reject the basic premise that classroom teachers should be curriculum developers if it is indeed true, as I have inferred, that the only way for a teacher to come to grips with a curriculum of the type in question is through some kind of personal involvement in curriculum development.

I don't feel that I have answered very many questions in this presentation, but I have felt somewhat inhibited, because I have had a strange feeling that Janus is up there peering over my shoulder, watching to see just how I am making out. All that I can say to Janus is that prediction may have been fairly easy in the simple old days of ancient Rome; but in the very complex society that we live in today, it's not so simple; and Janus, had you been around in 1974, I think that you would have probably have had to do considerably more homework to maintain such a high credibility rating. Still I hope that the ideas that we have presented to you in the total framework of this case study -- first, in discussion of the assumptions underlying the curriculum and the strategies employed in implementing it; second, in the types of problems that were encountered in the initial implementation stages of the innovation; and third, in this description of what I think appears to be the future of the curriculum -- will serve as food for productive thought as we seek during the next
few days to find new methodologies for dealing with the issue of who should make what curriculum decisions and how they should make them.
PIN-POINTING ISSUES IN CURRICULUM DECISION-MAKING

Tetsuo Aoki

Historians of educational change in Alberta have identified certain past events which have given shape and accent to the direction of curriculum change and development. In the field of social studies the publication of Donalda Dickie's book, *The Enterprise*; Dr. Tim Byrne's impact on the social studies program changes in the forties; Dr. Lawrence Downey's submission to the Curriculum Branch in the mid-sixties of a proposal for change in the Social Studies program directed toward social problems, Mr. Mort Watt's inspired Social Studies Curriculum Conference of 1967 - these are some of the salient events which have triggered significant shifts in the social studies field, each accompanied by much debate, each generating much light and more than a little heat.

I feel that this Invitational Conference is no ordinary get-together as many conferences shape up to be, but an event which future historians of curriculum development in Alberta will identify with a special punctuation mark. I feel that the conferees here assembled are committed and dedicated to co-active work in the creative generation of a statement which will begin to chart new directions in the curriculum development process. Hence, the conference, in one sense, is a hope; but it is more than a hope. It is, in another sense, a trust, a trust placed in us that our efforts will lead to the improvement of education for all students in Alberta schools. To us has been devolved the task of recommending the curriculum decision-making process that will become
dominant in the coming years throughout our province. Hence, we need collectively to be wise and visionary.

What is the specific orientation of this conference? The focal point of this conference has been defined for us - it is the curriculum decision-making process. Let me hasten to point out that in the field of curriculum, people do talk about curriculum theories and about curriculum decision-making theories. Though related, these are conceptually discrete. To fail to note the distinction is to confuse the two. In my mind curriculum theories deal mainly with the substantive issues of the ends and means of the educational process; curriculum decision-making theories deal mainly with the procedural issues underlying the question, "Who should make what curricular decisions and how should they make them?", the guiding question that appears on the conference program.

I wish now to proceed with the job assigned to me. My task is to use the case study of New Social Studies in Alberta as a point of departure, scan the field laid out by Harry Sherk, Leif Stolee and Frank Crowther, think about generic curriculum decision-making processes, and attempt to reveal basic issues. Earlier this morning, Messrs. Sherk, Stolee and Crowther who have been and are very much involved in the New Social Studies program, shared with us their views on presuppositions, problems and prospects of the curriculum decision-making process related to the New Social Studies program. My role is not that of reactor or of summarizer, although that would indeed be an interesting role to play; my assigned role is to generate ways of looking at assumptions we make in curriculum decision-making in general and thereby attempt to reveal what
I think are key issues. I wish to point out five such issues.

1.0) A basic problem in curriculum decision-making arises from the difficulty of dividing the multiple tasks involved in program development.

One of the interesting statements made this morning is the statement that "a major part of the task of curricular decision-making can be delegated to teachers". The way in which this statement is interpreted depends on the conceptual framework that is embedded in its context. Immediately two questions come to mind:

a) About what is the task of curriculum decision-making?
   (In your group sessions this morning I am sure that several usages of "curriculum" emerged). We need to know what curriculum is in order to identify curriculum decision-making tasks.

b) After we come to know what curriculum is, then the following question needs to be examined: What is meant by dividing curriculum decision-making tasks into major and minor tasks?

At this point, because of the confusion that the use of the term "curriculum" almost inevitably brings, I arbitrarily switch my terms. Instead of curriculum and curriculum development, I will speak of program and program development. May I first stipulate what a program is and then use that definition to identify program development tasks.
As I see it, an instructional program is an interrelated system of three components. (See Figure 1.0)

FIGURE 1.0

BASIC COMPONENTS OF AN INSTRUCTIONAL PROGRAM

The components are:

1.11 Goals (intended outcomes) which can be seen as ends.
1.12 Displays with which students transact which can be seen as means.
1.13 Teaching/Learning (T/L) - Strategies which also can be seen as means.

From the above we can derive the following instructional program development tasks:

1.21 Goal setting - task of setting ends
1.22 Development of displays - tasks of developing means
1.23 Development of T/L Strategies
The foregoing is admittedly a simplified view of program and program development, but it allows me to make the following point about ends and means.

The relationship between ends and means can be seen in at least two different ways. (See Figure 2.0)

FIGURE 2.0
ENDS - MEANS RELATIONSHIP: TWO MODELS

Efficiency Model

ends

or

means

ends

Mutualistic Model

means

ends

1.31 One way in which the ends - means relationship can be viewed is neat and tidy. I have labelled it the "efficiency model" or "the assembly-line model". In this model, ends and means are thought to be unidirectionally related. In terms of program development, we might be oriented toward thinking that we determine the goals first and then determine the means. The goals are then thought to be "up here" and means are designed to enable one to get "up here"; or, the goals are thought to be "out there" and means are designed to enable one to get "out there".
Underlying such a model are the following beliefs:

a) that setting of goals must precede the designing of means,
b) that goals can be clearly perceived if one looks hard enough,
c) that goals once set are stable,
d) that goals guide the developing of means, but that the means do not guide the shaping of goals.

A person guided consciously or unconsciously by such a model assumes certain values and acts them out in definite ways. He deems that:

a) goals are more important than means; hence, he believes that the "important people" should formulate the goals;
b) and as a corollary: the designing of means should be delegated to "lesser" people, i.e. the technicians, the "know-how" people.

Another notion of the relationship between goals and means is not as neat as it is in the efficiency model, but is rather messy in appearance. Borrowing J. J. Schwab's notation* I shall label it mutualistic. (See Figure 2.0)

In this model, goals and means are interactively related. Underlying this model are the following beliefs:

a) that goal formulation and means designing go together in a complementary fashion, although focus may occasionally shift from one to the other,

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* In his article "The Practical-The Language of Curriculum" Schwab states "It (deliberation) treats both ends and means and must treat them as mutually determining one another". In David E. Purpel and J. Boulanger (eds.), *Curriculum and the Cultural Revolution*. Berkley: McCutchan Publishing Corporation, 1972.
b) that goals are never entirely clear; there is always uncertainty as to exactly what the goals are and that goals become clearer and come more sharply into focus as the designing of means proceeds,
c) that means and goals need to be viewed holistically and formulated together,
d) that the shortest and quickest way to the goal is not necessarily the best,
e) that the means may be just as important or, in some instances, more important than the goal.

If means and ends are indeed mutually related, means and ends are mutually important. They are independent, i.e., one does not make complete sense without the other. In the mutualistic model, a crucial program developmental task problem emerges: How do you break up into sub-tasks mutually related things without destroying the life that exists in the interrelationship of the parts? In a mutualistic program development situation, who should set goals? Who should develop displays? Who should develop T/L strategies? Do we have a group of people setting goals and another group designing means? Or should we have the same group somehow involved with both ends-means development?

I have indicated two ways in which ends and means are related. There may well be others. But given the two, we should bear in mind the danger of falling into the trap of the "either-or" syndrome. There may well be value in both paradigms in program development tasks. Time prevents me from elaborating on this point. But what I contend here is that the problem of dividing program development tasks becomes a different sort of problem depending on which paradigm one uses. We need to cogitate on this problem before we move too swiftly to its solution.
It may be that if we analyze "program development" carefully, we may be able to ferret out certain kinds of program development tasks which may be best handled with an efficiency model, whereas in other kinds of tasks the mutualistic model may be more appropriate. Hence, the issue of dividing program development tasks.

2.0) A basic problem in curriculum decision-making issues from the neglect of evaluation particularly in the formative stages of program development.

The importance of formative evaluation was mentioned by Harry Sherk and stressed by Leif Stolee this morning. I wish to elaborate on this point.

In program development, there are two parallel ongoing tasks:

2.10 program development,

2.20 evaluation of both the emerging products and the ongoing processes of program development.

The selection of program components - goals, displays and T/L strategies - involves evaluation in the sense that evaluation is involved in any selective process. That is, in selection, some component is deemed good. Similarly, the processes of goal setting, display development, development of T/L strategies, all involve evaluation - again, in the sense that these processes are selected from alternatives. Evaluation, therefore, is very much an ongoing activity in program development, the construction of a product becomes the primary and foremost concern, and the evaluation of the emerging product and the development processes involved are given secondary concern to such a point that it tends to receive short
shrift. Leif Stolee implied it this morning when he stated: "We're too much in a rush to get the product out".

As I see it, the issue is not whether or not evaluation is going on as program development proceeds, for the answer is that some kind of evaluation is always going on. The issue is rather the goodness of the quality of the evaluation plan and the evaluation process. So often in program development, evaluation is attended to "too little and too late".

3.0) A basic problem in curriculum decision-making issues from lack of resonance at the communication level among people on various tasks of program development.

I owe much of the thinking I express here to Dr. F. Lee Brissey, social organization theorist at the University of British Columbia. In order to deal with this issue, I wish to treat program development as an instance of problem-solving, and, since program development is typically done by a group of people, I wish to talk of joint program development and joint problem-solving. (See Figure 3.0)
**FIGURE 3.0**

PROGRAM DEVELOPMENT AS PROBLEM-SOLVING

<table>
<thead>
<tr>
<th>Line 1</th>
<th>Goal Setting</th>
<th>Displays Development</th>
<th>Dev. of T/L Strategies</th>
<th>Indicating Measures of Outcomes</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Problem Defining (Desired-Actual)</td>
<td>Prescription of Displays</td>
<td>Prescription of Action</td>
<td>Projection of Outcome Measures</td>
</tr>
</tbody>
</table>

| Fidelity     |             |                      |                        |                                |
| Understanding|             |                      |                        |                                |
| Acceptance   |             |                      |                        |                                |
| Relevance    |             |                      |                        |                                |
| Commitment   |             |                      |                        |                                |

In Line 1 are shown the tasks of program development. They are the tasks of goal setting, displays development, development of T/L strategies. To these I add indicating measures of outcomes (evaluation). Bear in mind that although they are laid out visually from left to right, these components could be looked at either unidirectionally or mutualistically. In Line 2 are the same items in the language of problem solving. The task of goal setting (as seen in Line 1) is seen as defining a program development problem. Such a problem reflects the divergence between what is desired and what is the actual (this is what is meant by Desired - Actual = Problem). This problem for the group can be called the convening problem, for it is the reason why people are brought together. The tasks of prescribing displays (Displays Development) and prescribing actions (Development of T/L strategies) are means - tasks which can be thought of as prescriptions; i.e., procedures designed to solve the problem, or what amounts to the same thing, procedures designed to close the gap between the desired and the actual. Indicating measures of outcomes is, for purposes of evaluation, a task which can be seen as projecting outcome measures that will count as measures of problem solution.

Lines 1 and 2, therefore, can be thought of as tasks directly involving the convening problem. People are presumably brought together because they share concern for some program development problem. Therefore, there should be some degree of resonance among the people in their concern for the convening problem. But how much resonance there is among them is indeed problematic.
Once people have assembled as a group concerned about a convening problem, there are group communication problems that emerge. People come with different experiences, different orientations, different ideas about what counts as knowledge, different ideas about what students should know, different ideas about the ontological reality of the relationship between man and his world, different values as to what is most important in education, and so on. These differences provide both the potential for creative constructive joint effort or for destructive joint effort in goal setting, in display development, in the development of T/L strategies, and in indicating measures of outcomes.

I wish to refer you to a scheme developed by Mr. Lee Brissey of how a group might systematically process communication problems that may emerge. He speaks of five basic levels of communicative intent, each with its own aim and each logically prior to the one that follows. Viewed in this way, communication can be evaluated for effectiveness at any of the five levels: fidelity, understanding, acceptance, relevance, and commitment.

In his preliminary exposition of these concepts, Brissey gives a brief anecdote illustrating these five levels of intent - their meanings and interrelationships. Even a quick examination of this anecdote will give us a better group of these five levels of intent. Using messages pertaining to his habit of smoking, he illustrates what he means by these communication levels.
For years now, a number of public service organizations have been giving me messages about the hazards of smoking and its apparent relationship to cancer. I have heard the messages so often, and they are usually so well presented that I have no trouble reproducing many of them verbatim. To this degree, therefore, the messages have achieved a high degree of communicative effectiveness at the level of fidelity, I can replicate them accurately and without hesitation.

Fidelity, of course, is a prerequisite for understanding, for if a message hasn't "gotten through", I certainly can't say I know what it means. As for these messages about smoking, though, not only can I replicate them, but I also understand them fully. I know what it means to smoke; I have at least a layman's understanding of what cancer is; and I know enough about the structure of English sentences -- the syntax of the language -- to understand what it means when someone says to me: "Smoking leads to cancer".

Just as fidelity is a prerequisite to understanding, so too, understanding is a prerequisite to acceptance. Meaning is prior to truth. And in this case, not only do I understand the message, "Smoking leads to cancer", but there has been enough evidence presented in a variety of studies conducted during the last decade that, when all is said and done, I tend to accept the statement as true. Smoking probably does lead to cancer.

Naturally, because I've been a smoker for years, all these messages have relevance for me. Moreover, I do care about my health, and so I regard any information that I can use to prolong "good health" as relevant.

But it's at the highest level of communicative effectiveness -- that of commitment -- that all these many, many messages about smoking fail miserably. For, while I can repeat the messages and while they're not only understandable and acceptable to me but also highly relevant, I'm clearly not sufficiently committed to them to behave accordingly. The communication fails to produce its desired action, for I will probably continue to smoke for many years to come!*

The point at issue is not the validity or invalidity of the five levels of intent in communication here presented. It is that in joint program development, there are two crucial ongoing processes: the program

development process and group communication process, each yielding problems of different types and each problem requiring a resolution.

4.0) A basic problem in implementation of programs may be found in the producer - consumer paradigm underlying implementation, diffusion.

The foregoing discussion in 3.0 foreshadows the issue of implementation. Here, I point to two paradigms. (See Figure 4.0)

**FIGURE 4.0**

**PRODUCER - CONSUMER PARADIGMS UNDERLYING IMPLEMENTATION**

*Implementation:* producers give to consumers (one-way communication).

```
producer/giver  IMPLEMENTING  consumer/receiver  
(active)                      (passive)
```

*Implementation:* producers are consumers; consumers are producers.

```
producer/consumer  SHARING  consumer/producer  
|                              |   |
construction             co-active             constructive             activity
```

4.1 The first paradigm views implementation in terms of unidirectional flow. It is analogous to the producer-consumer paradigm we have in business and industry. In this paradigm, specialists produce for those who consume. It is the paradigm of the relationship between the haves and the have-nots. In program development, under this paradigm, curriculum experts produce programs for the consumers, the teachers and
Implementing a program, under this paradigm, presents a basic problem of how to communicate effectively with people who have not been involved in setting goals, designing displays and T/L strategies and evaluation plans, and who have not had a chance to undergo the communication intent levels we talked of earlier. The search is for resonance.

4.2 In contrast, let us look at paradigm #2. In this paradigm, the producer - consumer distinction is blurred. Through mutualistic sharing the people involved become engaged in constructive activity generating their own meaning, their own construct of social reality, and their own life-styles. Transformed into the language of joint program development, the participants are seen here as being engaged in the task of program construction; i.e., inventing and creating goals, selecting and creating displays, developing T/L strategies, and designing evaluation procedures.

I see the Curriculum Branch's move towards regional consultant teams spread across the province as providing the initial mechanism necessary to operationalize the second paradigm. Likewise, I see the growth of Professional Development Teams of the A. T. A. as attempting to operate within Paradigm #2.

5.0) Fundamental Issues in Curriculum Decision-Making Arise from Dissonance in Basic Paradigms.

The name of Willis W. Harmon is familiar to all of you. He is the futurist at Stanford whose ideas have been incorporated into the well-known document: A Choice of Futures: A Future of Choices.
Harmon was the one who wrote of the need to shift away from the social paradigm of the Industrial Revolution and to entertain instead a person-centered paradigm. In a paper he delivered this month at the ASCD Conference in Los Angeles, he stated that the dominant social paradigm of the Industrial Revolution is characterized by:

1) development and application of the scientific method,
2) industrialization emphasizing achievement of efficiency and productivity through organizations and divisions of labor, machine replacement of human labor,
3) acquisitive naturalism as a dominant cultural value,
4) belief in unlimited material progress: drive toward technological and economic growth,
5) manipulative rationality as a dominant theme: man seeking control over nature,
6) individual responsibility for one's own destiny; individual "determination" of the good; society as an aggregate of individuals pursuing their own interest."

According to Harmon, this social paradigm characterizing the Industrial State is no longer viable in this post-industrial age when we are undergoing a conceptual revolution as throughgoing in its effect as the Copernican Revolution, and an institutional revolution as profound as the Industrial Revolution. Harmon says we are at a transformational phase of change wherein a patchwork of past paradigms is no longer sufficient. We need an emergent paradigm which will probably include the old paradigm as a special case.

What should the new paradigm look like? Harmon feels that there needs to be a paradigm that stresses the normative. He states:

"When faith with old gods is weakening, when the old structures are threatening to crumble and the new cannot yet be discerned, dependable information of alternative paths to the future is especially needed. If the maps cannot show final destination, they need at least to identify a few paths that promise to be tolerable along the way and appear to head in a desirable direction".*

It is in this context that I present Figure 5.0 which I believe summarizes the conceptions about assumptions I have been talking about. I resort to the work of M. Maruyama, another futurist, who points to three paradigms: Paradigm A - Unidirectional, Paradigm B - Random Process, and Paradigm C - Mutualistic.*

Casting our eyes over pivotal terms descriptive of the paradigms allows us to begin to grasp the variations in the assumptions underlying the paradigms. For detailed examination, one needs to refer to Maruyama, but even a brief excursion allows us to begin to sense the fundamental orientations that shape our thought and action. What we need to know are the thrusts and constraints of these paradigms, for basically, "that is where curriculum issues are at". When we raise the question, "Who should make what curriculum decisions and how should they make them", it matters much which paradigm or combination of

* Ibid.

* M. Maruyama, "Paradigmatology and Application to Cross-Disciplinary, Cross-Professional and Cross-Cultural Communication". Unpublished paper received from the author, 1973. Figure 5.0 in ludes excerpts from pages eight and nine of the Maruyama paper.
FIGURE 5.0

UNIDIRECTIONAL, RANDOM PROCESS AND MUTUALISTIC PARADIGMS

PARADIGM A
ONE DIRECTIONAL

1. hierarchical, cause and effect
2. homogeneous
3. competitive
4. unity by similarity
5. majority rule or consensus
6. categorical perception
7. believe in one truth
8. assessment through "impact" analysis
9. community people viewed as poorly informed, lacking expertise
10. planning by experts

PARADIGM B
RANDOM PROCESS

1. individualistic
2. decentralized
3. isolationists
4. haphazard
5. do your own thing
6. atomistic in perception
7. pursuit of one's own interest
8. what does it do to me?
9. community people viewed as being egocentric
10. laissez-faire

PARADIGM C
MUTUALISTIC

1. interactionist
2. non-hierarchical
3. heterogeneistic
4. but coordinated
5. symbiotic
6. harmony in diversity
7. elimination of leadership on any individual
8. contextual in perception
9. must learn different views and take them into consideration
10. look for feedback loops for self-organization
11. community people viewed as most direct source of information, articulate in their own view, essential in determining relevance
12. plan generated by community of people
paradigms we use to respond to the question. Hence, if we need to look at ourselves, we would do well to use those paradigms as lenses.

How should we go about dividing program development tasks? How should we decide who should do what task? How should we make decisions about program development?

Who should do what about evaluation of the emergent programs and program development processes? How should we go about making decisions about evaluation?

Who should do what to bring about resonance at different levels in the communication process as people undertake program development? How should we go about making decisions about communicating effectively about program development?

Who should do what about implementation of program? How should we make decisions about implementation?

What kinds of actions result from these questions are very dependent upon the underlying paradigms that are used. Hence, the cruciality of paradigms, such as the ones we have examined.

This conference is engaged in joint problem-solving. We are co-actively attempting to build a reality we have labelled the curriculum decision-making process. It is my hope that the paradigms I brought before you will serve as displays with which you can transact. As you come to grips with fundamental issues, I hope that these paradigms will assist you in the serious task of charting new directions in the curriculum decision-making process in Alberta.
CHAPTER II

A CASE STUDY IN SHARED CURRICULUM DECISION-MAKING
PROGRAM DEVELOPMENT IN EARLY CHILDHOOD SERVICES

Ron Jarman

Introduction

There are a number of points that I would like to convey as preliminaries to my presentation. First, and of utmost importance from the point of view of this particular conference, it should be noted that the Early Childhood Services Branch is currently utilizing two basic models for the operation of Early Childhood Services Programs. These models are, on the one hand, a community group registered under the Societies Act as the operator of an E. C. S. program, and on the other hand, a School Board as the operator of the program. Now an important point with respect to what I have to say here today is that for the most part, my address deals with the context of a School Board Program. There will be some relevance in my remarks to community operated programs, but the primary focus is on E. C. S. programs developed under the auspices of school systems. Thus, we will be looking at one of two sides of the Early Childhood Services Operation.

This presentation will have three parts to it. First, on a completely descriptive level, I intend to trace the process that often occurs in the course of development of an E. C. S. program to be operated by a School Board. Of necessity, I will over-simplify this process at times, and delete many exceptions to my generalizations. The process to be described is evolutionary from the stage of elementary awareness of E. C. S. through to the actual implementation of a program.

As a second part of the presentation, I intend to deal briefly with the provincial structure of E. C. S. In some contrast to the first section, in which processes at a local level will be
articulated with some allusion to local structure, in the second
section I will be examining the provincial level of E. C. S. in terms
of structure only. Following this, I will allude to some implications
of these two areas, local and provincial, and the interplay between them
which presently exists and which may develop in the near future.

As a final aspect of the presentation, I would like to solicit
questions from the floor on points of clarification, and at this point,
the balance of the E. C. S. Branch staff who are here with me today will use
whatever examples and information that they have available to clarify and develop
my remarks.

Stage I: Planning and Development

The area of shared responsibility in program development within
Early Childhood Services can be viewed in essentially two stages. The first
stage, which is sometimes a fairly lengthy period, is comprised of the
planning and development of the program. This stage begins with a
general awareness in the community and/or school regarding the E. C. S.
program. This general awareness may have originated in any of a multitude
of sources. Whatever the source, we begin our examination at an entry point
at which there is some community awareness of E. C. S.

As depicted in Figure I, this awareness often consists of
homogeneous conceptions of E. C. S. programs on the part of the school
and the parents of the prospective preschool children. That is, parents
often have an expectation that this program should be operated by the school.
They view the school as the appropriate operator of the program in terms of the
expertise that the school can supply to the program, as well as simply the
traditional role that schools have played in kindergartens. The school, for
its part, reinforces these expectations on the part of the parents, out of agreement with their beliefs. Indeed, at the simplest level, the phenomenon that is being described here is well documented in the literature in a number of areas, and that is essentially a hiatus, between parents and schooling. While the two groups concerned may have mutually agreeable expectations, there is a very definite split here in terms of role; the school is operating under a belief in obligation to the community, and the parents accept the implications of the belief. The outgrowth of this mutual expectation on either side is a general agreement on the means of implementing an E.C.S. program. It is important to note however, that at this point, there may be a relatively minimal consideration given to the ends of the program, the goals of the program often have not yet been examined by either group.

Now, at this point, in viewing the current state of the program in terms of developmental history, there may have been some discussion between the school and the parents, which precipitated the entry of a consultant from E. C. S. or a member of the departments of Culture, Youth & Recreation or Health and Social Development into what may be construed as a general parent/school meeting, or a similar type of context. Generally, the reason that a consultant has been brought to the situation at this point is simply that the groups concerned would like some re-affirmation of their particular beliefs with respect to the operation of the program and some information on the logistics of how to commence operation of a program. The consultant, for his part, would come to this situation with two particular objectives. The first would be to give an overview of the nature of the E.C.S. program; the second
**FIGURE I**

Mutually Agreeable Expectations

![Diagram with circles labeled Parents and School.]

**FIGURE II**

Role Reactions

![Diagram with arrows pointing from Parents to Consultant and Consultant to School.]

CONSULTANT
would be to suggest some basic groundwork for the groups to engage in, following his visitation.

Beginning with the overview, the consultant would have as a broad goal, to sketch the general nature of the E. C. S. program, which may be accomplished in four parts. First, the consultant might look at the nature of children’s programs, and refer to the literature that supports the enrichment point of view, and in conjunction with this, the concept of local development to meet the needs of a specific group of children in a particular community. Thus, the context which the consultant would create for children’s programs would be mainly local development within an enrichment framework. As a second point, the programs for parents would be discussed. In this context, discussion might take place on parents as aides working within the children’s program, parents as members of a local advisory committee and parents involved in their own programs, that is, programs for parents themselves. As a third point, the consultant might touch on the utilization of local resources in the operation of an E. C. S. program. In this respect reference would be made to the potential roles of local agency people, and more generally, the roles and uses of common community resources. Finally, the concept of a local advisory committee as the vehicle for the operation of an E. C. S. program would be examined. In this topic, the consultant would articulate the composition of local advisory committees in terms of parent membership, membership from the departments of Early Childhood Services and membership from other community agencies which may be strictly local. To complement this, decision-making and coordination of the program would also be addressed.
Within the second objective, the consultant may request the groups to look at potential clientele for the program, for often at this point in time, this has not been done. As a second topic the consultant may request the groups to begin to identify community members for purposes of the formation of a local advisory committee.

The effect of this meeting with a representative of E. C. S. is sometimes almost a situation of dissonance on the part of both groups concerned. On the one hand, the parents now see themselves in a complex situation, where the expectations on them are very much greater than what they had bargained for in the course of requesting a standard kindergarten program. As a result, the parents may initially feel slightly overwhelmed, and certainly something less than comfortable in some cases. On the other hand, the school staff are also in a slightly disconcerting situation as viewed from their frame of reference. They too, are reacting to the role that they see for themselves in this new concept of a kindergarten program, now apparently renamed as E. C. S. The school staff see themselves in a context that includes cooperation with other agencies, and shared decision-making with other constituent groups. They also see themselves in a context where they will need effective communication ties with all concerned.

Thus, on either side there may be a reaction to the proposed roles for both groups. Expectations have been examined, and often the conclusion has been reached that the nature of the program that the community now has under consideration is much broader than the type of program that they had originally decided to initiate. This is often the most nebulous period in the planning of the program, primarily because it is a period of major re-orientation.
The most common consequence of the role reactions that have been described is a period of apparent dormancy, during which an adaptation to new concepts is made - a gestation stage. During this stage, a subgroup of parents and school staff may begin to share their views informally in the type of preschool program that should be operated in their community. This period may be lengthy in some circumstances, but finally, the first overt indication of activity following this gestation stage takes place, which may be a very broad "wants assessment". That is, because of the nature of the presentation that the consultant has made previously, in which an emphasis for program development has been placed upon needs assessment, a relatively small group of people often eventually collaborate and begin to enact a process that could more accurately be termed a "wants assessment". A number of partly unrelated topics for program development and potential program development may emerge at this time, primarily because the E. C. S. program may now be seen as a panacea for all community problems.

This generally becomes a highly active period for a relatively small number of individuals. In the course of this period this small group, as depicted by the intersection between the two circles in Figure III, may re-contact the field consultants that are involved in Early Childhood Services for further assistance. At this point, the group begins to distill its identified wants into valid needs, and realistically expand its horizons with respect to not only the scope of the Early Childhood Services program, but the resources involved in the program itself at all levels. Discussions often take place
with E. C. S. consultants, health nurses, Preventive Social Service Directors, and field representatives from the Department of Culture, Youth & Recreation, all with a view to validating the identification of needs. Of course, a complete validation of needs is not obtained initially, but the primary result of this particular stage, which is the first stage of shared responsibility, and may be labelled Phase I, is that there is a realization, after speaking to the members of these departments as well as speaking to other members of the community, that collectively, the parents and the school do not have the resources in order to carry out the kind of program that they now envisage as a result of the "needs assessment" that they have done. The group has now reached the point where they have a rough idea of what they would like to accomplish, but they also have a concomitant realization that they do not have the resources in order to carry it out.

It is at this point that the group begins to turn again to the community through the members of the departments, as well as any other communication links they may have, in order to identify program resources, as depicted in Figure IV. At this time the group will begin to incorporate people other than parents and school representatives into the local advisory committee, and thus an approximation of a whole local advisory committee begins to take place through the involvement of local agency and resource people.

The community resource personnel may be looked to as serving a primary and secondary function in local advisory committee membership. They may serve a primary function in terms of personally meeting the needs of the E. C. S. program, such as when a health nurse is a member of a local advisory committee and also supplies direct health services to
FIGURE III
SHARED RESPONSIBILITY

PHASE I

PRELIMINARY NEED IDENTIFICATION

PARENTS

SCHOOL

CONSULTANT
FIGURE IV

RESOURCE IDENTIFICATION

PARENTS

SCHOOL

COMMUNITY RESOURCES
FIGURE V

SHARED RESPONSIBILITY

PHASE II

REFINEMENT AND FURTHER IDENTIFICATION OF NEEDS

PARENTS

SCHOOL

COMMUNITY RESOURCES
the children and their families to meet identified health needs. The secondary function that they may play is the supply of information and contact personnel in order that additional resources may be engaged in a program. An example of the latter is a Preventive Social Services Director as a member of a local advisory committee who identifies resource personnel for parent programs.

With the further expansion of the local advisory committee to the point where it is complete in terms of parents, school, and community resources, the committee becomes fully operative as a structure for program planning and development. A number of mini-cycles which have taken place in the course of the evolvement of the committee have resulted in a refinement of the needs to that point in time and then as a direct consequence of a statement of these needs, a statement of the objectives for the program has been made. Thus the committee has reached the point of both evolving a statement of needs and involving the community resources to meet these needs. At this point, the sharing of responsibility is a trilogy, between parents, school, and community resources as depicted in Figure V.

The structure of this local advisory committee, and the role that the individuals on it may play, can be examined by considering the intersections of the circles in Figure V, with the committee as the kernel of the groups concerned.

As depicted in Figure VI, the local advisory committee is representative of the groups with respect to general community resources, parents, and the school system personnel. Considering the community resources first, the committee plays a role in coordination and utilization of these resources, that is, the utilization of those resources not already represented on the advisory committee itself. With respect to
its relationship to parents, the committee acts as a constant feedback device in order that the program may have a renewal dimension in it. As parents evolve different goals for the program as a result of their necessary awareness of the issues in early childhood program planning and development, the local advisory committee in turn can be responsive to these and serve as a vehicle for modifications in the program. Finally, the local advisory committee can work with the School Board in terms of the utilization of school resources. Most importantly, it can address itself to the area of articulation effects into the school system itself, that is consequences in the school system from the operation of an E. C. S. program and consequences for the E. C. S. program of the school involved.

In most circumstances, this point represents the end of the planning and basic developmental stage. In retrospect, looking at the phases in this stage as they have been described, it is, of course, the case that they are not as linear as I have depicted. There is a great deal of variation in their ordering, but the primary growth points to be recognized seem to be those main points that I have touched on thus far.

Stage II: Implementation and Formative Evaluation

In the second stage, implementation and formative evaluation, there are quite a number of activities that often take place to further modify the programs, and therefore I will not attempt to enumerate these. Instead, I will touch briefly upon a single issue that has been recognized by the E. C. S. consultants and by the groups concerned as being a particularly important one, and one that comes to
FIGURE VI
LOCAL ADVISORY COMMITTEE (LAC) AS
LOCUS OF DECISION-MAKING AND COORDINATION

COORDINATION AND
UTILIZATION OF
SECONDARY
COMMUNITY
RESOURCES

COMMUNITY
RESOURCES

LAC

SCHOOL

PARENTS

UTILIZATION OF SCHOOL RESOURCES;
ARTICULATION EFFECTS
the fore very quickly in the course of implementation.

The formative evaluation that takes place is very often an informal type of evaluation. Areas that are often examined in the process of the implementation of the program are the degree of co-operation between groups, and the effectiveness of lines of communication. Within these areas there is one aspect that seems to be of almost paramount importance in relationship to the others, and this is something we have called here the degree of isomorphism between responsibility and authority for each constituent group.

It would appear that the first question that is begged in the initial implementation of the program is "When groups are taking particular actions, to what extent are they accountable for their actions?" That is, first, to what extent do the various groups have a mandate to take certain actions, and then second, to what extent are they responsible for those actions? The primary point to be made here is that in practice, the two may not be entirely harmonious with one another. As an example we've looked at the case of the school as an operator. The local advisory committee, for instance, may implicitly have some authority to act in certain areas in which the school may be finally accountable. Conversely, the school may tend to take actions in some domains in which the parents may need to establish some credibility. These are particularly thorny problems and they are ones that I think are recognized, as I said, very early on in the implementation of the program. The degree of isomorphism between responsibility and authority seems to depend to a very large extent on the particular personalities and the particular groups involved. It is not a problem that is easily solved
FIGURE VII

DEGREE OF ISOMORPHISM BETWEEN RESPONSIBILITY
AND AUTHORITY FOR EACH CONSTITUENT GROUP

EXAMPLE:

SCHOOL

RESPONSIBILITIES

AUTHORITY
in the course of planning, but instead its solution is evolutionary, with a need for very open discussion among all groups concerned in the course of implementing the program.

Provincial Structure for Program Development

Having briefly described a typical program planning and implementation process at the local level, with some consideration of local program structure in terms of the concept of a local advisory committee, I will now turn to the provincial structure for program development. I believe most of you are familiar with the Early Childhood Services coordinating council. It is a body made up of members from the four departments that are under the coordination of Early Childhood Services, representatives of various stake-holder groups such as the universities, the Alberta Teachers' Association, the Alberta Association for Young Children and the Alberta School Trustees' Association, in addition to several members at large. This is approximately a seventeen-man body. Its functions are primarily to formulate recommendations for actions by the Deputy Ministers and Ministers of the four-member departments of E. C. S.

The E. C. S. coordinating council is related respectively to program development and approval in terms of the five committees depicted on the left of Figure VIII, and the Proposal Review Committee on the right. The Proposal Review Committee is an inter-departmental committee which recommends approval of proposed programs to the Minister of Education. The program development committees, which work in the areas of all types of information, parent programs, physical resources including playgrounds and buildings, children's programs, and program
evaluation, act in response to broad policy guidelines established by the E. C. S. provincial coordinating council.

These program committees are made up of members of the departments within E. C. S. as appropriate to program areas and their program mandates within E. C. S., selected professional individuals at large such as university staff members, local E. C. S. staff members such as teachers and program coordinators, and parent representatives. The structure of these particular committees, therefore, is such that the inter-departmental nature of E. C. S. is represented at the working program committee level to complement the policy level of the coordinating council. The primary role of these program committees is to develop programs in response to provincial priorities. As a secondary priority within that, they may also engage in program development in response to local identification of needs for a particular program. Thus, this is a structure by which the field representatives of the member departments of E. C. S. can forward information on needed development either through their coordinating council member or directly through their member who may be sitting on one of the program development committees, for consideration by the appropriate committee. The committees are operating, therefore, on the one hand in response to provincial mandate, and on the other hand, in response to local requests, and in this sense they supply a further vehicle for interplay between provincial and local needs.

In the interests of brevity, I will terminate my presentation at this point and open this session for questions from the floor. I would like to take the opportunity now to introduce the E. C. S. branch staff, who will accompany me if necessary in responding to your questions. Seated before me are Ms. Gwen Leavitt, consultant in Lethbridge, Dr. David Jeffares, consultant in Calgary, Ms. Annette Lagrange, interim consultant.
in Red Deer, Mrs. Marjorie Affolter, Coordinator of Program Approval, and Mr. Dennis Bjornson, consultant in Grande Prairie. Please feel free to ask any questions that you may have.

Question: Why are we involving four departments of the provincial government? I should think we'd have a difficult time ourselves, without bringing three other departments into this area. How does E. C. S. relate to Head Start and what has been learned there?

Jarman: The involvement of other departments is for a number of reasons. It's partly historical. These departments in past years have been involved in areas of service delivery in which E. C. S. is now involved, and therefore have the kind of expertise and background in these areas that should be utilized to whatever extent is possible. In the case of involving the Department of Culture, Youth & Recreation, for instance, they have been working to develop a program for parent leadership training and have a history of development in this area. Preventive Social Services through the Department of Health and Social Development have been working in Parent/Child programs. Mental Health Services and Services for the Handicapped from this same department can be utilized for assisting operators with handicapped children in the program. The Department of Advanced Education should be involved by virtue of its role in guiding training programs for all types of staff for E. C. S. programs. There are a number of other resources in other departments of government that could be mentioned here, but it's a case, first and foremost, of utilization of present manpower and expertise to meet the broad needs of the E. C. S. program rather than inefficiently creating redundant
resources. Secondly, it is a case of coordination needs. Many of these sections of government have historical mandates which, even if some of them are to be turned over to E. C. S., are not going to be turned over in the course of a relatively brief period of time. In the interim, therefore, it is essential that one hand knows what the other hand is doing. One of the primary functions of Early Childhood Services in the initial phases of the program is coordination.

With respect to your question about Head Start, there are a number of ways that we could look at this. As you know, by most achievement and intelligence criteria, project Head Start was a failure. There were certain aspects, however, that did come out of project Head Start which have tended to be overlooked, and which could have some very strong spin-off effects for Early Childhood programs in the 1970's. Most definitely, one of these was the almost "after the fact" discovery in some cases that in order to accomplish certain goals in an Early Childhood program the program of necessity had to involve community resources, especially parents. Early Childhood programs are simply a group experience for children who cannot be expected to carry the burden alone for accomplishing some of the goals that have been set for them. This is especially true in the case of disadvantaged children, who have very broad needs outside of the usual educational program, such as nutrition and health. The amount of support that must evolve through the home in order that there be a mutual support in the group setting for the child is so paramount to the reaching of those kinds of goals, that involving the parents is quite essential in this circumstance.
Question: Whose responsibility is it to develop a curriculum for an Early Childhood program?

Jarman: The nature of program development in E. C. S. is such that it is local development within broad provincial guidelines. Thus, while there is a discernible direction to the program, there is a considerable amount of latitude within that for local development. By virtue of the fact that there is a concept operative in the program development process which begins with a "needs assessment", and then development to meet local needs, there could never be a single curriculum. There will be, however, many common cores running through some of these programs, and in the course of establishing priorities across programs, these priorities will evolve as provincial curricula.

Question: You said, a while ago, that three other departments besides the Department of Education are involved in E. C. S., because of a need for a coordinating/integrating function of the services provided by those three departments. Now, if E. C. S. is operated out of non-schools, operated by private individuals, how do you get the coordination of the school system?

Jarman: That becomes a more implicit kind of process. It becomes a process whereby the community and the schools get together through the local advisory committee, and in many of these circumstances the local elementary school principal may sit on the local advisory committee. The committee serves as the body to accomplish those kinds of ends.
And yet there are many private E. C. S. programs which are not connected with the schools at all. They are run by private kindergartens; they're on their own with nothing to do with the schools whatever!

Jarman: That's correct.

Question: Right. I fail to see how they can operate this way. I'm kind of baffled.

Jarman: There are the two sides to it in terms of operating; it's a case of "Who is operating the program?", and there's a tremendous amount of variance within the classification of each operator. Actually, to be more technical about it, there is a third combination and that is one under contract with the other. This is likely to play somewhat less of a role in E. C. S. in the future than what it has in the 73/74 year by virtue of the equalization of grants between the two operators. The main point is that autonomy exists to the extent that it is desired on the part of both the school and community, but the local advisory committee encourages integration and the sharing of ideas.

Question: This morning it was quite useful to hear some of the problems that have been encountered with the social studies program. What are the specific kinds of problems you run into in implementing this program?

Jarman: Coordination, first and foremost, by virtue of the fact that we have, especially with respect to the Departments of Culture, Youth & Recreation, and Health and Social Development, two very
substantial departments in terms of size involved in E. C. S. The amount of information that we can transmit to people in the field and the amount of interplay that we can build up at a provincial level between the people concerned is a difficulty which we have been working at very steadily throughout the 73/74 year, but there is a great deal of work that remains to be done in this area.

Question: The whole program is very open to parental involvement, not parents dragged in by their heels, but parents who want to get in there and work. In many cases, the areas where we most need kindergarten services are the areas where there is no way we are going to get the parents involved. This is a big problem as I see it in many of the areas of our city, or perhaps we are just a particular situation. Who is it that should initiate a program? ——— the school system? the school principal? the kindergarten teacher? . . .

Jarman: This is a difficult problem to generalize on, and it is certainly one we have mixed feelings about. On the one hand, if a school board implements a program independent of parents, then as demonstrated by the history of school/community relations the program really has to be actively worked at in order to get parents involved. And yet, on the other hand, if you wait for some active indication that parents want to become involved you may wait a considerable amount of time, and in the meantime, the children have no program. It's a cyclical kind of problem therefore, and one that E. C. S. will increasingly have to address itself to in the next year. In the meantime, our field staff are becoming very sensitized to this issue with respect to the possibility that eventually they may
actually encourage the start of a program in some communities.

Question: The mandate for E. C. S. calls for 0 to 8 year olds. Can you see eventually that Grades One and Two will become part of the E. C. S. program rather than the public education system?

Jarman: If I understand your question correctly, you're asking if the program will begin to operate outside of the system, so to speak, for Grades One and Two.

Question: Yes, will E. C. S. take over Grades One and Two programs?

Jarman: The nature of E. C. S. involvement in those grades is going to be very informal for a considerable length of time. We can't predict precisely what form that involvement will take, but what I mean by that is that the parents in the 73/74 year are already approaching school systems and requesting ways in which they can become involved in the early elementary education of their children. A situation is developing where the schools will have a tremendous opportunity to look to the community for further involvement of parents, and parents will be coming to the school as a result of it. In direct response to your question, then, in the immediate future E. C. S. involvement in the school system will be a function of local circumstances.

Question: Further to this, then, we have a Department of Education and a Department of Advanced Education. Do you see a Department of Early Childhood Services?
Jarman: I don't know whether one would evolve if I did! I think the main thing that we're wrestling with right now is the nature of this coordination function, and whether the coordination function at any point must ever become quite explicitly directive. There is a cutting point that we're looking at there in terms of the principle of coordination by a small body such as E. C. S. and when that body must begin to do more than simply coordinate. The location of E. C. S. with respect to that cutting point is gradually emerging.

Question: This is back to my first question -- "Who is responsible for the curriculum? Where does the Curriculum Branch fit in to Early Childhood Services?"

Jarman: I would like to give that question to Dr. Torgunrud, but I will attempt to answer it myself. I think there has been a very real expectation on both sides that E. C. S. activities and the Curriculum Branch activities have tremendous implications for one another. Now, the nature of the way in which we proceed from this point forward is something that is just in the stage of germination.

Question: Could it possibly have been clearer had you started this by stressing the difference between Early Childhood Services and Early Childhood Education? Surely, the concept of a service department of government being developed to set up a program outside any one of the departments was a real possibility, and maybe Early Childhood Services should be no more dependent on Education than it is on Welfare and Social Services and all the rest of them?
Jarman: Yes, time will tell.

Question: Is there a financial accounting system for these E. C. S. operations? For instance, what happens if a group operates outside of a school system and at the end of the year have a $40,000.00 deficit. Who picks it up?

Affolter: We haven't come across that problem, but we've made it very clear that they are accountable and that there will be an audited financial statement prior to the end of the last quarter, and so there is certainly an accountability there. Not only that, nowhere has the government made a commitment to underwrite deficits in any E. C. S. program. They are told exactly how much they can expect to get. If they go beyond that, well then I guess it's up to the group to bail themselves out.

Jarman: Thank you.
STRUCTURAL AND FUNCTIONAL ASPECTS OF SHARED DECISION-MAKING

Bill Duke

Introduction

My responsibility this afternoon is really two-fold. One responsibility is to react to the delivery system that was described to you by E. C. S. personnel earlier this afternoon. I plan to examine this delivery mode in a hard-nosed, analytical manner. However, I must caution all that I will not be looking at the program per se nor its effects on the students, but rather at the organizational structures and functions in which this service is taking place. I want to say, though, to those of you who haven't worked with the E. C. S. people, that they have a horrendous mandate before them. This group of people needs and deserves our solicited and unsolicited cooperation and support.

My second responsibility is to try to relate to a decision-making model that was described this morning by Ted Aoki. (I believe he used the term "mutualistic".) Then I will conclude with generalizations that apply to curriculum program services in general, as opposed to looking at a specific program service such as E. C. S.

I have at least two cautions that I want to leave with you. The first caution is that what I am about to say is largely hypothetical. I cannot demonstrate any cause-and-effect relationship between what I'm going to say and what's happening out there. I am hypothesizing on the basis of what I've gleaned from the literature. Secondly, I'm dealing with only one component of a delivery system, namely, the administrative and organizational component. Some of you
say, "That component is unimportant"; others might say, "It is very important".

It is not my purpose to tell you where you should fall on that continuum.

I would suggest, however, that to neglect the administrational and administrative structures all around us whether or not we build them in deliberately.

Overview

There are four points I am going to dwell upon:

1) the underlying concepts or assumptions of the shared or mutualistic model of decision-making;

2) the structural aspects of the shared, mutualistic mode;

3) the functional aspects, meaning the role relationships, the definitions of jobs, the functions that people perform. (i.e. What are the decision points? Who decides what? Who's responsible for what? Who's accountable for what?); and

4) three generalizations that I think apply to curriculum.

Concepts Underlying the Mutualistic Model

Cooperation. The majority of people in this room openly embrace this concept. But I wonder to what extent the concept is fully internalized. I would hypothesize that most persons here would have little difficulty in getting to the fourth step of Brissey's communications scale on this concept. In other words, there is smooth sailing from fidelity to understanding to acceptance and to relevance. But step five, commitment to cooperation, I'm not sure about. That's where, behaviourally, you have to put concepts into practice. In the mutualistic mode you structure cooperation. It is built-in as a prerequisite in an organizational setting where particular types of decision-making relationships are sought.

Integration, Differentiation. I think these terms focus on the nitty-gritty of organizational life. In integration there is a
bringing together of sub-systems. But the need to integrate also implies differentiation. E. C. S. is an illustration because it involves health, recreation, and education, which are representative of basic community needs. However, the need to integrate these formerly differentiated services also applies to basic education.

Speaking to a group of high school principals last week, I pointed out to them that this was one of their main challenges in education. As teachers become more specialized, the function of integrating specialized talent becomes more challenging.

**Coordination.** Again, most of us subscribe to this concept. What does it mean? Like many common terms, it means different things to different people. Coordination, to me, does not connote a control function at all. It is purely an information-giving, advisory kind of function which allows people to use input and make decisions. But often when we coordinate we don't really just coordinate. We say that we provide broad parameters for decision-making, leaving all kinds of room for decision-making. When talking about financial flexibility to high school principals last week, it seemed to me the message I got was that they did not have any! Their point was the coordination loses its meaning if the limits for decision-making are very narrow. In any case, let's agree that coordination speaks to setting limits as such and providing for a free interplay within those limits.

**Decentralization, Delegation.** By definition, I think the mutualistic mode requires decentralization. But what do you decentralize? It's one thing to decentralize in terms of consultation; it's another thing to decentralize responsibility and accountability. The latter
means going a lot further than the usual consultation mode, and it has very significant connotations for organizational structures. Moreover, decentralization is another term that has great acceptance these days. If something is being decentralized, it’s good almost by definition. Conversely, I submit to you that not all things should be decentralized, because some things cannot be decentralized -- not in a decision system where certain organizations or certain institutions are held accountable for certain things.

Consultation, Communication. There are notable concepts and always laudable objectives. Consultation is a different concept, or a smaller concept, than decision-making. It carries with it less responsibility and less accountability. But consultation is related to communication because consultation leads to communication; hence, consultation procedures tend to segment communication.

Shared Responsibility, Accountability. These concepts reflect the crunch questions insofar as how meaningful decentralization really is. If there is no shared responsibility and no shared accountability, then one can question how real and how meaningful decentralization is.

Structural Dimensions

Now I want to look at structure, at least in terms of the E.C.S. delivery system, because E.C.S. applies the concepts we have just been discussing. The E.C.S. delivery system is depicted by Figure I. Here we have three departments of government involved in one program. These departments are, by definition, of the one-directional orientation; they tend to stress bureaucratic efficiency. These terms tend to have a negative connotation which is unfortunate in that bureaucratic efficiency
FIGURE 1

ORGANIZATIONAL - ADMINISTRATIVE ELEMENTS

A. STRUCTURE

Department A \(\rightarrow\) Department B \(\rightarrow\) Department C

PROVINCIAL COORDINATING COUNCIL
(RECOMMENDING BODY)

FIELD REP. FIELD REP. FIELD REP.

COMMENTS

* Superimposed of Shared Decision-Making on a Bureaucratic Model
* Integration of Differential Functions
* Integration of Role Relationships
* Centralized-Decentralized Policy and Operational Facets
in itself is not undesirable. I think most of you would agree with that.

Figure I indicates that field representatives are extensions of those departments involved. The relationship between the departments and their field representatives has generally been structured in terms of what Max Weber calls the division of labour, authority, and responsibility. Hence, E. C. S. has some problems with which to cope because any mutualistic mode which is superimposed on an existing structure of this kind is going to leave some rough spots. Let's examine it briefly. The field component, which was outlined to you very well by the group earlier this afternoon, has a line relationship with a respective department but also has to relate to the local advisory committee. The local advisory committee shares responsibility for decisions that are being made locally. Coordination at the provincial level is achieved through a coordination unit which I have shown to be some place between the departments and the local level.

Activities of the provincial coordinating council were described to you in the previous presentation. This council makes recommendations, and I believe that this coordinating council is a recommending body only. These recommendations go to the respective department, and remember, each of these departments has a structure within it. So each recommendation goes to the department and to the respective Minister. Now what happens? Does it come back to the coordinating council and then get released? And to whom? Or does the decision go directly through to the field representative? It probably goes all these ways. The point is that one structure has been superimposed on another, leading to difficulties. These difficulties manifest themselves in problems of
range of authority, range of responsibility; communication, role of definition and functions. Who does what? Who's in charge? Who's accountable? However, this is not to suggest that because this may be so, that the approach is bad! Perhaps this is the best way to effect significant change.

Let me remind you, as Ted Aoki did, that just because we try to employ a mutualistic model, we should not throw out the work of Max Weber. Nor should we ignore the individualistic mode, because, basically, every delivery system will be an integration of the unidimensional, mutualistic and individual modes. The major decision is to determine what aspects and what components of each model best serve a particular system.

Let me summarize this section briefly. First, what we have is a superimposition, in terms of the organizational structure of a shared decision-making model (or a mutualistic model) on a bureaucratic one. Because of this imposition, there are problems, not insurmountable, yet significant. Second, there is an integration of differential functions and tasks. The departments involved do different things, and therefore an integration of these differentiated functions has to take place in order to deliver a common service. For instance, the persons involved are not all educators. They do not have the frame of reference of educators, but rather a frame of reference based in another discipline. We must try to integrate with people who do not hold the same assumptions peculiar to us in education. Finally, I expressed a concern with centralized-decentralized policy and operational facets. To make this particular structure work, more study needs to be given to mechanisms for meaningful decentralization.
Functional Dimensions

Underlying concepts of the functional dimension of the provincial E. C. S. coordinating council can best be outlined in question form. What is the function and role of the provincial coordinating council? What is the council's role with respect to a legitimation function? What is the council's role in making program decisions and fiscal decisions? Does this council delegate? What, in turn, has been delegated to it and what does the council delegate to others? My point is that there is a job to be done in defining more precisely what the council's function is and letting others know what functions and tasks it has been assigned.

How about participating departments? What legitimates their particular participation in a mutualistic program? Who's accountable? Who does one sue if not happy with what's going on? What departments make the program decisions? What departments make the fiscal decisions? To what degree? There is the question of delegation: how much can these departments delegate and to whom and on what authority? These are some of the concerns raised in your group sessions. They constitute legitimate problems but not insurmountable ones.

What is the legitimate role of local advisory committees? What is their status in a purely legal sense? What can a local advisory committee do? After an examination, I concluded that their role is purely advisory. If the group being advised chooses to pay no attention to their advice, except for securing the required signature on the program application, it follows that the advisory role is indeed minimal. The track record of local advisory groups which were retained when school divisions and counties were renamed is not an enviable one. The vast majority withered and died. Why? The reason they passed from the scene
is that they had neither programs to design nor decisions to make. Furthermore, bodies to whom they made their recommendations were under no obligation to listen. I'm suggesting to you that if local advisory committees are to have a meaningful existence, they had better have more to say; further, they had better be held accountable for the decisions they make.

What about the community? What is the community's legitimate role? Does a community member have decisions rights both in program and in the area of finances? Can decisions be delegated to a community member? Can decisions be delegated by a community member? These are difficult but relevant questions.

Local field personnel, comprised of personnel from the cooperating departments, make up another functional dimension. What is their role? Are they consultants and coordinators in a soft sense (advisory), or are they coordinators with clout? No doubt both regulatory and consultative dimensions are involved. For instance, program approval is not a consultative function. On the other hand, are we such purists that we have to have titles that say only one thing? I think not. Let us openly recognize that there are monitoring and regulatory functions involved within the present arrangement without prejudging the outcome.

Next let us turn to school boards. What is their function in E. C. S. program delivery? What happens to grades one and two down the road? That's a significant question when you consider the different models being used in E. C. S. and basic education. I leave it with you because I think it has implications that are far greater than merely that E. C. S. ends at one point and public education starts at
another. What happens if they don't start and end in the same place? We need to think seriously about the interface between public and private education.

Let me conclude this discussion of the functional dimensions of various stakeholder groups by repeating my hypothesis that there is strong subscription to the underlying concepts and assumptions that spell out the mutualistic mode. I genuinely believe that the mutualistic mode has more collective and individual support in this room than any other mode.

Some Concluding Generalizations

Three generalizations and some implications for curriculum development emerge:

1) New and existing structures must foster underlying goals. The nature of the goals determines the participation of any number of departments. If the goals necessitate that particular departments participate, they ought to participate.

2) There is a greater need for role definition and specification of role relationships in the shared or mutualistic model. I think we have to do more groundwork; that is, analyzing and finding out what these roles are with a view to making them more viable.

3) Where development and implementation are taking place simultaneously, on-going evaluation is essential. Ted Aoki stressed this idea and I want to reiterate it. Sound evaluation is not the negative kind of thing that looks only for flaws. Rather, mature evaluation built in at the beginning of a new program allows for the feedback and adjustments through the intermediate stages leading to a summative assessment of a comprehensive nature.

I want to conclude by saying that these particular generalizations can be applied by standing back and looking at the existing roles in terms of the kinds of decisions to be made. We must then provide legal structures which allow responsibility and accountability to follow the new role designations. Lastly, evaluation must tell us whether or not the new functions and new structures are doing the job satisfactorily.
CHAPTER III

CASE STUDIES ON STUDENT AND TEACHER INVOLVEMENT IN CURRICULUM DECISION-MAKING
A CASE STUDY ON STUDENT INVOLVEMENT IN CURRICULAR DECISION-MAKING

Muriel Martin and Betty Ontkean

Some Definitions and Assumptions

As an introduction to the thesis of our presentation this morning, we would like to present our concept of curriculum. We do not suggest that you accept it as yours. It is, however, a working definition with which we feel comfortable; it provides a framework for the remarks that are to follow. We define curriculum as, "The learning that occurs during the interaction of the teacher and the learner and the activities that arise from that interaction". The "Teacher" may, and in fact does, occur in many different guises.

The conference theme, introduced yesterday, is a topic of considerable interest to those classed as "teachers" as well as those categorized as "learners". The central issue focuses upon the Decision Makers. Who should the decision makers be and what should be their level of involvement in curricular decision-making? To the list of Decision Makers already discussed and generally accepted we would add another member - none other than the student. In spite of the current waves of public expression opposing any extension of freedom of youth, it is our belief that there is a place for greater student freedom - freedom to become involved in the choosing of learning experiences associated with development of the program in a structured setting such as the school. If in fact students are to be motivated to learn to direct their energies in a responsible manner, involvement is essential at an age when learning can be a springboard for future development. Decision-making at the student level should
occur in content selection and in the choosing of learning activities. We believe such action should occur in the elementary grades.

Two assumptions are germane to the case that we present:

1. Involvement in the selection of one's own curriculum and in activities to institute learning is a very natural process and one practiced very early in life. Witness for instance the very young or pre-school child. To this youngster learning is a self initiated process. Within the confines of the environment, the young child selects his own "curriculum" e.g. playtime activities and materials, associates or playmates, language (selects from his experiences and practices and refines his speech in his own style and time).

   In essence, the young child practices the skills of decision-making, problem-solving and self-management. He is the director of his own energies, selecting activities that are meaningful because they satisfy his curiosity and provide pleasure. In many respects he governs his own rate of progress. He refuses to be pushed. He refuses to be confined to boundaries of restrictions (e.g. walks and talks when he is ready - not when adult dictates). Progress is a function of learning as opposed to teaching - a result of interaction and involvement with environment and significant others in his environment.

   It is significant to note the rapid rate of learning that occurs at pre-school age level when the child is his own "curriculum maker".

2. A basic principle of learning is intrinsic motivation. Involving students in program selection at the school level has a positive effect, triggering interest and self motivation.
Dr. Hilda Taba, a well known educator and curriculum specialist, argued that "Curriculum development is sterile if it does not encompass change in classroom practice" and that "Educational programs should ... persist or be modified, because of the quality of their effect upon students".

**An Integrated Grade Six Program As A Case Study in Student Decision-Making**

Research has shown that two factors in particular are significant to the learning process.

1) A development of self-esteem is a pre-requisite to learning.

2) Involvement is the key to success in programs of self-enhancing education. Participation, however, is a function of student interest.

Some four or five years ago a classroom teacher in St. Albert was faced with a problem that is not uncommon to educators generally: how to motivate students to want to participate in curricular activities? In this particular case an inordinate number of students were opting out in classroom assignments - especially as related to the language arts. A student interest inventory given to the student body indicated a low level of self-concepts. An alarming number of students rated themselves as below average students and believed others (their friends and teachers) rated them similarly.

As viewed by the classroom teacher, these concerns translate into two problems:

1) How to turn students on and keep them tuned in.

2) How to keep every student working to his/her potential.
Preparation for the activity included review of primary student materials to become re-acquainted with types of material suitable for younger readers; e.g. story length; letter size; interest, etc. Gradually student interest grew, ideas developed. Students worked singly or in pairs and before long their own ideas appeared in print. The project proved to be an enormous success. The responses of appreciation from younger children when stories were presented and read to them had a therapeutic effect. There now was a purpose for writing. Other children were interested in their stories! Not only were primary students interested, but so were others, including their own classmates. Reading and writing took on a new dimension. From this grew the desire to turn all events of any significance into a writing project. An example of this urge to seek information and construct a booklet for some one to read was their exchange trip to Jasper. They went to no end of trouble to collect information, to take pictures, to bring back and to share their experiences with each other in booklet form. The idea of the writing sessions when they returned was theirs. It did not come from me. The transfer of writing in the pure narrative to expository, from the imaginative tale to content subject matter, came about through pupil choice. Social Studies became an important area, originating from the Jasper excursion, and it opened up a whole new vista. Social Studies became a dominant area. Student interest in terms of writing, reading and exchange of student written booklets reached a new high.

Of course, our young writers experienced periods of frustration. There seems to be a shocking shortage of resource materials written at a level commensurate with student reading ability. Many of the library
books are too detailed and filled with information of little interest to elementary students. What adults think students should learn and what is of prime interest to students is often quite different. Is it not ironical that while preparing resource materials for younger children, the Grade VI students had to cope with reading materials that were inappropriate for their own age level!

The following year my opinion continued - students were introduced to the materials building approach. Having samples of student work from the previous year provided the impetus to the new class. Once again students went from the literature themes to the Social Studies. Murals, oral reporting to the student body and the taping of student reports for student evaluation provided a kit of materials to share with other classes.

At this point a decision had to be made: should language arts be overshadowed by social studies as was appearing to be the case? In reality, however, it was language arts - reading, discussing and writing. Social studies was the vehicle to practice their skills. It became a natural means also for the introduction of outlines, bibliography, indexes, etc.

For a closer look into how students produce materials, let us look in on a Grade VI classroom. Displayed in the classroom are all the books, tapes, filmstrips, etc. for the first Social Studies topic of the year, the Aztecs. If this topic doesn't seem to catch the interest of the children the teacher is quite prepared to change it.
The children are given a chance to browse through the material and if they come across anything interesting they are asked to jot it down. We discuss all their findings. Students have come up with many interesting facts. They have found lurid pictures of human sacrificing, priests with blood-matted hair standing over their victims with sharp obsidian knives in their hands, etc.

At this point the teacher discusses with the class the main areas into which the study of Aztecs can be divided. Using our civilization as a parallel, the students come up with the concepts that seem important to them:

1) Religion
2) War and Weapons
3) Everyday life
4) Rise and fall of this civilization, etc.

After browsing through the books again for specific information the class comes up with multitudes of sub topics - e.g. for Religion we have:

1) Training of priests
2) Building and maintaining temples
3) Human sacrificing
4) The Gods that were worshipped
5) Legends and myths, etc.

By this time the children have decided on what they would like to write about. They write down the titles and page numbers of the books they are going to use. This is their bibliography.
The class is now ready to learn how to do an outline. Each student is expected to make a fairly detailed outline of his particular topic. Now it is back to the books to jot down notes (main ideas).

When all the notes have been gathered the children are ready to write out their rough copy. The different parts of a book are introduced and the children are invited to use the parts they think they will need to make their book more readable and interesting.

When the student is ready, he asks for help from me. Content remains undisturbed. Spelling and sentence structure are reviewed and necessary alterations are made.

Finally, the time has come to do the good copy. This goes relatively quickly. We have the finished product for you to look at if you are interested.

The children are very proud of these books when they are completed. They are handed around and read by everybody. As we have gone along the children have developed their own built-in standards. The children themselves are their own judges. They know when something has to be done over. Consequently when they have completed their booklet they know that they have worked to their maximum potential.

When all the books are completed we have an attractive class set of booklets written by the children for children. The books are written at a level that the children can understand, and the topics chosen are vitally interesting to them at this particular level. The boys, for example, inevitably write on war and weapons, sacrificing, etc. while the girls write on marriage customs, children, cooking,
fashions, etc. The poorer readers in next year's class now have an excellent starting point. If they are unable to cope with the resource books available in the library, they can use these.

The teacher, too, is a beneficiary. The more students become involved in selecting and decision-making the more the teacher fades into the background and assumes the role of advisor. However, the high standard of work the children are producing and the happy involvement of students because they are working on things that they have chosen to do provide ample reward. We have been further rewarded by gaining new insights into how to motivate students, what is important to students, and the degree of responsibility students are capable of assuming.

**Recapitulation**

A review of developments in the classroom just visited reveals a fairly clear allocation of responsibilities for curriculum decisions:

<table>
<thead>
<tr>
<th>Task</th>
<th>Responsible Party</th>
</tr>
</thead>
<tbody>
<tr>
<td>1) Changes in approach re Language Arts Program (Program modification)</td>
<td>Teacher</td>
</tr>
<tr>
<td>2) Choice re activities (following Jasper trip)</td>
<td>Students</td>
</tr>
<tr>
<td>3) Language Arts versus Social Studies (an integrated approach)</td>
<td>Teacher</td>
</tr>
<tr>
<td>4) Topics of Study - Content Selection</td>
<td>Students</td>
</tr>
<tr>
<td>5) Learning Activities - Individual or Group</td>
<td>Students</td>
</tr>
<tr>
<td>6) Job Responsibilities</td>
<td>Students</td>
</tr>
<tr>
<td>7) Setting of Standards</td>
<td>Students, Teacher</td>
</tr>
</tbody>
</table>
A sharing of responsibilities along with accountability was a system that developed gradually. In this particular case the teacher was not afraid to delegate responsibilities to the students, resulting in positive student gains.

Some Further Applications.

Student interaction at the classroom level and involvement in curriculum decision-making can enhance at any grade level. Students of differing ages interacting in curricular studies can be beneficial to both older and younger team members. In St. Albert, we now have Grade IV students assisting at the kindergarten level and Junior High students helping with the elementary program. Older students will perform in a most responsible manner when provided the opportunity to assist younger. Their perception of student needs and the means to effect positive learning experiences for younger buddies is indeed remarkable.

The very young also have insights that are noteworthy, and in closing I would like to share an experience I had with a 4-year-old. Dawn, a typical 4-year-old, was busily engaged with scissors and paper-doll cut outs. Lack of experience was apparent as she struggled to keep within the confines of the pattern outlines. Not content to be the silent observer and somewhat nervous over the possibility of a "ruined" cut-out, I offered assistance and almost immediately our roles were reversed. I was the cutter and Dawn became the observer. In a few short minutes, however, I was jerked back to reality with the young lady's comment, "Don't you do it all - let me try for a while - else how am I going to learn, if I don't do it myself?"
How true! How are they going to learn if they don't have practice in doing for themselves - and a very important part of that doing lies in the act of decision-making.
CURRICULUM DECISION-MAKING IN THE GROUP B OPTIONS

Dave Luyten

It is my privilege to have been chosen to speak to you concerning curricular decisions in the planning of junior high school B options. This is my first year as a teacher. I teach Grades 7, 8 and 9 science at Picture Butte High School. As well as teaching these science courses, I was assigned the task of developing and teaching a Group B science option. It is my intention to present the decision points that I have experienced in developing this Science B Option course as well as the successes and frustrations I have experienced.

Before I delve into this matter, I would like to give an idea of the classroom and laboratory facilities at our school. The lab is very adequate and well supplied for junior high school purposes. Next to the lab is another room where the students carry out their research. The room itself has a fairly good supply of reference and idea books. There is also an excellent library which the students often use.

Some of you may be wondering what the difference is between the B options and the A options. The A options deal with the cultural and practical arts, such as music, home economics, French and industrial arts. The B options are academic electives, such as science, mathematics and social studies.

Probably the most significant difference, as far as this conference is concerned, is the provision of course outlines. B options do not have course outlines. As a result, they offer an opportunity for creativity and individuality.
Even before a course is taught, decisions must be made. I have called these preliminary decision points (See Table I).

The first decision that must be made is whether or not to offer B options. The decision was made at Picture Butte High School by the principal in conjunction with the superintendent. I presume this decision was based upon the needs of the students and the availability of teachers.

Once it is decided that B options will be offered, the next decision point is who will teach them. The interests and qualifications of the teacher determine the selection of the option instructor.

A crucial step in B option planning occurs when students decide which option to take. It is stated in the Junior High School Handbook:

"In general, selection of Group B Options should be made on the basis of strength rather than weakness."

This presents a problem with those students who do not have any 'strengths' in the Group B options that are offered. This problem is compounded when there are only a few Group B option selections available.

At Picture Butte High School, about sixty students in grades VII and VIII were allowed to choose between three newly offered Group B options. It was here that the first teacher decision point was reached. The three teachers involved decided to let each student freely choose the option he or she preferred. As a result, only three of the seventeen students who chose the science option could be classified as having chosen on the basis of strength.

The implications of this decision and of the total situation had a profound impact on other decisions to be made. Due to the varied
TABLE I

DECISION POINTS IN CURRICULUM PLANNING

Preliminary Decision Points

1. To have group B options
2. Who will teach the options
3. Conditions under which students select the options
   a) Students should choose the options
   b) Options should be chosen on strengths not weaknesses

Decision Points in Curriculum Planning

1. Aims and Objectives

   a) Purpose
      The purpose of Science B Option is to have the student discover the joy of solving problems

   b) Teacher Objectives
      The teacher should
      i) explore the growing interests and abilities of the student
      ii) carefully cultivate student interests
      iii) develop the students special abilities to a maximum
      iv) locate and correct any student weaknesses

   c) Student Objectives
      The student should be able to:
      i) demonstrate careful and competent handling of laboratory equipment
      ii) write up experiments in an acceptable scientific form
      iii) indicate interest in the course by NOT being a behaviour problem
      iv) demonstrate a desire to solve a problem by asking questions and by carrying out research

2. Content

3. Evaluation
   a) Students Objectives
   b) Grades
DECISION-MAKING DURING COURSE OPERATION

STUDENT

A. research
  select research topic
  teacher approval of research topic
  carry out research
  evaluation

B. experiment
  select experiment
  teacher approval of experiment
  research problem
  preliminary write-up
  teacher approval of write-up
  perform the experiment
  draw conclusions
  experiment evaluation

C. chess or puzzles

FEEDBACK
abilities of the students, the aims and objectives must be designed so that they are applicable to all. Since most of my students were weak in the field of science, the purpose of my present option course is to have the student discover the joy of solving problems.

I also decided that teacher objectives were necessary. The teacher objectives offer guidance to me as to how the students should be directed and guided in the course. The teacher objectives were gleaned from the 1973 - 1974 Handbook and are shown in Table I.

The second decision point deals with the content. The best method of achieving my purpose and of accommodating the varied abilities of the students was to let each student find, study and solve problems that interest him. This meant that experimentation and research became the core of the option. Also, this implied that the teaching situation would be very informal, as the student had to find his own problems and use the scientific method to find solutions with little help from me.

The final decision point in curriculum designing was to formulate a method of evaluation. I felt it was important to have each student realize that he was capable of reaching success in science. Once a student found that he could be successful, it was hoped student motivation would be improved. This was accomplished by two methods:

a) Student objectives were formulated so that they specified mainly affective behaviour. The student objectives are also shown in Table I.
b) Secondly, I felt that if I was to attain the goals set forth, the normal grading system must be revised. I informed the students there would be only three grades that I would hand out: an A, a C, or an F. This strategy hopefully would allow any normal B grade to become an A and so forth. The results would hopefully spur those students who normally receive C's, D's and F's toward a more positive attitude.

But changing the method of evaluation does not end the need to make decisions. Decisions are also made during instruction of the course. (See Table II) There are both students and teacher decisions involved. The basic decision facing the student is whether to do library research or an experiment. Teacher decisions involves approval of the experiment or of the research topic and approval of the finished report.

It is here that the teacher's objectives are useful. I can discover the interests of students and I can guide them so as to develop their strengths and to correct any weaknesses. Also, I can weed out experiments that are not suitable for reasons of safety and facilities. Another value is that I have an opportunity to probe into the student's understanding of his assignment.

Frustrations sometime occur when unforeseen events occur during a course; decisions must be made to correct the situation. After about two months of operation, some of the students showed a lack of enthusiasm resulting in a poor quality of work.
I have encountered a major obstacle that was resulting in the general disintegration of the students' attitudes. I did not want to undermine the purpose and objectives laid out, as I felt they were valid and worthwhile. Therefore, the problem before me was to overcome student apathy without sacrificing the goals of the course.

I decided to add an alternative activity that gave the students the opportunity of breaking away from the normal procedure while still holding to the objective of developing students' critical thinking skills. This alternative was to play chess, or to solve puzzles.

When I introduced this new alternative, I was afraid that I might change the science option course into a games option. I therefore informed the students that this new alternative was designed only to create a break from the normal routine. In reality, this revision has worked surprisingly well. For the first week after I introduced this alternative almost all the students chose it. After the novelty had worn off, the students' attitudes improved, even though the use of this alternative had been greatly reduced. In fact, I can think of only one instance, since the first week, when students have chosen this alternative. The students appear to be content just to have this alternative available. One frustration I am presently battling with is the inability of students to transfer their knowledge and experience to practical situations. These students appear capable of finding problems in a resource book and following instructions on how to solve the problem, but they do not seem to be able to carry over experimental processes to problems and activities they themselves experience.
I am in the process of trying to find ways to overcome this problem. An alternative I am considering is that each student be required to pose and attempt to solve a problem that he has observed or experienced rather than a problem he has found in books.

A third frustration I am experiencing is a common one, time. Shortage of time is a real problem, especially since I am a first year teacher and must design and prepare lessons for three grade levels, as well as develop the Group B option course.

But of all the frustrations, the worst is my inability to spend the amount of time with each student that I think is necessary to adequately explore, cultivate and develop his interests and abilities.

The successes I have found in science option have been very satisfying and encouraging. I think I owe part of my success to the fact that I have had no previous experience teaching. As a result, I was free to develop a course based upon my pedagogical philosophy and tailored to fit my beliefs and personality. I must admit this same fact, lack of experience, also has led to many frustrations.

Due to my lack of experience, many times I have been confused as to what line of action to take next. Then, there is the nagging question, "Will my superiors accept what I have developed?".

My greatest successes in teaching are due to the results of this program. Many of the students now have a positive attitude toward science and have improved their science grades. Some of these changes have been small, but they are still a step in the right direction.

The greatest reward I have received in this program deals with two students who have almost steadily received F's in almost all of their courses. Their behaviour at the beginning of the year created many
discipline problems and their attitudes toward science and myself were very negative. Since I have had them in my option, their attitude and behaviour have taken an about turn. These improvements are not only restricted to science option class but have also carried over to their Grade VIII science program. It is results like these that make teaching junior high school students most rewarding.

In conclusion, I would like to make an admission. It was not until I was asked to speak to you at this conference that the procedures I followed in developing this program were written down. Almost the entire program I developed was designed in my head. It was not until I started to organize and structure the thought processes I went through that I realized the complexities involved in designing courses.

Many of my frustrations and problems could have been averted or reduced had I carried out the curriculum planning in a more formal manner. I would therefore like to leave you with what I consider to be the most helpful advice for the teacher when he is developing a curriculum:

organize your thoughts on paper!
ISSUES ARISING FROM CAST DIES ON STUDENT AND TEACHER INVOLVEMENT IN CURRICULUM DECISION-MAKING

George Bevan

After having heard yesterday's tremendous analytical efforts by Bill Duke and Ted Aoki I am loath to get up in front of you and share with you my accumulated ignorance. I came here with some ideas based on experience, because my job is to become involved in curriculum development. I have an empirical model myself that's been developed in much the same way that Dave Luyten developed his empirical curriculum model. He looked back on his Science Option course to find out how it had developed and said, "This is how it happened." From that we move to how it ought to happen. Before I get into empirical models, let me outline the three things I propose to do. One, I'd like to bring out some issues that I think are worthy of mention, some of which are repetitions from yesterday. A second task is to present a model for placing these case studies in some sort of curriculum network. The last thing I'd like to do is to give you a way of looking at the process of decision-making so that perhaps you can do something with it.

Now the issues. In the first place, the question Dr. Aoki raised was, "What is curriculum building, and what is curriculum?" We've had a number of terms used almost synonymously with curriculum building. I'll mention them to you. "Curriculum building is decision-making". "Curriculum building is problem solving." "Curriculum building is communication". Now I want to say to you that curriculum building is none of these things. It involves these processes, but curriculum building is itself a process and the product of it is a curriculum. I
mention this to you because I think there is a tendency to treat a very complex process simplistically. As we analyze it and break it down into its components, we end up with something that is far, far less than what curriculum building happens to be. It is amazing, in fact, that in spite of its complexity, curriculum building does take place.

Previous speakers yesterday got away with restricting their remarks to the processes of curriculum decision-making. I don't think that we ought to leave the product of curriculum building, the program that develops as a result of this process, out of the discussion. I don't think you can, and later on I will show you how I think they are linked. I would not like to accept a simple definition of curriculum or a simple definition of curriculum development. I think there are phases or stages in curriculum development. If we separate one from the other it will help us to look at the process itself.

Levels of Decision-Making

Table I depicts a Curriculum Development Classification System with three responsibility levels: Societal, Community, and School. Table I also lists the agent who takes nominal responsibility for the change. At the provincial or societal level, the provincial government takes the responsibility through the Department of Education or perhaps a multi-departmental approach. At the community level, the school system takes responsibility. It is the agent through which curriculum development changes take place. At the school level, students might be involved but the teacher takes responsibility. Students don't get fired out of a school if they make bad curriculum decisions. In
<table>
<thead>
<tr>
<th>Level</th>
<th>Agent</th>
<th>Example</th>
<th>Amount of Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Societal</td>
<td>Provincial Govt.</td>
<td>E. C. S.</td>
<td>High</td>
</tr>
<tr>
<td></td>
<td>Dept. of Social Ed.</td>
<td>Social Studies</td>
<td></td>
</tr>
<tr>
<td>Community</td>
<td>School System</td>
<td>E. O. F.</td>
<td>Medium</td>
</tr>
<tr>
<td></td>
<td>School Project</td>
<td></td>
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<td></td>
<td>(Bishop Carroll)</td>
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<td></td>
</tr>
<tr>
<td>School</td>
<td>Teacher(s)</td>
<td>Group 'B'</td>
<td>Low</td>
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<tr>
<td></td>
<td>Options Students</td>
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<tr>
<td></td>
<td>St. Albert Project</td>
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fact, one of our problems may be that teachers don't get fired for bad curriculum decisions!

We can now take a look at the third column in which I have tried to place the case studies that you've seen so far. An example of a project at a societal level is the E. C. S. project, but it's not a good example because it's not purely educational. It's not purely curriculum. It's more than that and in the "more than that" is a host of unanswered questions like, "Why is it there in the first place?" "What is the purpose of E. C. S.?" Let's go down to the next one. It's a better example. The social studies program that exists in our school system was put in there by the Department of Education. It is an example of curriculum development at the provincial level.

Let's go down to the school system. The E. O. F. idea came from the province, but most decision-making occurs at a school system level. Again, you might ask yourself, "Why are there E. O. F. Projects?" I don't think I will attempt to answer that question -- I'm not sure of the real reasons -- but I do know that projects are being developed at the school system level throughout Alberta. Let's go down one step in the list to another school system project such as at Bishop Carroll in Calgary. That's a school district-initiated project. Another one that's at a school system level is the Mathematics Project which you'll hear about this afternoon. It's also at a school system level, involving the entire system, or a large portion of the system.
<table>
<thead>
<tr>
<th>Stages</th>
<th>What to Consider</th>
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<tr>
<td><strong>Context</strong></td>
<td>What Goals and Objectives</td>
</tr>
<tr>
<td><strong>Input</strong></td>
<td>What Resources (Plans, Skills, Time, Money)</td>
</tr>
<tr>
<td><strong>Process</strong></td>
<td>Criteria for Decision-Making</td>
</tr>
<tr>
<td><strong>Product</strong></td>
<td>What Organization or Mix of Resources</td>
</tr>
<tr>
<td></td>
<td>What Program</td>
</tr>
</tbody>
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Finally, at the school level, the Group "B" options provide a beautiful example. Most of the decisions that relate to introducing various options take place right within the school. What happens after it is decided to introduce the option has been graphically illustrated today. The teacher frequently makes a decision based on a lot of pieces of information he has. The St. Albert project is another example. Here is a case of a teacher working with a Central Office person deciding to do something without reference to any Department of Education official and, presumably, without reference to the School Board, except through the Central Office person who was acting as liaison.

Now, I also put on the right hand side the "Amount of Change". I think this is important because we want to talk about impact on the educational scene. That's what I mean by the "amount of change". When a project gets its initiation at the provincial level and affects all school jurisdictions, I'd say there's high impact, or a high amount of change. Projects at a system level, affect a number of schools, or at least one entire school rather than a teacher or a subject in a school. That's a medium change. Finally, the change at school level has relatively low impact. It may be dramatic for a class or a teacher, but its impact is not on the resources or educational activities of the whole system.

It is obvious that because they are a different levels, you cannot treat these projects in exactly the same manner. The model of decision-making for the E. C. S. project cannot be the same as it was for the St. Albert project. I think it's probably a mistake
TABLE III
CURRICULUM DEVELOPMENT
AS A CONTINUOUS PROCESS

Decision to Change

Choosing Objectives Purposes Goals

Planning Developing

Instruction

FEEDBACK
to look for a single model, pure or otherwise, that will function effectively for all curriculum development projects. When you have decided what the situation is, at what level a given project exists, then you have to reach into your repertoire of models and pull out "the" model, that will work best.

**Stages in Decision-Making**

Let's talk about Stages in Decision-Making. Table II shows an outline of decision-making based on the four stages identified by Stufflebeam. The four stages are Context, Input, Process, and Product. At the context stage, you ask, "What goals and objectives should this program have?" At the input level, we are concerned with "What resources (plans, skills, time, money) do we need? What criteria will we use for decision-making? What plan do we have for actually carrying it out?" The process stage looks at "What organization or mix of the input of resources will we have in order to carry out this development? How will we go about it? What's our plan?" Finally, at the product stage we ask, "What is the program which issues from this decision-making process? Does it fit the criteria that we set beforehand?"

When you start analyzing or breaking down the curriculum development process into its decision-making stages, you can say to yourself, "Where does the St. Albert project fit? Where does the Luyten project fit? Where does E. C. S. fit?" As related questions we might ask, "Who should be involved in decision-making? Who should determine the goals and objectives of the E. C. S. program?" Students? Not likely, because we're talking about kindergarten children. The maturity of the client is an element in who should decide. In the St.
Albert project, students made a lot of decisions about process in the classroom: for example, whether they were going to study this ancient civilization or that ancient civilization; which topic they were going to choose to work on. They all had to prepare a report though! That decision wasn't made by them. The teacher decided that there was going to be a report. The teacher also imposed on those students some very noticeable decisions about standards. She very carefully led them to a point where they could make decisions themselves about how good the project material was.

Another way to look at this is to refer to Table III where we examine the continuous nature of curriculum development. To look upon it as a finite process, beginning with the decisions to change and ending with the production of a program, is to over-simplify what it is that we're doing. We're producing something that meets the needs of today's students. In a static society where the people's needs remained relatively unchanged, there would be no problem; but if change is as rapid as it appears to be, we ought to be doing two things: developing new curricula and then revising them as we find out that they do not, in fact, work as planned. So we need to have built-in feedback. Regardless of the model you have, it should have a feedback route. First of all, somebody has to make a decision to change. Having made that decision, there are a number of steps that one goes through including the choosing of the objectives, or purposes, or goals of the program. Then there is a planning and development phase. Finally, there is an implementation, or instructional phase. At every one of those levels there should be a way to feed back information about the process and the tentative product. Now we can go back and recycle. I know that this is systems' terminology and it's anathema to some of you, but I don't
apologize for using systems' terminology. The alternative is un-systematic and I can't buy that either! I think you can carry systems theory too far, but I want some systems, because I want some structure. The feedback route ought to convey to the decision-makers what's going on in the system. This, I submit to you is one element we lack in most curriculum development projects. It's why they go on forever! Who terminates something that we've tried? A project may deteriorate until you cut off funds, but except for that, how often do curriculums projects terminate? It happens, but it's a rarity.

Some Issues

I want to spend a moment or two going over some of the issues that were raised, and also to raise some new ones. First, I would suggest to you that what you need is not a theoretical model of curriculum development, but an empirical model. The way to find out what particular model to use is to try one; you will either like it or you will have to change it to suit your needs. Second, I want to ask the question about shared decision-making. Can you have true shared decision-making in an accountability model? What happens when things go wrong? Can you fire the staff? Who is accountable? I raise that question because somebody is! In the absence of an accountability model what we have is a "cop-out", it seems to me, on the question of, "What do you do when things go wrong?" You correct them, obviously, but how about the gross errors that we perpetrate on students? Maybe somebody should be dismissed if students are seriously affected by curriculum mistakes. I don't think I'm suggesting that heads have to roll every time, but I am suggesting that the concept of shared decision-making with collective guilt is not
a viable concept. Accountability has to be particularized. Somebody initiates, somebody provides information for the decision-maker, his counsel is sought, his opinion solicited and listened to. Then somebody makes a decision. One of the things that you do in a decision-making model is "finger" people, and say, "It is your job to make this decision".

I've said to you that I don't think curriculum building is simple enough so that any single model will suffice. You must use a variety of models. One question which came up yesterday and which is still there is, "How much involvement is enough." I can't answer that, but I can tell you that every now and then something happens in spite of all of the best rules that we know; the rules of thumb that we have. In spite of the pitfalls, in spite of the unanswered questions, curriculum somehow gets developed. And, when it does, we can only marvel at the commendable products that emerge from such an ill-defined process.
CHAPTER IV

CASE STUDIES IN FACILITATING CURRICULUM CHANGE
A CASE STUDY OF FACILITATING CURRICULUM CHANGE:
MATHEMATICS IN EDMONTON AND CALGARY

PART I
Emery Dosdall

What I want to do is give you some background about the
development of our mathematics program and some of the decisions that
we made in nurturing the project up to the present day. It started
back in 1968 with the Human Resources Research Council (HRRC). They
proposed a pilot in Alberta in the field of individualized mathematics.
They wanted to pilot an Individually Prescribed Instruction Program
(IPI). The pilot in 1969 was placed in three Alberta schools. The first
one was placed in Millarville in the Foothills School District, the
second in St. Vincent de Paul in Calgary Separate, and the third in
the Forest Heights Elementary School in the Edmonton Public System.
The objective of the IPI project was to field test and to evaluate, over
a three-year period, the IPI program as an established program which
was developed in the United States in the Pittsburgh Training Centre.
It was hoped that the project would give us a lot of spin-off or
developmental guidelines that we could use in further developing
other kinds of programs, not only in mathematics, but also in all subject
areas along the ideas of individualization.

The first two years of the IPI pilot raised some very serious
concerns among the project teachers and administrators. Despite the
very positive attitude both teachers and pupils had about the program,
the tremendous cost, the excessive prescription in the materials
themselves, the seemingly large amount of "down" time, and the number
of teacher aides that were required to run the program mitigated against it right from the start. The project teachers, however, did not want to return to the traditional program nor did they want to drop out of the project. At the same time, there was a growing reaction from parents, teachers, and administrators with respect to the kind of mathematics that we were using in our schools. As educators, we brought most of this on ourselves in the way we tried to interpret the program to our clientele. We told them, "This is a new math. You leave it alone. We'll do it in the school. You stay away from our schools." As a result we got more and more negative reaction about new math.

In place of an absolute phase-out, we tried to utilize as much as we could of the IPI program that had been tried out for the two years. We used the IPI set of objectives and a modified type of IPI format. We began, using numerous teachers in the system, to revise and to rewrite the teacher and the student materials. The Calgary Public School System at this time also became involved. Calgary Public and the three original systems produced the necessary materials into a program that the project director at the time labelled, "The Elementary Mathematics Developmental Activity" (EMDA). These EMDA materials were piloted in the four systems in the 1971-72 school year.

EMDA was administered by a coordinating committee, consisting of a project director from HRRC, teachers and administrators from each of the participating systems, and representatives from two universities. The coordinating committee decided to evaluate each component of the program to see where revisions and modifications were needed. The first revision was to be in terms of the set of objectives on which
the IPI program was established. The co-ordinating committee gave the responsibility of revising and re-writing these particular objectives to the Edmonton Public School System. To complete the task of setting up these particular objectives, a system coordinating committee was established to oversee the development of the objectives. This committee consisted of a university representative, an elementary administrator who had been deeply involved in mathematics over the years, and an elementary mathematics curricular associate. The task of this coordinating committee was to look at the total goals of the elementary mathematics program to try and establish some framework for development. With this framework they were to try and determine some of the topics that might facilitate the reaching of these general objectives. The goals that they established were taken directly from the Elementary Mathematics Handbook established by the Department of Education just the previous year. The committee tried to decide on five major strands that they would concentrate on to reach these goals. These strands provided a way of organizing all of the different topics or concepts that we wanted to present to children. We tried to give a brief description of what it was that we were aiming at with the concepts that were laid out for each of these objectives.

With this kind of basis established by the coordinating committee, at least two teachers at each grade level were brought in to work with the coordinating committee in selecting topics they thought were appropriate, and also to try and put a placement on each topic. This was a big task. This type of thing happened: A grade two teacher would say, "You know, I just cannot teach meaningfully the concept of
money to grade two kids!" So we said, "Maybe that should be placed into a grade three level." We looked at such concepts as other bases. Should you be teaching other bases at the grade three level or grade four level? These kinds of decisions were made by the teachers with the coordinating committee. They were decisions that affected the entire system later on. The teachers that were on these particular committees were selected because they had worked in previous mathematics committees or they were teachers who had been identified by their administrators as very good or exceptional math teachers. If was during these meetings that we made most of the major changes. The final task of re-writing and editing was left to the coordinating committee, who tried to put them into some kind of performance terms.

The list that we came up with was a list for grades one through six. This list was presented to the representative from each of the other systems that we were working with in the southern part of the province. Their reaction to the objectives that we presented to them was that they wanted a much more specific listing of the skills. The Edmonton group, on the other hand, wanted to retain the much more general list. The coordinating committee had several meetings to resolve the dilemma. We brought teachers from Edmonton to meet representative teachers from Calgary and vice versa several times to find a compromise. As a result, what we decided to do as a group was to continue with the exchange of materials but to use different objective sets. During the time that all of these discussions among the different representatives were taking place, each of Edmonton's fourteen mathematics curricular associates visited the teachers that were on the project pilot. With this feedback from teachers, we came up with a tentative format that was determined by the supervisor and the curricular
associates. The format, once established, was taken back to the project teachers for their reactions, and was further discussed in terms of its feasibility. The conclusion of these discussions was the establishment of the Edmonton Elementary Mathematics Program (EMP).

It was at this time that HRRC was terminated; however, we decided to continue the project, and finally came up with a program containing several components; the first being a multi-text approach. We had several text series and selected those that had very favourable piloting. We decided that we would reference these texts to every objective, grades one through six. This was an enormous task and it could not have been completed by our own system because of the expense and the time factors that were involved. As a result, we wrote to each of the publishing companies to see, in fact, if they would do this task for us. We received a very favourable reaction from each of the companies that we contacted. The indication was that they would do this as a service to the four school systems. Each set of the commercial materials was completely referenced in, on a Grade One to Grade Six basis.

The second major component was a multi-activity approach. We referenced games, activities, and investigations to each objective at each grade level. We also tried to develop pre-tests and post-tests. We developed final tests and different kinds of Record and Management sheets to bring it all together.

During this particular time we had something like seventeen active mathematics committees working throughout the year. These consisted of teachers, administrators, and the curricular associates.
It was a massive group to have working on the project. The money that we needed for these committees, for materials and for release time was provided by our system's research and evaluation department. The other resources we had were provided through the mathematics program budget. We did attempt to get additional support for the project development from the Department of Education. The Department established a committee that looked at the educational appropriateness of the objectives that we had established. This committee was disbanded after two meetings. A second committee was set up to study the perceived needs of various groups with respect to mathematics; we do not have the results of the committee's work as yet.

The materials that were developed were put in a program booklet format for each grade level. They were sent out to each of the teachers that had participated with us in the previous pilots. We wanted these teachers to have first crack at these materials and to revise them where necessary. We allowed other teachers to have the programs if they voiced an interest in piloting and if they were willing to go through a number of in-service sessions. As a result, during that particular year we had over one hundred teachers participating with us in a pilot. Again, the program was monitored and revised. It was then on the basis of the teacher feedback that the decision was made to place the program on a system-wide basis.

To implement this in our system we gave each of our elementary school administrators a half-day in-service training. We gave several half-day and after school in-services to our teachers, and we tried to make the public aware of this particular change in the mathematics area.
through a report to the Board and also through a number of parent-teacher nights in which the program was discussed with members of Home and School and parent groups. Further assistance for the implementation of this program came this year through the funding that we received in an EOF assistance grant.

We have had tremendous interest in the program from several outside systems. Thus, when we did reprint it, we sold it at cost to Fort McMurray, Edmonton Separate, Foothills, Leduc, Medicine Hat, and other systems. We received a number of letters from across Alberta and from across Canada asking for the program but we were not really able to honor all of these because of the limited copies that we had, and because of the cost.

In February 1973, EMP and several other mathematics programs and problems were discussed at a seminar held in Edmonton. At the conclusion of this meeting, two resolutions were passed. First, it was the desire of the representatives to have better communication and materials exchange between systems. Second, they felt a need for better and more cooperation between systems, especially when working on curriculum projects.

In the development of the follow-up Junior High Mathematics Program, we tried to keep these two resolutions in mind. The objectives for the Junior High, as in the Elementary, went through a similar process in their development. After the objectives were set, we contacted a number of systems that had expressed an interest in working cooperatively. We had a meeting in Red Deer and they indicated they'd like to get involved in the Junior High project. Ten school
systems agreed to participate. We agreed to prepare twenty-one units. The tasks were broken up so that the ten systems are cooperating and working as equal partners in the development of the Junior High program. We can produce the 21 booklets which include not only the components of the Elementary but also learning packages. This task can be done in a one-year span and will be piloted on much broader populations than it would have been possible for either Edmonton Public or any one of the other systems to produce.

I think it's the cooperation and close exchange on these projects with other systems that has been really beneficial to us and there have been several spin-offs that have happened as well. We're presently planning to work cooperatively with a number of systems in the development of the Math 10/30 and 13/33 programs which will be a continuation of the program. We will be working cooperatively to develop metric materials, and on the complete revision of the elementary program when metrification does come in.

Communication between coordinators and supervisors of instruction, not only about specific programs but also about several other general concerns, has been one of the most beneficial things that has come from our project over the last two or three years. To give the perspective from a smaller system, Don MacInnis who is representative of the Calgary School Board, will go through some aspects of their involvement, not only in the area of mathematics but in some of the other projects that they are involved in. Thank you.
Before I start, I think it is important for me to give you a few statistics in relation to our system. The Calgary Separate system is not a large system with unlimited resources and a great number of curriculum specialists. At the secondary level, our central office staff consists of one coordinator who has overall responsibility for curriculum for Grades 7 to 12; one general supervisor, myself, who has responsibility for curriculum from Grades 7 through 9; three specialist supervisors, one of each in physical education, fine arts, and religious education. So you see we are a small system. I think I can bring this point out a little more. We are presently working with Edmonton on a life-science project. We looked over our staff to find out how many life-science specialists we actually had. Out of a total of twenty grade 7 science teachers in the system, we had five that could be considered specialists in a life-science area.

With that overview of the size of our system, I'd like to talk to you about our approach to curriculum development. The importance of moving into the curriculum-writing field was heightened as a result of the change in the Junior High School Handbook in 1969. The Handbook gave more local autonomy in the curriculum area. This necessitated a change in the role of our teachers. The introduction of the academic electives probably was the greatest force in bringing teachers together to talk about curriculum. The question presented by the teachers was,
"What can we do?" The answer to that question seemed to be the formation of curriculum councils that were to be additional to the ATA Specialist Councils that were in vogue. Councils in the four core areas were formed in our system in 1970. A first decision by the teachers in each area was to form writing teams. The teachers believed that the materials from the province and the materials from the publishers did not meet our needs in the core areas. Our teachers concurred with the reports coming from other systems and from the province that the junior high math program did not meet the needs of our students. We looked at other programs, but these programs did not meet our needs either. So our teachers decided to work on the development of programs that they believed would meet these needs. The same procedure was followed in social studies. Through our councils these materials were presented by teachers through what we called a mini-convention sponsored by our local ATA. At this particular convention the teachers took the materials that they had developed, and explained them to their peers. The teachers really appreciated this convention at this time in our development.

The writing of curriculum in our system was, and still is, an evolving process. We first started out at nights, after school and on Saturdays. The teachers who were involved in this curriculum branch in this manner asked the question, "Could we write a curriculum during the summer?" They came up with some good reasons why this should be so, and their request was granted. Curriculum writing at the Junior High School level was handled during the summer months for two summers. An honorarium was presented to the teachers who worked on this curriculum. Then the teachers, said, "Summer is better than nights and Saturdays, but could we develop
Their request was granted.

Incidentally, my job was to break down what I called the If complex -- "If we had this, if we had that, such and such would happen."

We have found that requests from top teachers in regard to curriculum development are not unreasonable and the results achieved are great.

All the requests from curriculum councils have been accepted by our system during the last four years. The area of responsibility, however, has not changed. The responsibility for curriculum development at the secondary level in our system still rests with our coordinator.

He set the tone at our initial curriculum meeting when he stated, "If you have a problem in your specific subject area and you still have that problem at the end of the year, look at yourself in the mirror, for you are the instrument whereby changes can come about". This did not mean that he was giving up his responsibility with the teachers.

Curriculum development might be placed on a continuum. At one end would be the outside experts. At the other end of the continuum we have the teachers. Our system is not at the extreme end of the continuum where the teachers are doing it all, but we are somewhere in that direction. Central office does participate in the curriculum development, but we hope that we are sharing this responsibility with the teachers.

What, then, are the responsibilities of the Curriculum Councils through their curriculum writers? We say that they have the responsibility of knowing their subject. We also say, and we believe that this is really important, that they have to know their audience. This
responsibility was met by securing what we call a "system profile". Through testing, it was found that the range of ability in reading and math at the grades seven, eight, and nine levels was tremendous. The average grade seven class has a range of reading ability of grade three to grade eleven! The same thing could be pointed out in relation to computation and reasoning skills in mathematics. The math teachers took these statistics to heart. In the handbook that they developed and gave to the teachers, they made this statement, "The aim of this program is to accommodate the student at his level of mathematical ability and to allow for his own pace in acquiring new skills." They also stated that they work from the premise that the typical grade seven, eight, and nine student does not exist.

Having recognized these differences, what did we do about them? Reading was a problem identified by our curriculum councils. In order to alleviate this particular problem we worked with the University of Calgary, and through Dr. King we developed the course "Reading at the Secondary Level". We sponsored thirty or forty of our teachers to take this particular course at the system's expense. Further, our curriculum writers firmly believed that it was incumbent on them through their writing to meet the different levels of ability in reading. If a concept was important enough to be on the curriculum, they believed that it was important enough for them to have materials that every child could use in order to understand that concept. The main criteria used in classifying the learning opportunities provided, was the reading difficulties of the exercises.

We also looked at the computational skills of our Grades 7, 8 and 9 students. Instead of getting better from seven, eight and nine, they go down from where they were in Grade 6. So we have developed
units in computational skills. The math council has shown their teachers how they can use mathematical computation in their program every day.

The curriculum writing needed a curriculum plan, and this plan was developed by our Social Studies team. This plan may be seen by looking at the October/November issue of the *A T A Magazine*. All of the steps used by the Social Studies team in planning for their writing may be found in that article. The Science council further developed what the Social Studies people had begun. They wanted to add a few new twists to the plan of curriculum writing in our system. They wanted more involvement of administration so they asked for and received permission to use vice-principals to act as coordinators of a science writing program. It is important to note that our vice-principals teach at least 50% of the time. Five vice-principals, then, were chosen to work on the Science Council. They became involved with the Edmonton Public School Board teachers on a project called Curriculum Resources Information Bank (CRIB). They utilized science teachers and librarians in trying to organize materials for the writing team when the writing team was ready to sit down and actually get into the writing process. With the chairman of the Science Council, they approached science teachers to become involved in the writing. Significantly, they also arranged to have language arts teachers involved in the re-writing of the science to meet the needs of the students. I was involved in actually writing some of the science, and it's quite an experience to have language arts teachers come in and read the material that we had prepared. They laughed at us! They said,
"Are you kidding? Is that for a Grade 7 student?" So they re-wrote the material, working with our science teachers, and built into this material reading skills which have the effect of allowing science teachers to become teachers of reading.

Since the writing, the curriculum writers have taken an additional responsibility. They say that it's not enough for them to write a package and then smile. They also want to develop in-service activities through which to present their curriculum materials to their peers. In the social studies, for example, we had seven curriculum writers involved in developing these packages. They had to work with only twenty of their peers, so they were almost a one-to-one ratio in selling our product to them! All writers and coordinators were to help in this in-service. The language arts teachers were also involved to show how important it was to become involved where reading is concerned.

The curriculum councils have also engaged in other activities of a worthwhile nature. They have met with principals' councils to outline their program. They made up and shared with the principals some tapes that explain what the social studies Grade 7 program was about, what the social studies Grade 9 program was about, and so on. The principal was actually getting a short course in social studies through these tapes, but he could also use these tapes as an in-service in his particular school. The curriculum councils also asked that I meet with the coordinator of elementary school to have him and his teachers make up a tape to explain to our Grade 7 teachers "What is a Grade 6 student? What are we receiving in Grade 7?" I know what the tape will give. It will show the Grade 7 teachers that there's no such a thing as a Grade 7 student! I think that if
we play that tape at our first staff meeting then there should be a lot of hustling in terms of, "What are we going to do about the material that we were going to present to this Grade 7 class?"

The broadening of our base in curriculum led to a meeting in Red Deer which involved representatives from other school systems. At that meeting we were presented with a plan whereby we could participate as equal partners in preparing a mathematics program. The proposal appealed to us, as we saw how it could complement the work that we had already done in mathematics. We also saw many advantages for our size of a system: the project that would have taken us three or four years could be completed in one year. It is important to note that it is still our project. Our teachers are very proud of the work that they are sending up to Edmonton; they are equally pleased with the way that Edmonton teachers contribute to our efforts. The Edmonton teachers deserve a "tip of the hat" for helping us maintain the healthy attitude that this is still our project.

The experience of working with other teachers is a growth experience for all of those involved. In expanding the experience from development on a local level to the development of sharing curriculum writing between systems on a provincial basis, one gains in the sense that he becomes more outward looking -- picking and choosing ideas from others and evaluating their applicability to his own local situation. The sharing of the work load between systems makes it more productive and tends to increase the quality of work, because a person tends to be more careful in preparation when those materials will be in the hands of many teachers. The element of pride certainly comes to the fore.
We believe this involvement in the mathematics and science projects has helped us, and we hope it will continue. We have attempted to cross disciplines in the development of curriculum. We have also attempted to coordinate the activities of librarians in curriculum writing. We have zeroed in on finding a place for the vice-principal in this important work. We have utilized the services of the University. We have asked about guidance personnel and how we could best utilize them in our work, and we know they have an important role to play.

In review, then, responsibility for Curriculum is in the hands of our coordinator. He has placed a challenge to the teachers through their councils to share this responsibility, and they have accepted his challenge. Just how well they have accepted this challenge is demonstrated by an M. Ed. thesis on the degree of implementation of curriculum materials in our system: thirty-five percent of our teachers have been involved in curriculum writing; seventy-five to eighty percent of our teachers are using the materials developed by the curriculum group; over fifty percent of our teachers have been involved in the religious curriculum product.

Further evidence is provided by quotes from some of our teachers. I read them to my coordinator, and he said they sounded too much like a testimonial; however, I want to quote one by Ray Wilkins, a fellow who has been working with us on the Science CRIB project developed by Edmonton Public; "The Life Science Bank reflects a number of important factors in curriculum change that are known to be desirable but difficult to realize, namely, cooperation between school systems in an inter-disciplinary approach, concern for reading ability, release of teachers from classes to do curriculum work and the involvement of the vice-principal in curriculum development". Let me close
with one final quote, from Principal Dr. Tom Halbert: "We have a long way to go in curriculum development. We are happy with our projects so far, and firmly believe that through cooperation with other systems our road will be made easier and the ultimate winner in the end will be the students in our classrooms".
DECISION-MAKING IN PROGRAM DEVELOPMENT  
Ralph Sable

It is generally accepted that there are at least four levels at which curriculum decisions must be made. (Goodlad, Tyler, Spodek):

<table>
<thead>
<tr>
<th>Level</th>
<th>Responsibility</th>
</tr>
</thead>
<tbody>
<tr>
<td>Societal</td>
<td>Department of Education (Legislative Assembly)</td>
</tr>
<tr>
<td>Institutional</td>
<td>School Districts and Schools (Local Boards, Administration, Teachers)</td>
</tr>
<tr>
<td>Instructional</td>
<td>Classroom Teacher</td>
</tr>
<tr>
<td>Learner</td>
<td>Students</td>
</tr>
</tbody>
</table>

This paper, based upon information received from case studies presented and upon the previous insightful analyses of the case studies, is an attempt to provide a process which is applicable, with modification, at each of the levels of decision-making outlined.

Some of the barriers to a discussion of this type have been presented by the previous speakers. One barrier is the communication problem as outlined by Dr. Aoki. Dr. Aoki referred to this as dissonance in basic paradigms of curriculum decision-making.

Another barrier is the acceptance of a definition of what we are discussing when we use the term curriculum. I choose to use this term in the vein suggested by Dr. Aoki, i.e. program development. Processes and products in program development are shown in Figure I.

I believe that The Case Study of Facilitating Curriculum Change: Mathematics in Edmonton and Calgary as presented by Emery Dosdall and Don MacInnis is illustrative of program development as presented in the M. Johnson model (as adapted) as it functions at the institutional or school
system level. The fact that they were successful in a cooperative movement involving many school districts is an indication that such a process is viable at the societal or provincial level.

As I perceive the process through which this mathematics curriculum has developed, it illustrates the following points:

1. The sources of concepts or intended learning outcomes were from the Department of Education curriculum guides (the desires of society) and from the discipline of mathematics.

2. The criteria for selecting the I. L. O.'s to be included in the program being developed were based upon information from:
   a) Department of Education
   i) Discipline of mathematics
   c) Teachers
   d) Feedback from the instructional system
   e) Use of appropriate media.

3. The intended learning outcomes in each unit were subject to modification in the variety of districts and classrooms where the units were used. (This allows for each district or classroom to participate in the program development process in a modified form.)

4. The relevance of the program being developed was scrutinized by pupils and teachers.

5. The content included in the program was:
AN ADAPTATION OF M. JOHNSON’S CURRICULUM AND INSTRUCTIONAL DESIGN MODEL

CURRICULUM DEVELOPMENT SYSTEM

Institutional teaching strategies
Institutional content
I.O.L.'s

Instructional planning

M. RIX

Instruction

Instructional content

Instructional strategies

Disciplined knowledge

Non-Disciplined knowledge

Transaction

Learning outcome

Social interaction

CONTROL

EVALUATION

LEARNERS

Criteria for Selection of I.O.L.'s

Criteria for organization of I.O.L.'s

SYSTEM

Display

Transaction

a) modified existing materials
b) newly developed material.

6. There was a strong in-service education component.

7. There was an important, ongoing evaluation component.

8. There was a feeling of involvement by all members of the project. This seems to have led to a commitment to implement the message contained in this program development process.

It is my opinion that this process is one which could be employed at all levels of the program development process. The societal or Department of Education process could function in this manner. To do so, however, would demand a basic revision of current practices. There would be need for a decentralization of decision-making so that the process could be made functional.

It has been stated that, as a professional, educators are less motivated to curriculum innovation than to system maintenance. It can also be said that each of us in the hierarchy of education believes strongly that the maintenance of our present system is both desirable and necessary. It is felt to be desirable because each of us is rather certain of the unique contributions which we make. (We wonder if the system could function without our presence or at least the position which we occupy). It is felt to be necessary because of the current emphasis upon accountability. Accountability is seen as a linear function of action-reaction. To date, feedback from practicing educators has not been used routinely for accountability
purposes. Somehow, practicing educators have not considered it as trustworthy as a P. A. B. system and the inscrutable computer.

The above biased statements lead me to explore a form of decentralization in which the paradigm of program development presented could function. This is the concept of decentralization called DEVOLUTION.

Decentralization can be viewed in at least two ways (Sherwood 1969). Decentralization may mean either DECONCENTRATION or DEVOLUTION. In deconcentration the delegation of authority, adequate for the discharge of specific functions, is given to a staff member situated outside of headquarters. This suggests an hierarchical structure. In devolution there is a legal conferring of powers to discharge specified and residual functions to formally constituted local authorities outside of headquarters. This is non-hierarchical and implies a measure of autonomy—the freedom to behave outside the total constraints of direct control.

This conferring of powers or decision-making function to a local authority can be done. The case of the Edmonton - Calgary project illustrates this. There is, in my opinion, a large element of accountability in this project. They have been cognizant of the need to fulfill the goals of the Department of Education. What has been lacking, however, in this case of devolution is that all-important financial component. I raise the question, "Why should funds for such a program development process not come from the Department of Education rather than from the school district budget?"

I believe that it is important that this conference consider the model for program development presented and that the ramifications of implementation of this model be considered. An excellent exercise for
small group discussions would be to formulate situations at each level of decision-making—the societal, the institutional, the instructional and the learning—and to conjecture as to how the model could be implemented at each level. How can decision-making be coordinated? Can the role of each level of decision-making be made more explicit?

As a final statement regarding program development, I present a different format of the model (Figure II). This will lead one through eleven steps of implementation.

It would also be a useful exercise to consider the proceedings of this conference in the manner of a group process in communication.

1. Have the messages had high fidelity?
2. Have the messages been understood?
3. Have the messages been accepted?
4. Have the messages been relevant?
5. Have I, the participant, gained a commitment to implement the messages? If not, is there a necessity to examine the dissonance present?
Steps in the Design of Curriculum Instruction and Program Development

(1) Research - From Knowledge (e.g., the major concepts of the disciplines).

(2) Determine the criteria for selection and organization of I.L.O.'s.

(3) Determine the possible I.L.O.'s.

(4) Select the content area.

(5) Select appropriate resources.

(6) Prepare evaluation systems.

Designing the Instructional System
(teachers and/or pupils)

The interactive phase including continuous evaluation of:
a) pupil progress
b) the teacher's interactive behaviour

Select specific evaluative procedures relative to specific I.L.O.'s.
CHAPTER V

STRATEGIES FOR EFFECTING CURRICULUM CHANGE
Most of the literature on attempted curriculum innovations deals only with reported adoptations and the "oughts" of curriculum change. Studies of the successes and failures in instituting and internalizing innovations, are fewer in number; however the literature that does exist reports for more failures than successes.* Many reasons have been postulated for the overall lack of success in instituting major curriculum change. However, the general orientation of educators to curriculum development and innovation, which has resulted in a "top-down" decision-making model, and our lack of skill in developing curriculum and effecting curriculum change, are probably the two most important factors.

Curriculum development and innovation can be examined from different vantage points. Focusing on the target of the innovation - the individual, the group, or the organization - is one way of examining the

*The studies on curriculum innovations are too numerous to document in this paper. However, the ones found most useful include Goodlad, Klein, et al. (1970), Gross et al. (1971), Martin and Harrison (1972), Sarason (1971), and Smith and Keith (1971).
change phenomena. Another favored basis for examining change is to focus on the substantive nature of the development or innovation being considered. For example, is it a change in mathematics or social studies; is it a change in teaching methodology; or is it a change in the structure of the classroom? However, the most productive vantage point from which to examine the change phenomena, at least for the purpose of considering the decision-making process, is to focus on the strategies used and the orientations adopted in change attempts.

Two conceptualizations are particularly useful in considering the orientations and strategies used in curricular innovations. These are the Empirical-Rational, the Power-Coercive, and the Normative-Re-educative strategies discussed by Robert Chin and Kenneth Benne;¹ and the R&D approach, the Problem-Solving approach and the Social Interaction approach as proposed by Ronald Havelock.² These two conceptualizations are similar in certain aspects and different in others. Chin and Benne, for example, take more of an orientations approach to the change process, whereas Havelock's proposal deals more with the developmental and change processes.


The basic assumption underlying the **Empirical-Rational** orientation is that men are rational beings and will, therefore, follow their rational self-interest once this has been revealed to them. The general strategy of the approach is to search systematically for knowledge and then to diffuse this knowledge through general education. From the point of view of curriculum development, the strategy assumes that a curricular innovation is developed or proposed on the rational basis that it is superior to present practice; and that the potential user, who is rational, will adopt the innovation if the proposer can reveal the rationality of the innovation to him and can indicate how he can gain by adopting it.

The empirical-rational orientation has dominated our entire educational system in the past. As a result, most curriculum development at all levels has been strongly influenced by this orientation. It is the basic stance taken by academics and scholars and, therefore, dominates not only our curriculum development but also our teacher preparation programs.

The **Research and Development** strategy for curriculum development is based largely on the empirical-rational orientation. It assumes (1) a rational sequence in the development and application of an innovation; (2) a passive but rational consumer; (3) a well-developed and thought out developmental plan; and (4) a rather large-scale, high-cost initial development program. Because of its high cost it is generally assumed that most worthwhile curriculum development programs must be conducted at the regional, national, or international levels. The rational sequence of activities envisaged generally includes (1) basic research, (2) applied research, (3) product development, (4) product
testing, (5) diffusion, and (6) implementation. Rationality is also assumed in the diffusion and implementation processes. These processes generally included the distribution of printed documents, short courses, and demonstrations. The focus of these activities is on the substance of the innovation rather than on the innovative process. The R & D approach has become very popular in curriculum development circles over the past ten or fifteen years.

The Power-Coercive orientation assumes that change comes about through the application of power in some form - political, economic, or moral. Those with less power, it is assumed, will comply to the wishes of those who hold more power. Those wishing to implement a change will, therefore, assess their power base and the power base of those they wish to influence. They will then apply what power they have in order to get the innovation adopted. This orientation has been very influential in past curriculum change attempts and is probably just about as influential today. Most of our past curriculum development processes have included a combination of empirical-rational and power-coercive strategies.

It is generally assumed that the power-coercive orientation is a "top-down" strategy. Although this is generally true, it is also possible to use this orientation to develop a "bottom-up" strategy. 3

According to the Normative-Re-education orientation, rational self-interest is only one of several factors which influences man's actions. Supporters of this orientation take the position that man is an active being, who strives to satisfy his many and interrelated needs through transactional relationships with his environment. At the societal

level man is guided by the norms, relationships and expectations of the
groups and institutions to which he belongs. At the psychic level, man
is guided by his internalized meanings, habits and values. Therefore,
change in practice will occur only if those involved change their norma-
tive orientations to the old practices and become committed to the new
ones. Change in normative orientations involves changes in attitudes,
values, skills, and relationships. The position taken is that potential
users must be involved in working out the new program, especially in
identifying the goals of the program. Because the problems confronting
the user are not necessarily solved by more substantive or technical in-
formation, emphasis is placed on providing the user with problem-solving
skills and with bringing about the needed changes in attitudes, values, and
behaviors. The strategy generally involves a collaborative relationship
between the user and a process consultant.

During the last few years much lip service has been given to this
orientation, but as yet very little by way of concrete implementation
attempts have applied the strategy, especially at provincial and school
system levels.

The Problem-Solving approach to curriculum change can be based
to a large extent on this orientation. The approach assumes that curriculum
development and change is part of the problem-solving process. Its basic
assumption is that users' needs are of paramount importance. Emphasis is
placed on the need for diagnosis, the full utilization of internal resources,
the use of non-directive outside consultants, and the belief that self-
initiated and self-directed change has the best chance of success. The
process starts with a felt need which is developed into a specific problem,
or set of problems, through a systematic diagnosis. Following the articulation
of the problem, a search for possible solutions is initiated. Information and ideas are retrieved both from within and outside of the system. On the basis of this information a solution is fabricated, applied, and then evaluated to determine the extent to which it has satisfied the felt need. Outside consultants are used primarily as process consultants or to play linker roles between the user and sources of outside information.

The problem-solving strategy, to be truly effective, requires that the user be skilled in the problem-solving processes and that a variety of alternatives and useful information, from which the user can select, are available, both inside and outside of the system. Both the empirical-rational and the normative-re-educative orientations are appropriate to the problem-solving strategy.

The Social Interaction approach is a conceptualization of how innovations diffuse throughout a social system. It assumes that the network of social interactions involving an individual largely influences his adaptive behavior. It also assumes that the place an individual holds in this network (central, peripheral, or isolated) largely influences his rate of adoption. Informal contacts are held to be fairly important, as are the reference groups of an individual. The basic strategy in applying this orientation is for the individual wishing to spread an innovation to first sell it to the opinion leaders in a group. It is then assumed that natural diffusion will take place.

The normative-re-educative, the empirical-rational and the power-coercive orientations all assume the social-interaction strategy of diffusion, at least to some extent. It should be cautioned, however, that the research supporting this approach comes primarily from agriculture and
medicine - two vocations which are quite different from education, at least as far as the organizational setting in which they operate is concerned. Change in individuals within an organizational setting are influenced by factors quite different from those influencing change in individuals who are not affected by an organizational setting.

The User as Developer and Decision-Maker

The modal approach to curriculum development and change used in Canada over the past several years includes (1) the development of a new curriculum package or process by an external agency; (2) the adoption of this new curriculum by the higher level authorities (e.g., the provincial government); (3) dissemination of the new curriculum to the user, either through a power-coercive or an empirical-rational mode; and (4) the supposed adoption into use of the new curriculum. This approach assumes a passive user, but one who will change when asked to do so, or when he realizes that the change will serve his rational self-interest.

This modal approach has failed in most cases where the innovation required a change in the roles and behavior of users. As mentioned previously, there are many reports of new curriculum being adopted, but very few reports of successful implementation of new curriculum.

Therefore, it is proposed that a major revamping of the role of the user in curriculum development and decision-making is necessary if real and vital change is to occur. The user must be given a more central position in the scheme of things. The following conditions are necessary.
in order for this change to be successful:

(1) the user must play a key role in decision-making in such areas as organizational structure, curriculum materials, curricular processes, and instructional processes;

(2) superordinate decision-makers and curriculum developers must recognize and support this new role;

(3) users must be in support of the goals of the proposed innovation and must have an attitude receptive to change;

(4) users must have, or be given, the opportunities to learn problem-solving skills, and

(5) users must develop the skills and competencies necessary to play the new roles demanded by the curriculum innovations being proposed.

Ideally, curriculum decision-making should be neither centralized or de-centralized, but rather, users, superordinate decision makers, and developers should play different roles. For example, external developers should produce, for the "curriculum cafeteria", alternative ideas, materials, packages, processes, etc. The superordinate decision-makes should set the overall goals and establish the general rules and parameters in which curriculum decisions can be made by the users. The users should make curriculum choices within the board parameters set at higher levels. Users can either produce their own curriculum and materials, when this seems most appropriate, or else use the curriculum materials produced by external developers when these are most appropriate.

A New Approach

What is needed is a new model to guide our curriculum development and utilization functions, new structures to facilitate the effective
Fig. 1 - A Curriculum Development and Utilization Model
application of the model and, most important of all, users who have the knowledge and the skills to apply the model.

During the last decade or so a considerable body of theoretical and conceptual knowledge about the knowledge development and utilization functions has been acquired. However, we have not been as successful in using this knowledge to construct operational models to guide our activities in curriculum development and decision-making. The following is an attempt to construct an operational model, which is complementary to the "User as Developer" concept discussed above.

There are four broad components in the curriculum production and utilization system (see Figure 1). First, the user component, which consists of those subsystems which provide services to students (e.g., teachers, schools, school districts). Second, producers of basic curriculum knowledge – this is a very diffused subsystem, if in fact we can classify it as a subsystem at all. It consists of universities, research agencies, private research organizations, or any other source of new basic curriculum knowledge. Third, the curriculum development subsystem which translates basic knowledge into practical knowledge and materials which can be directly applied to the problems faced by user subsystems. At the present time, research and development agencies, private development groups (e.g., publishers), universities, etc., constitute this subsystem. However, some development work is also being done by operating systems (e.g., school systems). The fourth component of the model, and the one which was not found in many earlier models of curriculum development and utilization, is the linkage subsystem. This subsystem operates to bridge the gap between the curriculum producer and the potential user. Although this subsystem is not well developed at the present time, it is in a key position to control the operation of the
entire system.

The model, as presently conceived, focuses upon the problems faced by the various user systems (e.g., teachers, schools, school districts, etc.). Therefore, the problems approach discussed earlier could well guide the functioning at this level. However, without well developed and tested knowledge the problems approach breaks down, or at best is frustrated, especially at the "search" stage of the cycle. Therefore, agencies geared up to develop and test new curriculum materials and ideas are a necessary component of the model. These could be state-appointed agencies, private concerns, universities or components within operating systems. The major criteria to judge the success of this component is that it develops a sufficient volume of ideas, and products (based upon the needs of the user systems and the available theoretical and conceptual knowledge) to meet the needs of the user systems. Probably the research, development and diffusion approach discussed earlier would be most appropriate for this component of the overall model.

Basic and theoretical knowledge is necessary if practical knowledge is to be built on sound foundations. Therefore, the type of curriculum study and research conducted in universities and research institutions should be encouraged and supported. However, new knowledge, whether it be theoretical or practical, is of little value if the potential user does not know about it, or cannot acquire it, or does not know how to apply it. This factor has probably been the weakest link in the curriculum production and utilization chain during the past few years. Therefore, linkage structures must be established to facilitate these communication and consultative processes. The major functions of these linkage structures should be to
help articulate user needs and communicate them to the curriculum development structures; interpret and communicate, in practical terms, new curriculum materials and ideas to user systems; and assist user systems with their planning and problem solving processes. The social interaction and problem solving approaches should be useful in performing these linkage functions.

The types of structures and relationships necessary to perform all of the functions implied by the model will vary depending upon the situation and the antecedent conditions. The major test of any curriculum development and utilization system is not whether or not certain structures are present, but rather whether or not expert consultative assistance is made available to user systems at all stages of the problem solving process; whether or not user needs are considered as major input for determining curriculum production priorities and whether or not a range of relevant and useful information is readily available to user systems.

It has been argued, with some justification, that various versions of all components of the model have been tried in most Canadian provinces and found wanting. Although this argument is true it should not be concluded that the total model has been tried and found wanting. In fact, the model has not been tried in any complete sense in any Canadian province. Nor, have many of its components been given an honest and fair trial. However, even if they had, less than satisfactory results could be expected, because implementing one component of the model without consideration of the others is bound to lead to disappointing results.

It should also be emphasized that implementing the model will not in itself assure success in curriculum development and utilization. Several
other conditions must prevail. First, all those concerned, from government policy makers to classroom teachers, must understand the model, especially their role in it and how they should relate to others in the curriculum utilization system. Second, those involved must have the knowledge and skills to effectively perform the functions for which they are responsible. Third, sufficient time, resources, and flexibility must be provided to ensure a fair test of the model. Very few of these conditions have been present in past attempts to develop more effective curriculum development and utilization systems. The standard practice has been to implement one small component; then provide insufficient time, resources and personnel for it to succeed. In addition, the expectations held for the new system were generally very unrealistic.

Admittedly the implementation of a curriculum development and utilization model, in such a manner that some degree of success can be expected, will be a slow and laborious process. However, if we are to successfully cope with the demands for change which are constantly being placed upon us by our supersystems and by our environment, we have no alternative but to try.

Implementing the Model

Our rational orientation might lead us to conclude that government policy makers should be made aware of the knowledge development and utilization problems faced by the educational system; then convinced to establish the necessary structures and functions (e.g., research and development organizations, linkage agencies, etc.); provide the necessary resources; employ, or prepare, the necessary skilled personnel; and do whatever else is necessary to implement the total system at one time. This may be an ideal solution, but its chances of success are very minimal; at least this
has been the lesson learned from past attempts. A more realistic approach is for educators, at whichever level they may be working (schools, school districts, universities, etc.), to use whatever means are open to them to create the necessary structures and develop the necessary skills to operate that part of the model over which they have jurisdiction. This is especially important for user systems because they are the key to the entire process. Educators must also struggle to develop linkages among all components of a curriculum development and utilization system because, until this is done, satisfactory results cannot be expected.

As the need and opportunities arise, policy-makers can be pressured to provide the structures and the resources necessary to facilitate the system's operation. Pressure resulting from a frustrated need is more likely to produce results than pressure supported only by some theoretical argument of need. It cannot be pointed out too strongly, however, that although the model may be implemented starting from the user and then spreading throughout the system to the provincial policy-makers, that real success cannot be expected until the entire model is implemented.

In my view, the first stage in implementing the model is for users to develop the knowledge and skills necessary to effectively work through the problem-solving process as it relates to the new and changing demands being placed upon them. The development of appropriate knowledge and skill, however, is not the sole responsibility of the individual user unit, but rather the joint responsibility of the profession, the school system, and the appropriate faculties and departments within our universities. The acceptance of this joint responsibility will in itself assist in forging the necessary linkage structures. The first step is to identify the specific functions required for the problem-solving process. The next step is to
determine what knowledge and skills are required for the effective performance of these functions. The third step is to develop tools, devices and training programs so that the appropriate knowledge and skills can be effectively applied. The matrix presented in Figure 2 identifies the functions and skills needed by user systems if they are to effectively plan for and implement curriculum innovations.

The functions as listed on the horizontal axis of the functions and skills matrix are an adaptation of those conceptualized by Havelock. These are: diagnosing the situation, acquiring resources, choosing the solution, implementing the solution, and stabilizing the innovation.

The vertical axis of the functions and skills matrix contains a list of skills necessary to perform the various functions listed on the horizontal axis. These skills are based on the conceptual, human and technical skills categories developed by Katz. An "x" in one of the cells created by the functions and skills axis in the matrix indicates that a particular skill is necessary for a particular function. A "xx" indicates a major emphasis. Although this particular set of skills is not as well developed, nor as adequately supported in the literature, as is the set of functions described earlier, it does represent a start in coming to grips with a much neglected aspect of the change process. User systems can have all the conceptual and theoretical knowledge necessary for a particular function, however, unless they have the necessary tools and the skills to use these tools, the function cannot be performed.

<table>
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<tr>
<th>SKILLS</th>
<th>FUNCTIONS</th>
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<tr>
<td></td>
<td>DIAGNOSIS</td>
</tr>
<tr>
<td>APPLICATION OF THEORETICAL MODELS</td>
<td>X</td>
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<tr>
<td>SKILLS OF ANALYSIS</td>
<td>XX</td>
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<tr>
<td>INTERPRETATION SKILLS</td>
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<td>SYNTHESIZING SKILLS</td>
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<td>SENSITIVITY SKILLS</td>
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<td>LISTENING SKILLS</td>
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<td>INTERPERSONAL SKILLS OF RELATING</td>
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<td>SKILLS OF INNERPERSONAL LEARNING</td>
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<tr>
<td>DATA GATHERING SKILLS</td>
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<td>COMMUNICATING SKILLS</td>
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<td>SKILLS OF APPLYING DECISION CRITERIA</td>
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Fig. 2 - Functions and Skills Required in Curriculum Change
The third step in providing users with the necessary knowledge and skills is to develop training programs based upon the functions and skills just described. These programs are still in an embryonic form and need much more attention by the teaching profession, the universities and the operating systems. In the meantime the body of knowledge that presently exists in support of the functions and skills elaborated upon earlier, should be of some assistance to educators as they devise strategies and tactics for solving the problems created by the ever-increasing pressures for curriculum change.
FIGURE III
The Problem-Solver Strategic Orientation

1. Need felt
2. Problem diagnosis
3. Search
4. Retrieval
5. Fabrication of solution
6. Application

Outside Process
Consultant
Change Agent

outside --- resources --- Inside

USER
FIGURE IV
The Social Interaction Perspective

KEY:
○ Individuals in the social system
→ Flow of new knowledge
□ Formal organization structures
△ Informal structures
FIGURE V

The Research, Development, and Diffusion Perspective

In the diagram, the sequence is as follows:
- Basic Research
- Applied Research
- Development and Testing of Prototypes
- Mass Production and Packaging
- Planned Mass Dissemination Activities
- The User
CHAPTER VI

SPECIAL PRESENTATIONS
INTRODUCTION

In a study of curriculum one may attend to objectives to be reached, content and skills to be achieved, methods of study used, finances to make it all possible, the facilities required for offering the curriculum, the relevance of the program to individual and society, or even the means for determining how well the curriculum has achieved its purpose. In brief, curriculum may be looked at in terms of people or things.

Because we are strongly influenced by the scientific method on this continent, we tend to emphasize things, which are more readily quantified and manipulated. Unfortunately, whether curriculum is changing or changeless is more dependent upon actual changes in people rather than the quantification and manipulation of things. It should not be assumed however that the task of changing individuals is easy; in fact some are suggesting it is downright impossible. Neither should it be assumed that this apparent inability to change rests exclusively with the individual, as there are external influences which may be supportive or restrictive. Therefore it is the purpose of this paper to look at the influences which are determiners of whether curriculum changes or is changeless.
Before turning to a brief treatment of some of those influences, I should like to discuss the reality of changing people's behaviour as seen through the eyes of Amitai Etzioni, who after having spent many years in social research, makes some startling observations in the June 3, 1973 issue of Saturday Review.

There are two positions which may be taken relative to bringing about change in human beings. The first of these would be that you actually bring about attitudinal changes which are in turn reflected in changes of habits and behaviors. The second would propose that the actual attitudinal and motivational changes in people themselves are impossible and the only way to change behavior is to alter the environment in which they live.

What is the evidence regarding these two positions? Beginning some ten years ago a concerted campaign costing 27 million dollars was launched to change the smoking habits of a population. Despite that concerted effort, the consumption of eighteen year olds dropped after three years of activity from 11.73 to 10.94 cigarettes per day. In rehabilitation of inmates from gaols, generally 50% of them suffer successive incarceration. Reformatories specifically built and operated for altering the habits and behaviors of young people have almost a 60% return of their clientele. In a recent year
in the United States, approximately 60 thousand people were killed in traffic accidents despite driver education programs, calculated at having a per life value of 88 thousand dollars. Yet, a seat belt which costs $87 to install proves to be a thousand times more effective.

With this kind of evidence facing us, assessment of the adequacy of means or time taken should be made. First, when one reviews the various media through which change of human beings has been attempted, items such as advertising, information campaigns, educational programs, counselling and rehabilitation appear. Second, the length of time in which these means operated have been varied. It would appear that certain skills such as speed reading or square dancing can be taught, albeit with considerable effort, in abbreviated periods of time. However, regardless of the length of time, it appears that changing ingrown habits and value positions meets with much less success.

On the other hand, what is the evidence regarding the results of having made environmental changes? In Britain for instance, the breath analyzer has been found effective in removing drunken drivers from highways. Antabuse, although suffering abuse itself, has brought desirable results in assisting alcoholics. Methadone is widely used now as counter-environment for heroin. Sharp declines in the number of individuals in mental institutions might be traced to the introduction of the use of sedatives. The success of seat belts and other safety features has been documented.
From this one might conclude that more productive curriculum could be achieved by concentrating upon controlling the circumstances under which the curriculum is being offered than upon the human factor. I believe that an alternative position may be offered. The difficulty in changing individuals may require consideration of the:

a) means to be used in bringing about the desired changes, by providing opportunities to practice the new behaviors rather than just being told about them.

b) time we are prepared to allow so that change has had an opportunity to occur. The time line in education was fifty years, now we tend to think of equating change with the cooking of minute rice or instant potatoes.

c) focus upon primary rather than secondary variables. What is the reward system of the person who is being expected to change? What are the discrepancies between that reward system and the one which the curriculum change requires? In other words the focus should be upon the human variables rather than the curriculum change itself.

d) other influences which significantly affect the possibility for change.
INFLUENCES FOR CHANGE OR CHANGELESSNESS

As the second thrust of this paper, the first having been the acknowledgment of the difficulty of changing people, a number of variables related to considerations itemized above are briefly discussed. Some of these variables are supportive of change, while others are restrictive. In some cases they may be both supportive and restrictive.

Influence of General Values

Richard L. Miller in *Perspective on Educational Change* identifies four general values which have influenced curriculum. Of the first, democracy, he writes:

Democracy is built upon the belief that society should serve to free the intelligence and protect the integrity of the individuals who compose it. Democracy is both a product and a process. As a process it provides, indeed expects, vigorous competition in ideas and programs. Its trial and error procedure, learning by doing, places a premium upon field experimentation.

A second value, equality, is perhaps another fundamental base. Such a value permits many voices to be heard, with conflicting points of view, permitting positions which would be denied in closed systems. Therefore change may be both fostered and stymied.
A third value has been material progress, or "the best is yet to come." The idea has developed that human nature is improving and that society as a whole is moving toward a better order of life. This has been prompted in part by an emphasis upon science and technology. Our theories change, procedures are modified, and products improve as man reaches further into the future. Nevertheless we may have developed a blind faith in the achievements of science and technology resulting in a level of depravity of our social development.

Fourthly, education is valued. The most famous quote in this regard was that made by Thomas Jefferson -

"If a nation expects to be ignorant and free, in a state of civilization, it expects what never was and never will be".

Therefore, curriculum reflects changes in material needs and desires. As a consequence, courses of study have become tied even more closely to society. Again an unquestioning faith, coupled with the scientific and technological progress, may have prompted imbalances in curriculum changes.

Specific Factors Supporting Curricular Change

Miller goes on to identify certain factors which have brought on curricular change. The hostility among nations has brought about strong interest and infusion of money into the development of programs in science, mathematics and second languages. In Canada about ten years ago we had a
comparable infusion of money for the introduction of vocational education. Presently we are engrossed in the needs and desires of minority groups, and early childhood.

The growth of knowledge is another factor which has brought about change, doubling and redoubling in ever shorter periods of time. There was a time when Bacon could say, "I know all that is worth knowing", but today it is not only difficult, it is downright impossible. The organizing of this knowledge into major ideas and skills has resulted. This phenomenon is raising questions of amount, nature and location of curricular offerings.

Pressures from outside professional education have also had their effect. Such slogans for Education Week as, "Education is Everybody's Business", have not been idle reflectors of what society often expresses. Soaring taxes have brought expenditures for education under sharp review. Community pressures are of many shades along the continuum of keeping things as they are or of bringing about significant changes in what is to be taught and how it is to be taught. More often the schools have been in the forefront but a critical society has often acted as a catalyst. (e.g. current trend in Mathematics, alcohol, venereal disease; controversial issues, conversion to the metric system, driver education).

Finally, the advances in the behavioral sciences, particularly in anthropology, sociology, and psychology, have brought about an understanding of the process of educational change. These advances have lead to team
teaching, continuous progress, grouping patterns, functional buildings (open areas), creativity, educational television, and teaching machines. Note again however that although the stimulus has been the sciences which focus on human behavior, the response has been primarily in organizational patterns, facilities and equipment, or things.

**Factors Inhibiting Change**

Traditionalism may be keeping us doing the same thing when it has long outgrown its usefulness. New ideas do not seem to fit in well with the old. We sometimes justify traditionalism by referring to it as judgement of wise experience. It must be acknowledged that there must be a balance between stability and change. Perhaps the amount and kind of curriculum change we have had in this province in recent years now require a period in which there can be understanding and application before further changes are introduced. We might also have to plead guilty to having made some changes for the sake of change alone.

Laziness is another factor which may be too common an inhibitor. Trying something new takes study, planning, and hard work, not the least of which may be to withstand the criticism of those around you. Laziness may also be the half-brother of indifference, in which there is little professional zeal or dedication. Alfred North Whithead said it well when he wrote:
Is it likely that a tired, bored workman, however skillful his hands, will produce a large output of first-class work, and be adept at evading inspection; he will be slow in adapting himself to new methods; he will be a focus of discontent, full of unpractical revolutionary ideas, controlled by no sympathetic apprehension of the real working trade conditions.

This laziness comes out in many different rationalizations, and these are well selected by Miller:

- We've tried that before
- We'll try it later
- The board will not go along
- It costs too much money
- We haven't the time
- It is too difficult an undertaking
- We need more research

The trick is separating reasons from excuses.

Fear and insecurity constitute the third general factor. Fear of the unknown, possibly including failure, reduces enthusiasm for change. Loss of prestige or power are also deterrents, although experience and prestige are often instrumental in bringing about change. There has to be a balance between the security one needs to withstand failure on one hand and on the other hand dissatisfaction with the status quo in order to want to change. Here is where the means to bring about change must focus upon the reward system in relation to the innovation.

**Educational Factors Inhibiting Change**

Getting in a rut is one possible view. You have probably heard the expression that 21 years of experience may be nothing more than one year's experience repeated 20 times. Experience is dangerous when it becomes a substitute for additional study, and when the lessons it has
taught are the only factors considered when present and future issues are being weighed. "My students have always turned out to be good citizens, and there is no reason to think that curriculum changes are really needed or will make much difference," may reflect an evaluation based on a limited criteria.

Reticence on the part of administration can hold back change. Being neutral about change may be interpreted as being against an idea. It is so easy to become so taken up with routine that no time is given to planning.

Educational bureaucracy may or may not assist in bringing about change. Whether it assists or hinders may be determined by whether or not the bureaucracy can provide for research and development, for in-service, for time off and many provisions which can bring about curricular change.

Insufficient finances is a real limitation. However the extent of that limitation is disputable when recent research indicates that the amount of money spent per child does not predict the rate at which innovations are being adopted. There is a much stronger, predictable relationship between the degree of commitment and the amount of experimentation.
Community indifference and recistance may be real or imagined. Where it is real it is necessary to avoid active opposition to change, where it is imagined one is led to question the educational leadership being provided.

Inadequate knowledge about the process of change is often reflected in attempting new programs. In our planning we have often concentrated on only one variable and forgotten that the variable is one among many. For example we have emphasized a method and failed to organize the subject matter in a way which matched the method. Witness what many of us did to the enterprise. We had plenty of piles of sawdust but very few houses. Another mistake we have made is to suggest that a good package will sell itself. We are led to believe that the PCCS Physics package is an excellent one. Strangely, figures suggest that fewer and fewer students are taking it. We should remember that the introduction of a new curriculum cannot be considered final; there must be opportunity for altering and adapting to local conditions.

A final inhibitor is inadequate teacher education. There may be some excellent curricula available but they become ineffective when for instance, how to work in groups is taught by lecture. Once more we get caught up in the fact that our actions speak so loudly that students can't hear a word we're saying.
In summary this paper has attempted to highlight the centrality of human behavior as the most significant variable in change. There has been documentation of the serious difficulty in changing human behavior. The paper concluded with a categorization of human and other variables which may support or restrict change. We do not consider the task of change as insurmountable, or we would not have joined with other interested groups to give the matter concentrated attention. We look forward to significant suggestions, recommendations and resolutions coming from the deliberations of this conference.
A TALK WITH THE MINISTER

Honourable Louis Hyndman

Thank you, Mr. Chairman. Now, I don't want to speak for too long because I understand that over the past couple of days you have honed to a fine edge many significant questions, and I'd like to do my best to try to answer them for you. Perhaps, though, I could just offer a few comments with regard to curricular matters, realizing that these are probably only the verbal meanderings of a curricular amateur.

Now, who should carry out curricular change? I suppose, quite apart from the way that this has been carried on in the past, all of you have been aware of a new interest by the public in having an increased voice in the matter of curricular change. Not all people want this voice. Many people get very upset when there is any change. Some of them take the approach, "The curriculum that I had when I was in elementary school was just fine; I've done very well, so why should there be any change at all?" Then, of course, you'll hear people saying that, "There must be something terribly wrong with that particular program, and why isn't it changed?" So there is a dichotomy there. I think a large part of it stems from the fact that many people don't understand why a curriculum is developed and how it is developed. Possibly all of us involved in curriculum have an obligation to help parents understand the curriculum better.

Certainly, the way in which change takes place, in my view, should be evolutionary rather than revolutionary. I think we must always be aware of the fact that there has to be a climate that makes that change possible. It is all very fine to decide on a particular change (and I think the introduction of metric thinking in Alberta is
going to particularly underline this), but unless and until the climate of public attitude is such that parents understand what the purpose of the change is, and will accept it, it has very little or limited chance of success.

The question of who makes what changes is one which I imagine you have discussed. Most people will concede that in respect to core subjects, however those are defined, there is a basic obligation on the part of government to provide over-all guidelines; but within those guidelines, there should be a greater degree of decentralization. I really wonder whether the trustees might consider using to a larger extent those pertinent sections of the School Act which allow them to initiate curricular changes or indeed to devise new curricula of one sort or another.

Let me summarize the two related points I have been making. First, curriculum change must occur within a climate which invites the support and participation of teachers and the public. Second, there is a need to proceed at a controlled pace. The importance of the public climate can be illustrated if we look at the situation in California where, as I understand it, a lay committee makes very rapid and jolting changes in curriculum from year to year, or even from month to month. This would, I think, be a very dangerous and unwise course of action for Alberta to follow. But if changes are not made at a deliberate pace bearing in mind what the public thinks, that kind of problem and those kinds of pressures will occur in this province.

Moving on, maybe I could just outline some of the areas which perhaps you'll wish to explore with your questions. The cutting edge of curricular change is illustrated by the Early Childhood Service program.
I understand you went into this in some detail. The E. C. S. approach is unique in the sense that it involves people beyond what we have considered in the past to be the educational community. It was set up that way deliberately and it was set up also to have a flavor of diversity. The E. C. S. plan was deliberately left fuzzy in a number of areas. We could have introduced a clearly defined program simply by adopting the curriculum from another province, from Ontario, from one of the northwestern states or from Britain; but E. C. S. was deliberately left a little indefinite with no fixed programs that would preclude opportunities for creative choices by Albertans.

Another area you may wish to explore is the question of the involvement of other departments of government in "education". Certainly the Department of Culture, Youth & Recreation has been involved in a number of areas which some people might protectively say are "educational". Some argue that this should not be the case. Why isn't the Department of Education doing all of these things? Should not the Department of Education, and we educators, be solely responsible without any other person getting involved? I'll be happy to answer questions on that subject. You may wish to look at the Department of Agriculture which has been involved in education in the rural areas for many years. And there are other examples.

A final subject you may wish to get into concerns the degree of decentralization of curricular decision-making and the operational forms which it could take, or should take. Are there alternatives? What should be the role or future role of the department, of schools, of the teacher in the classroom, of students, of parents?
I think, Doug, that I’ve introduced enough topics to arouse a few questions. I’ll do my best to answer them. Thank you very much for your attention and I wish I could have been here with you for the last three days.

Chairman: Thank you very much, Mr. Minister. Indeed you have stimulated some thought processes. Who would like to lead off with that first question?

Voice: Mr. Minister, I noticed in the Legislature yesterday you announced an increase of 11.4% for E. C. S. programs. The reason given was that school boards would probably no longer apply for E. C. S. grants because their share was costing too much money. Is there any way in which we might make it easier for school boards to pay for E. C. S. programs, especially those in rural areas?

Minister: I don’t believe I announced an 11.4% increase. I think this was a recommendation of the coordinating committee of Early Childhood Services which is comprised of all the representative groups. The recommendation may or may not be followed. I did read of the statement out of one of the Calgary School Boards regarding the costs and the fact that they had to pay $60,000. It is my opinion, that if this program is going to be successful, there is going to have to be a local commitment of money. I don’t buy the argument of the Calgary School Board that they may not run the program if the province won’t pay all of it. In my view the local people in Calgary should demonstrate their support, or otherwise, of the program, and, if necessary, the Calgary School Board should, through supplementary requisition, tax people to pay for part of the
program. In terms of the rural areas, the E. C. S. program was devised particularly so that it would be and could be operated in rural areas. We have, I know, some 367 E. C. S. programs going in rural centres. A year or two ago people would have thought there never would have been that kind of interest, but as we get more experience in terms of what the real costs are, we may see situations in large metropolitan areas, small cities, small towns, and remote school areas where there would have to be differential grants. This is certainly a possibility down the line.

Chairman: A rather shy lady asked me if I would ask a question on her behalf. It has to do with Early Childhood so I think it will make a nice transition if I interject it at this point. The essence of her question was this: By the way that the government has introduced Early Childhood Education (and particularly with the kind of parental involvement that they have through the E. C. S. program) some people hope, while others fear, that this degree of community involvement will become the model for the 1–12 operation, too. The lady was wondering whether you foresee this kind of extension of the Early Childhood model. I hope I have represented that question correctly.

Minister: It's an excellent question, Doug. I wouldn't see any prescribed regulations or laws which would materially circumscribe the operation of a school board in this area, however, I think the board would be wise to assess whether some value hasn't been gained by the involvement of thoughtful and informed parents. I agree that it's very difficult for educators if the parents who do try to get involved are irresponsible and irresponsibly critical. Those kinds of parents
can be really dangerous assistants, but the majority are thoughtful and appear to be objective. I think it's something that shouldn't be approached with fear. Is it a dimension which the school board can encourage? Maybe there have to be different degrees of involvement, ranging from 1% to a higher amount in each school. It's probably a neighborhood kind of situation. I think that because parents are now involved in the E. C. S. program they are not suddenly going to turn off the light when their youngster gets into Grade One and say, "Oh well, I'll just stay at home now and I won't become involved." I think parents will want to continue to be involved and that their involvement should be looked at as something that can be an advantage rather than something to fear. At the end of the war, I think there was a feeling by many parents that they wanted to rebuild a country; education was to be left to the teachers and the school board. Now, I think, that is changed. A parent, of course, is every child's first teacher. All of us realize that education in its broadest sense must be complemented by and buttressed by an interested parent who supplements rather than undoes what the school has done. So I don't think it's something to fear. It's certainly not something we'll prescribe, but I think wise school trustees will look to see if they can improve the quality of education for the youngster by some degree of parental involvement.

Voice: Mr. Minister, what are your views on the involvement of other government departments in what has been traditionally conceived as being the educational areas?

Minister: I think that we can no longer afford the luxury of being possessive about certain things being "education" and not allowing other
departments, or other people, or agencies to get involved. Certainly, I think we have to provide education for youngsters. The public, to some degree, has been making that job much more difficult over the last few decades by tending to dump many social responsibilities of the family and the church into the school system. I don't view with fear the fact that the Department of Culture, Youth & Recreation, or in some cases, Health and Social Development, are prepared to offer assistance in some of these peripheral and auxiliary areas. Their involvement frees more money for grants to school boards! I think in many cases the services that are being provided by auxiliary departments are things that are low on school board priorities. The other thing is that we can tap the expertise which exists in other departments. As curriculum specialists, we are sensitive to new demands in the areas of consumer education both for children and adults. Similarly, environmental and ecological education is a concern of the total population and not just school children. By cooperating with other departments that have expertise in these areas, we can reduce the amount of compartmentalization. This will be better for education, and in the final analysis better for young people. That's what the whole thing is about; that's what we're here for.

Voice: If the curricular development and decision-making is to be decentralized, will the Department of Education fund it?

Minister: I think the question over here is, "If the curriculum decision development is going to be decentralized, will the Department of Education fund it?" Yes, I would like to think the Department could,
maybe to a larger degree than at present, in effect say, "We trust local people to make more curricular decisions." In the final analysis, I am responsible to the legislature for everything that goes on in curricular development and so I suppose, there would have to be some broad parameters set. The present School Act provides that curricula can be devised by a local area and then sent in for approval. Local submissions are very rarely rejected, but may be modified to some extent before going back out to the local area. The other thing which I think we'd have to watch would arise if the tax-paying public would say, "Well, if you have 141 different jurisdictions carrying 141 kinds of math courses in Grade 5, the old math and the new math and the new new math, etc., that is surely an unfortunate duplication of public expenditure that you Mr. Minister, since you are spending our money, should stop". So, perhaps we would have to look at regional development. I would think, for example, that larger cities have the resources and professional staff to do very substantial work in developing new or changed curricula. In the rural centres it may be possible to do this, not with just one small school division, but maybe four or five banding together. Then I would hope that regionally developed materials could be shared with the rest of the province so that we don't have a hundred different models but maybe four or five shared around the province.

Voice: Mr. Chairman and Mr. Minister, you mentioned that the E. C. S. program was deliberately left fuzzy, and I think that this fuzziness is creating a problem perhaps in remote areas. I'm wondering if the Government feels that they ought to initiate the Early Childhood program in such areas, because I'm thinking that the leadership may not be there and the child's rights may not be attended to.
Minister: I think that's an excellent question. I think, that in areas where it can be clearly demonstrated that youngsters should be getting some kind of enriched dimension of Early Childhood experience, and that nothing has happened locally, the Department, through its Regional Offices, or otherwise, should move in and try to initiate something on its own. We will be moving in this direction to a greater and greater extent as every month goes by. I think we've, in effect, allowed enough time to go by. There may be valid circumstances where people in an area don't feel that they would like to initiate an application, because of geography or because of a particularly difficult blend of students. So we'd go in and try to initiate programs where they don't exist now. We'll be moving down that road with greater intensification as time goes by.

Voice: Sometimes, I think, we act in haste and then we have to do a lot of patchwork afterwards. Can we learn from the lessons of the past and not get on to too many bandwagons?

Minister: The question has suggested that a measured pace is desirable. Your point is well taken. For example, removal of the Departmental examinations represented a handing of authority to boards and, more importantly, to teachers. By removing the exams, we were saying, in effect, "Do something to prepare your own curriculum." Then, on top of this, for example, I think change was introduced perhaps a wee bit too fast in the social studies. I think perhaps none of us realized and none of us could have realized the problems that the teachers faced in suddenly being given the opportunity to devise their own curricula. But,
that, I think, was a valuable lesson to learn. Certainly, I think, the rate of change and the way it's done depends on what you are changing and who is causing the change. For example, the change to metric is something which in a way is being forced on us from a decision by the world and by the Federal Government. In some cases, though, changes have to be done very, very quickly because, if you wait too long and stretch it out over too big a length of time, inevitably you're going to have so many people bringing up counter-arguments that it will never succeed, or it will be implemented in such a diluted way that it would be barely visible. But, in most cases, I agree with your suggestion that we need a measured pace with appropriate in-service training and appropriate understanding and awareness of parents and outside community.

Voice: There is the other question regarding the publishers and resource materials. Boards don't know sometimes how much a new program is going to cost. There are many unknown variables in there. That's why I like your statement "measured pace".

Minister: Yes, we may have to get to the state where program budgeting can show us the total cost of a new or modified curriculum change. We have to remember that making changes in the curriculum is one thing, but it has ripples that spread to all other aspects of the educational enterprise. I don't think that's an argument though to not change or to resist change.

Voice: Mr. Minister, my question concerns the Educational Opportunities Fund. Many of the schools are becoming concerned that all this money that's being injected into program development will run out and many good programs
are going to be left hanging in the air. As time is going on, this concerns me more and more. I wonder how you view that situation.

Minister: I think that’s a fair concern and it’s best that I reassure everybody that if the program can be evaluated as being good, then the money will continue to be made available, possibly or probably within general school program funding. We won’t simply be funding this for three years to the total of 12 million dollars and then dropping it, leaving an expectation or a built-in demand which would put boards and teachers and everyone in an impossible position. Not all programs will continue to be funded, of course. I think in fairness there should be an evaluation of those that are successful, with modification of those that aren’t quite working properly. I concede that the Department took away from local control by providing E. O. F. monies in the way that we did; however, I think we have a responsibility of some degree of leadership and to nudge in certain directions. Let me repeat, though, E. O. F. will soon move into a general funding situation.

Voice: Mr. Minister, I’m referring to one of the ripples to which you made reference a few questions back. Over and over again in the last several days it becomes so very clear that one of the important elements in curriculum change is the continuing education of teachers and others. This, of course, is the university’s responsibility to specify, and therefore of particular interest to another ministry. Could you indicate to us, though, how the Department of Education, which after all is the department concerned with the people who teach children in elementary and secondary schools, intends to introduce
its interest with regards to the entire field of preparation of teachers? How will coordination develop between the two ministries so that the one department which is responsible for funding university education (including teacher education) will be sensitive to the expectations set by the other departments in relation to programs for your children and young adults?

Minister: I think one of the main difficulties in this area occurred when teacher education moved from the Normal School to the university. I realize that the feeling of independence of university people from any kind of government interference is a strong and justifiable one. At the same time, we have this unique relationship whereby there is a contract between the Government of Alberta and the Faculties of Education in the universities to carry out teacher education. I think that there should be a recognition when there are major changes or major adjustments in the curriculum that there is going to be required some extra work to be done at the university level. Now, certainly, I would not agree that any change requires extra funding, because if one is a professional, one is obligated to keep pace with, at one's own time and expense, a certain amount of change with no assistance from anybody. That is a professional's job. But I agree that if there is something of a major change whereby a faculty can't adjust quickly, then some recognition by the Department of Education or the Government has to be put forward. Now this requires a cooperation between the two departments and recognition of this unique relationship with the universities; and though universities do not want earmarked funds, I think that we can move ahead to make changes in this area that will recognize the costs of that extra ripple.
Chairman: Our final question.

Voice: Yes, Mr. Minister. Is the Department now willing to go beyond simply selecting from existing materials into the actual production of materials where the publishing companies do not have the profits? What I'm saying is, "Will there be funds forthcoming for the actual production of materials?"

Minister: I think you've hit upon one of the real problems that are facing a lot of teachers, especially today, in that there are one or two examples of the curricular materials that are helpful and yet no publisher will produce them. I don't think it's that much of a problem in terms of text books, although it certainly is in terms of other materials. Certainly, there is a degree of money available now in the Department of Education budget as there is also in the budget of the Educational Communications Corporation, but if it appears that the private companies can't or won't do the job, then I'd be prepared to look at the suggestion that there be some degree of extra money for printing or duplicating materials that are agreed upon as being of some value. I don't know whether the facilities of the Queen's Printer should be used or if there are other printing facilities available. It wouldn't have to be done in ink colors and this kind of thing. This may be the only way to satisfy the need for Canadian content, but one of our problems is finding things we already have or finding out where they are. That's perhaps more important than actually producing new materials. I think we have a great many that we're hiding or just can't get out to you.
Chairman: Thank you Mr. Minister, I have one final question which I'm afraid I must insist you answer with either "yes" or "no". Do you feel that this conference is likely to have been worthwhile?

Minister: From what I can gather it has been extremely worthwhile. If it isn't it won't be funded! But seriously, I think you'll see positive results in terms of Government measures from what's gone on here.

Chairman: Thank you Mr. Minister, I'm happy you mentioned funding, because the sponsoring agencies are drastically over our budget for this conference! Mr. Minister, we very much appreciate your taking the time to come and talk with us today. You've come over very slippery roads that you're going to have to trek over again to get back to the legislature. We also appreciate the kind of sincerity with which you addressed us initially and with which you responded to the questions. Your presentation leaves us with a good deal of optimism regarding the kinds of actions that might be taken on the recommendations that we're going to produce this afternoon, this evening and tomorrow. So, Mr. Minister, on behalf of those assembled, a sincere expression of thanks for your attendance and for your contribution.
Thank you very much for the introduction. I do appreciate the invitation to participate in this way in the conference.

Last week I was in Tokyo involved in a conference on somewhat the same theme. The Japanese conference was delightfully organized, as I understand this one has been. We had every moment structured for us, and of course we had the intercultural exchange. The conference had as working languages English and Japanese, and that provided some communication difficulties which I hope I won't face today.

Out of last week's experience, and my rather limited experience in this conference, I would like to ask you the rather basic questions, "Why should we be engaged in curriculum development?" "What is our broad purpose?"

I received from the Prime Minister of Japan a copy of a book that he had written entitled, *Building a New Japan*. I would like to read, first of all, from the cover:

"This is a provocative million seller by Japan's young Prime Minister. A bold, innovative blueprint for re-modelling the over-crowded, polluted, growth-oriented Japan into a more livable land. This is a definitive guide to find out what Japan seeks and how it is about to transform itself."

Japan is at the crossroads, because unless it does transform itself into a more democratic, open society, it is going to become a completely planned, controlled society. When you look at the affluence of the country, you see one side. On the other hand you see inflation,
pollution, urban over-crowding, rural de-population and stagnation, education disorders and the generation gap. Do these sound familiar to you? Yet, you may walk the streets of Tokyo in safety. It has the lowest crime rate of any major city in the world. Its streets are clean; no paper, no rubble, no dirt. Yet, even with these paradoxes, the Prime Minister has a plan by which he hopes to transform Japan.

Now, why are we interested in curriculum change? Do we have any over-all plan to which it relates? Does our society have an over-all plan, an over-all goal? Somewhere in my reading, recently, I came across a couple of quotations that I would like to share with you. I think in this sense I am typing in with what I understood Gene Torgunrud’s paper said last Monday night. The quotations are these:

"Significance of the home, the school, and any other institution depends on the quality of human relations it fosters."

"Nothing is so dangerous in the entire world as an informed intelligence, if it is not humane."

So, before we set out to change the curriculum, let me remind you that change is painful. It is threatening to the people involved; it is also institutionally disruptive. On the other hand, change can be stimulating, challenging, and elevating of the quality of human life. It may be both at the same time, or at subsequent times.

Let me illustrate the importance of the human dimension. When I was a small boy in Nova Scotia on one cold winter’s day my father invited me to go on a trip to the local grocery store. We lived by a lake and walked across it at a reasonable pace. We completed our errands and then we started home. The day had become excessively cold and my father was in a great hurry. He expected me to keep up with him. He kept getting
farther and farther ahead on the lake, and I kept trying harder and
garde to keep up. I became cold and disgruntled. I think at
that moment I probably hated my father. Then I arrived home to
discover that he had a sick animal in the barn that he had to attend to.
I found supper was ready and the house was warm; I was surrounded by
security.

When my daughter, who is now fourteen, was four years old, we
returned to that farm and that lake where my father still operated
the farm. He took my daughter, my wife, and me in his motor-boat around
the lake, pointing out to my daughter the beauties of that lake, and
they were numerous. He spent the entire afternoon with her. That is
the only memory she has of her grandfather. Last September we returned
to Nova Scotia, my daughter and I, because I was attending the Council
of Ministers of Education in Prince Edward Island. We went back to
that farm to find the buildings in disrepair, the fields grown up in
woods. My daughter made a very perceptive comment. She said, "Without
people it's only a lake."

Now as an adult living in Alberta I know something about
change. I took over the superintendency of a school system that was in
the midst of centralizing its high schools, and I know the pain that
that caused, and the difficulties. In 1967/68 I was chairman of the
high school English committee when the new English 30 curriculum came
into effect, and you will remember, some of you, that there was a
story in one of the texts called Defender of the Faith. It became
a matter of great controversy. At one time Dr. Hrabi and I sat in a
room in Calgary arguing for many hours over whether it was or was not
necessary for me to resign over that issue, because I was convinced
that if the Minister of Education refused to support the work of that committee my professional work in this province was completed. But the Minister supported the work of the committee.

In 1969 I was given the responsibility for establishing regional offices of education in the province and transferring provincially appointed superintendents either to the regional office or to local appointments. This meant the disruption of home life, change of people's assignments, and a new structure. I want to remind you that I carry the scars of these things and so do other people. So when we contemplate curriculum change, we must recognize the disruptive effects of change as well as its positive side.

Dr. Hrabi mentioned last night that one of the things that has been under-emphasized in this conference, in his opinion, was international education. The Japanese are very concerned about their role in the international community. They believe they have a contribution to make. Their thinking is not insular. I don't believe that any group of people can be insular in the world in which we live. Dr. Hrabi is the Canadian representative to the O. E. C. D. in Paris. Dr. Worth, who is Deputy Minister of Advanced Education, is the Canadian representative in Paris to the Centre for Educational Research. I have participated in UNESCO educational activities, and would welcome further opportunities to do so because UNESCO is seeking to serve the developing countries. There is in Canada the work of the Council of Ministers of Education. There is the Canadian Education Association, and I could go on and on. Not all of these activities are well organized. Some may even be dysfunctional, but we as Albertans and Canadians have responsibilities to them.
I am interested that in your conference, when you talked about materials and resources, nothing at all was said about ACCESS, the new organization set up to provide radio and television programs in education for the province. I am interested for two reasons. I believe if ACCESS is to have significant impact on the work of the schools, it must be integrated into our schools, and there must be opportunity for people such as yourselves who influence curriculum to participate in the work of ACCESS. But I'm also interested for another reason. When I was in Japan I was invited to go to the broadcasting centre. They've been at work for forty-nine years. They have sixteen thousand five hundred employees. The Director said that because of their automation he could eliminate approximately half of his employees, but due to union regulations he could only decrease his staff by retirement or by death. This was at the automation centre, and there were a number of people sitting around enjoying themselves, and during a fifteen minute period the only activity I saw anyone engage in, other than coffee drinking, was when a buzzer sounded and a staff member punched a button. The programs for that centre are automated ninety days in advance. I saw a beautiful film on "Twenty One Days in the Life of an Egg." A lovely science film for the purpose of education. But the teachers are not making good use of film even though they are being broadcast because teachers are not automated. In order to use the materials that are being presented, every child in Japan would be doing the same thing at the same time. Only now are they beginning to look at video-distribution. Where we suggested that they might be interested in cassettes, they said they hadn't really done any extensive work with them. Yet, they produce cassettes!
David Thomas, who was the person who finally persuaded me to go to Japan, indicated in his opening remarks that five national conferences in curriculum development had now been held, but that in these conferences they had directed their attentions solely at pedagogy. He expressed some concern about the effectiveness of the work that has been done. Few, if any, of these conferences attended to the political and economic realities of curriculum development. From where I sit, it is my opinion that people in education are not really aware of the necessity of being knowledgeable about the political process in education. Let me say what I mean. First of all, if you're going to be a politician you have to get elected. You're not a politician until you do! Now a government gets elected on a platform. I wonder how many of you in this room are aware that the present government has an education platform with which it went to the people, and from the people received a mandate. Were you aware of this when you started your deliberations on curriculum development? So, first, I think you must know the platform which this government has a mandate to implement. This does not mean you must approve it, but you should at least be familiar with it. Second, I understand that in your brief meeting with Mr. Hyndman, the Minister of Education, you were asked for more input into the development of policy. The Minister and his staff are faced day by day and week by week with situations to which we must react within broad policy guidelines. You have been invited to share in the development of those guidelines.

I don't intend to prolong this presentation, but in Japan we were presented with two models. One is called the "technological model" and I would just like to list the steps in this model. The first is to state general objectives, large general objectives in education. Then
these are defined more specifically, either at the provincial level or another level. Next, come the tasks of supplying materials and resources of various kinds, outlining processes, and developing evaluation procedures to provide feedback. That is the technological model.

Then, interestingly enough, we were presented with another model. It is called the "humanistic model". Again, there were to be broad, general objectives and directions. These were to be followed by creative teaching in creative schools. The responsibility for the creative teaching and the creative schools rested with the creative people in them. These creative schools were to be supported by regional centres, by universities and colleges, by Departments of Education, by other bodies, whatever these may be. When it came to evaluation, they were to be evaluated from various perspectives, including the expert, the students, the parents, and industry. The net result was to be an open school and an open society with a re-definition of the broad, general objectives of education.

I must tell you that the Japanese did not buy either one of these models. They said that the model for curriculum development in Japan must include both. Now, whether it can or cannot is not for me to say. The Japanese believe that they can do it, and when I look at what they have accomplished I believe they can do most anything! They believe, and they made it very plain, that excellence in broad fields of knowledge and skills is necessary for the mature individual and for the mature nation, and that to these competencies must be added the broad skills of social participation and social responsibility. Was it more than coincidental that the conference I attended last week was
the first time in the history of Japan that teachers had ever been invited to a national conference on curriculum development?

So I will come back again: Why are we seeking to change? Someone has said that the Department of Education ought to have taken a position at the beginning of this conference. At least, that's what I was told last night. I would be very surprised if the personnel from the department I head have agreed on a single position. It is more likely that different members of our staff represent a range of positions. If they have not done that, they have certainly acted out of character. We have positions in the Department of Education. I believe, if you examine what I said, you will see that I have a position. I'd like to close with a quotation from a Chinese intellectual and philosopher many generations ago. He said, "So administrate that when you are finished, the people will say 'We did it ourselves'."
CHAPTER VII

CONFERENCE SUMMARY AND RECOMMENDATIONS
SUMMARY OF ISSUES AND CHALLENGES TO PARTICIPANTS

Jim Hrabi

Introduction and Assessment

My assignment is to summarize the issues and provide some challenges, and that's what I propose to do, but first of all I'd like to share with you my evaluation of the conference so far. I've used a number of criteria, the first one being the quality of the stories. I have rated this at 76.4%. George Bevan's story was number one, and Derek Taylor deserves honourable mention for that bon mot about the Golden Rule. Another criterion that I used is the amount of paper handed out: the larger the amount of paper, the lower the score. The conference has been immensely successful in this respect and my rating is 87.6%. My third criterion is the happiness of the participants. That's not a necessary criterion of a successful conference, but nevertheless it is a useful one. Using the school as an analogy, just because the kids are having fun doesn't mean it's successful! But, other things being equal, happiness is a good thing to have. However, it's very difficult to measure the happiness of a person. I couldn't do it directly so I used secondary measures. The ones that I used were the number of complaints on the front desk in respect to noise, and the evaluation of the security guard of this hotel. Also useful as a criterion were comments from the proprietor of the cabaret. It must be pointed out that this conference was extremely sluggish during the first two days with respect to this question and the rating was very low, but room 137 raised the average very substantially last night. If I hadn't had to delete the contribution of that Vancouver salesman who spent last
night in Earle Hawkesworth’s room, the rating would have been right out of sight! Nevertheless, the mark was 86.32%. Now there are other means by which to measure the success of conferences: the number of names dropped and the number of new words introduced are two criteria on which my analysis is not yet complete, but it should be concluded by tomorrow noon, and if anyone’s interested, I’ll be pleased to let you know. I don’t anticipate substantial demands.

These remarks are made to introduce you to the concept that this conference will be judged. It’s going to be judged mainly on the work of the groups leading to the recommendations and on the basis of the deliberations of the plenary session tomorrow. In addition, each of us as individuals is going to judge it and it’s going to be judged by the interest groups that we represent. It will also be judged by educational historians.

I have a deep personal interest in this conference because I have some responsibilities for curriculum development and for Early Childhood Services. I was Director of Curriculum during the period from 1967 onward when there were some substantial changes in the direction of curriculum decision-making in this province. It is now most appropriate and most opportune to be looking at our present policies with a view to possible substantial change.

This has been a very stimulating conference with respect to input. We’ve looked at developments at the classroom level, the system level, and the Department of Education level. We left out the school level, though perhaps we shouldn’t have because there are some rather interesting developments in this province where the staff of a particular school has decided to do certain things. I’m thinking of such schools as Winston Churchill School in Lethbridge, Bishop Carroll in Calgary and John Wilson
Elementary in Innisfail. With reference to the inputs we have received, we have gained a better understanding of the complexities of the process of curriculum development and implementation. This has been an enlightening experience. In fact, while I was talking with Jim Twa the other day, he assured me that, if you were prepared to put in another ten or twelve hours and go through a substantial evaluation, you would likely receive credit in a course in curriculum development at the University of Lethbridge! I'm being only partly facetious because this has been an excellent short course in curriculum development. Undoubtedly we have each gained a better understanding of the very real concerns of the various interest groups here.

Three Constraints

As I listened to the presentations and discussions I felt that there were three constraints that required further emphasis. First, Alberta does not exist as an island. We are affected by directions elsewhere. For example, in the question of metrication we are affected by what has been pointed out to be an international movement. In the area of vocational education and the vast ripples that have been caused in curriculum development in this province, we were again profoundly affected by a national concern in the area of manpower. So we have to be cognizant of that which takes place beyond our province.

To go on to a second point, we have to look at the impact of facilities and equipment. When there is a small change in program there is no problem, but when there's a major change in program there is a big problem. Vocational education is a good example. The program development achieved was accompanied by a substantial impact on facilities and
equipment. The same applies in Industrial and Science. When the concept of options for the Junior High School level was introduced, we were reminded very, very quickly and appropriately by our science people that these options would have an impact on the school buildings regulations. To some degree this constraint has an impact on the decentralization of curriculum development, because, at the moment, for better or for worse, school buildings regulations and improvement and construction are influenced substantially at the provincial level.

The last constraint I would draw to your attention is that of funding. It came up in the questions proposed to the Minister today. I personally feel this is a fundamental issue that deserves our very close attention, for even modest curriculum development programs at the classroom, school, district or provincial level must be adequately funded.

What are the Issues?

On the basis of the papers presented, the formal discussions I have heard and the informal discussions in which I have participated, the main issue in this conference is the question of centralization-decentralization. It may be the only issue. All others are related to or are dimensions of the centralization-decentralization issue. In relation to this issue, I would like to pose three questions:

1. **What is the role or the responsibility, with respect to curriculum decision-making, of these particular groups?**
   
   a) **Clients**
   
   b) **Teachers**
   
   c) **Schools**
   
   d) **School systems**
What criteria might be used in making judgements with respect to the role and the responsibility of those various groups? There are many criteria, but I've chosen to identify three, feasibility, effectiveness and efficiency. Now, to some of you, some of those words may be anathema. You don't like them. You may want to put forward other criteria. There may have to be a balance between some of those criteria but they are useful ones to keep in mind.

2. Is it reasonable to consider that the roles and responsibilities of various groups need not be constant, that they may vary with respect to the dimensions of curriculum decision-making?

Roles and responsibilities may vary depending upon whether you are looking at the goals of education, the content or substance of education, the choosing of learning strategies, or the selection of instructional materials. I do not think that it is necessary for the role to be constant with respect to all of those dimensions. Nor do I think that it is necessary for the role to be completely different for all of those people and agencies that we just mentioned. It may well be that with respect to certain dimensions of curriculum development teachers, parents, university people, Department of Education consultants, and other consultants may be working together and have essentially the same role.
3. **What should be the role or the responsibility of each group with respect to evaluating the impact of the curriculum on students?**

Should there be a varying role depending on whether you are a client, a teacher, a trustee, a member of the staff of the Department of Education? A post-secondary educational institution or an employer will have a pretty substantial concern with respect to the evaluation of the impact of curriculum on students, particularly as the students approach the age of graduation. If we accept the principle that the curriculum decision-making process is a continuous one, then such evaluation is and should be a significant determiner of the curriculum or the program. I'm not sure that the question of evaluation as a dimension of curriculum development received as much of the attention of this conference as it might have.

Of course, evaluation was implied by the way that a number of the models presented to us stressed the need for feedback. Perhaps a comment on the issue of feedback would be appropriate. If I have a complaint from an individual trustee, I have a concern. If I have a complaint from a school board, I have more concern. If I have a complaint from the Alberta School Trustee's Association I have much, much more concern. The point I am making is that in analyzing the feedback the incidence of the concern is significant. There is another dimension of feedback which you must consider in its evaluation, and that is the intensity of the concern. We have to be very careful with respect to assessing the feedback before making substantial curriculum changes.
The Challenge

It was suggested that I might issue a couple of challenges, and I'm going to do that. The first one is a simple one. I am hopeful that this conference will take some positions: that they will take them on the basis of the best available evidence; that they will indicate that evidence insofar as they can; and that they will consider the implications of the recommendations that they make, secure in the knowledge that very few, if any, people are smart enough to anticipate all of the consequences of any recommendation. You also can be secure in the knowledge that the changes you recommend will probably be challenged at a similar conference like this five years from now.

My second challenge is that you question commonly held assumptions and positions of particular interest groups like people from the Department of Education, trustees, teachers and students. What kind of assumptions do I mean? That provincial authorization of courses of study is good. (It might be that Canadian authorization of courses is better!) That local control is good. (I was interested in a comment by Ewald Nyquist in the March issue of The Alberta School Trustee where he indicates the doctrine of local control is fast becoming a minor branch of theology!) The Minister at the noon luncheon indicated one or two positions that he held to quite firmly. I hope you'll challenge them. My experience has taught me that he likes to be challenged, particularly if you're willing to back up your point of view with evidence.

A third challenge: we have numerous jurisdictions in this province. Their size varies and, in consequence, their material and
human resources vary. To compose recommendations with respect to curriculum decision-making that accommodate the needs of these jurisdictions with disparate material and human resources is indeed a challenge.

Finally, I would make this observation: This conference is sponsored by the Department of Education, The Alberta School Trustees' Association, and the Alberta Teachers' Association. We have also in attendance students, parents and university personnel. As the Minister indicated, we anticipate that a number of recommendations emanating from this conference will have an immediate impact on the policies of the Department of Education. I hope and I expect they will be the subject of vigourous debate by the Alberta Teachers' Association and the Alberta School Trustees' Association, perhaps as early as their next annual meetings, with the view again to possible substantial policy changes by these organizations. I thought Ralph Sabey was very perceptive in his observation yesterday afternoon with respect to political reality. In my judgment, political realities exist in all organizations, including the Canadian Studies Foundation and Project Canada West. As I indicated earlier, some recommendations may soon become Department of Education policy. Some more contentious ones may take longer in becoming Department of Education policy (and I'm not defining 'longer'). But their chances of becoming Department of Education policy are substantially enhanced if they have the support of other interest groups.
OPENING COMMENTS TO THE PLENARY SESSION

Myer Horowitz

This conference started on Sunday. Monday was chaired by Doug Ledgerwood, representative of the Department of Education. On Tuesday, Jack Fotheringham of the Alberta Teachers' Association looked after the day. Yesterday, Stan Maertz of the Alberta School Trustees' Association ran the show. Now that you have been totally confused by people from the field, once again you have called on the university to help you put your thoughts together.

The Minister, Jim Hrabi and others have stressed the importance of this final session. Reference has been made to the resolutions as being the pay-off for our efforts to the past three days. I don't underplay the importance of the resolutions, but I would like to put some emphasis on the type of involvement that we've experienced this week. We have talked about the values in process as well as the values in product. I would like to remind you that for each of us there has been a very special kind of gain which we probably are not able to measure at this time. I think we have gained a great deal through interacting with the ideas presented to us and with each other. I would like to make that point because this gain may not be evident in the product that we're aiming to produce during this morning's session.

Inevitably, you will have skimmed the resolutions that are being presented for discussion this morning. And inevitably, you will have noted that your favorite resolution isn't there! Don't become too concerned about that because you have to remember that from the
twelve groups there were generated a large number of resolutions. It's difficult to know how many because some groups put a number of resolutions together and treated them as one resolution. But clearly, there were about one hundred resolutions generated by the different groups, and we have selected fifteen for debate. The fifteen which we have selected, almost without exception, happen to be resolutions which were phrased by some group in the form that you see them. We changed the wording slightly, but I think we acted in good faith and didn't alter the sense of the resolutions. Our job was to look at, in some cases, as many as twenty resolutions all dealing with the same topic, and to attempt to select the resolution which we felt would generate the best kind of discussion and which might lead to some kind of recommendation.

As you would have predicted, in the resolutions there is an important reflection of the kind of discussion which we have had for three days. Jim Hrabi put his finger on the main concern of participants in the conference. This involved the roles of different persons and different agencies in the process of curricular decision-making, and so the specific recommendations referred to the role of the Department, systems, teachers and learners, parents and other members of the community, teacher education institutions, and so on. I don't think the resolutions were as specific as they might have been. That doesn't concern me a great deal, however, because I think we must look upon this very important experience this week as just one of many experiences in which we and others must have a long-term involvement. I think it's difficult to become too specific in a short period of time. I think we have to remember that this is just a beginning. As I have already tried to indicate, we must put a good deal of importance on the process that has taken place, the extent to which we have gained from
interacting with each other.

During one of my free periods yesterday, when others were involved in the small groups helping to hammer out some of these resolutions, I went back to my room and went through one or two of the periodicals I had put in my briefcase. Perhaps others have seen the most recent issue of *The Education Researcher*, the periodical of the American Education Research Association. In the editorial there is a quotation from Einstein which I find comforting, and perhaps you will also:

"The formulation of a problem is often more essential than its solution. Its solution may be merely a matter of mathematical or experimental skill. To raise new questions, new possibilities, to regard old questions from a new angle requires imagination and marks real advance."

I would like us to remember these words as we move into our work during the next several hours. We're trying to describe involvement of people and of agencies; this is not too difficult to talk about at a very general level, but it's real agony to spell out into any kind of detail.

In the resolutions that came forward, there still seems to be a great deal of confusion between the lay role on the one hand and the professional role on the other. Personally, I place value on our having come as far as we have, when we're willing to make general statements that there should be lay involvement as well as professional involvement. But if this session is an opportunity really to move forward, then it seems to me that we have a big job ahead of us in attempting to sort out the different kinds of roles that are involved in curriculum building at different levels. Even in the professional domain there is a great deal of work that still needs to be done with regard
to the role of teachers and other professionals.

Almost every recommendation dealt with the general theme of centralization/decentralization. Yet, we have a big job ahead of us after today to give more thought to what we mean by centralization/decentralization. I don't think we've asked ourselves a sufficient number of times, "From whose point of view are we talking about centralization/decentralization?" I don't think we've reminded ourselves that from the point of view of the learner it may make no difference at all whether that decision was taken in the Department of Education or in the school system office, or by some person of authority in his own school. From the point of view of many youngsters, the system is dreadfully centralized unless they, themselves, have a share in decision-making.

I'm not sure we've given enough attention to what I suspect was Gene Torgunrud's "thing" earlier in the week. I'm not sure we've given enough attention to the whole question of the attitudes of people, to the fact that people have to change and to the question of how they undergo change. To what extent do they need a jolt? (And, I think, to some extent we all agree that's necessary). To what extent do they have to feel comfortable and secure? How do we achieve balance? That's a theme, it seems to me, that we have to move into.

As we move now to consideration of the resolutions, I want to thank my colleague, Andy Hughes, who worked with me in pulling the resolutions together into debatable form. Andy and I were in the room just down the hall for several hours last night. The recommendations that are before you are, with few minor editorial changes the recommendations which you people generated. It goes without saying that there was absolutely no structure imposed upon Andy or myself to select some resolutions rather than others and to con-oct a few in order to keep some people content.
I want to make that point because I think it's incumbent upon somebody like myself, who is by no stretch of the imagination a representative of the sponsoring agencies, to dispel any notion that there was any kind of structuring with regard to the recommendations.

I want to suggest one or two things before we deal with Recommendation #1. We're a group of school teachers, most of us, without apology to anyone. Each of us has participated actively in enough teachers' meetings in schools, in enough gatherings at regional or provincial levels to know that we have to discipline ourselves just a bit. We don't want to get all involved in dealing with the niceties of whether the word should be 'may' or 'shall', or whether it should be 'can' or 'may', and so on. And so I suggest to you that you accept my proposal that we consider Andy Hughes, Doug Ledgerwood, Merv Thornton and myself as an editorial committee. We've asked Merv Thornton to keep notes of any proposals that come from the floor. After this morning's session, we shall attempt to act in good faith by rephrasing resolutions according to the points that are made by the participants this morning. Substantial changes, of course, should be resolved here and built directly into any statement which we eventually endorse; but with regard to fine editing, I encourage you not to invest a great deal of time in dotting the 'i's' and crossing the 't's'. I shall present the resolutions and invite at least one person in the room to provide some explanation. We shall not bring any resolution to a vote until it becomes clear that the issue is ready for decision. We shall conduct the discussion in a disciplined manner according to my perception of parliamentary procedure.
I want to remind you that if each person in this room were to speak just once during the next three hours, each person would have only forty seconds at his disposal. If you use more than forty seconds, please be grateful to the person beside you who has chosen not to address the group at all! You know of course, that I make this point not to prevent you from talking, (heaven forbid), but just to encourage you to realize that we do have a big job ahead of us. This is the time when we get right into it. The first recommendation, please.
1. It is recommended that the Department of Education set the broad goals of education that represent and reflect the desired educational outcomes as expressed by society.

CARRIED

2. It is recommended that the Department of Education support the ideal of shared responsibility in curriculum decision-making by helping to provide the necessary resources (such as time, money and expertise) to facilitate local curriculum development activities.

CARRIED

3. It is recommended that structures be established which would ensure input into the curriculum development process from all levels of involvement--Department of Education, local school systems, teachers, parents, learners.

CARRIED

4. WHEREAS there appears to prevail, on the part of professional educators, a degree of skepticism associated with parental involvement in the processes of curriculum development, implementation and evaluation;

WHEREAS a high level of concern has been expressed at this conference about the place parents may appropriately or legally occupy in
these processes;

a) It is recommended that operational orientation/modes of parental involvement be monitored, processed, and subsequently evaluated in order that alternative models of parental involvement be generated for application in relation to local conditions, and prevailing needs.

CARRIED as amended.

b) It is further recommended that this undertaking be initiated under the leadership of the Department of Education in concert with other participating government departments and other organizational structures associated directly with educational processes in the province.

CARRIED as amended.

5. It is recommended that members of the educational community, including students, initiate a process of inquiry which will result in the identification of those points in curriculum decision-making where students might have a useful and legitimate input.

DEFEATED (Primarily because #3 attends to this concern.)

6. It is recommended that extensive curriculum changes at the local and provincial levels be implemented only after adequate long term field testing including random selection of schools and/or teachers, and that the evaluation include feedback from learners, teachers and parents as well as other interested persons and agencies.

CARRIED as amended.
7. It is recommended that the Department of Education, A. T. A., A. S. T. A., together with Alberta's universities, assume the responsibility for the establishment and maintenance of a Research and Development Center, which will focus on problems pertaining to the development, dissemination and evaluation of curricula.

DEFEATED (Primarily because of costs, questionable effectiveness, and association with centralization of control.)

8. It is recommended that the Department of Education facilitate a continuous evaluation of new curricula after they have been implemented in the schools, and the dissemination of information pertaining thereto.

CARRIED as amended.

9. WHEREAS Alberta teacher preparation programs are commonly organized in such manner that teachers are encouraged to specialize in certain subject areas; and

WHEREAS intending teachers should become aware of the relationships among specializations and should develop an understanding of the design of the total curricula, K-12;

It is recommended that the A. T. A., the A. S. T. A., and the Department of Education request teacher education institutions to offer intending teachers opportunities:

i) to examine the broad scope and sequence of the Alberta curriculum;

ii) to compare and contrast alternative curriculum designs; and
iii) to assess the contribution and significance to students of their teaching specializations.

CARRIED

10. WHEREAS pre-service teachers have little opportunity to understand the urgency of acquiring curriculum development skills; It is recommended that the A. T. A. Specialist Councils, members of the Department of Education Curriculum Committees, and professors of teacher education cooperate as soon as possible to:
   i) provide models for intending teachers;
   ii) share experiences with intending teachers;
   iii) inform intending teachers of the opportunities that exist for the professional teacher.

CARRIED as amended.

11. WHEREAS we subscribe to the concept that teachers are curriculum decision-makers at the instructional level; and WHEREAS teachers have expressed a need to learn more about developing curriculum;
   a) It is recommended that in 1974-75 the A. T. A., A. S. T. A., and the teacher education institutions cooperatively offer workshops, seminars and conferences for teachers focused on the tasks of curriculum development; and
   b) It is further recommended that the A. S. T. A. be requested to recognize officially that attendance at such workshops, seminars and conferences is professionally significant.

CARRIED
12. It is recommended that curriculum committees at all levels address themselves to the ramifications of curriculum change on school buildings, school finance, and equipment and material requirements.

CARRIED

13. It is recommended that a curriculum conference be convened in two years to evaluate the effect and disposition of resolutions passed at this conference.

CARRIED

14. WHEREAS it is the function of the Department of Education to ensure that the learning outcomes expected of the educational enterprise are clear to all concerned with education;
WHEREAS it is the function of the professional educators, in concert with learners and other concerned persons, to devise the most appropriate means to achieve educational goals;
It is recommended that the Department of Education clarify its role in the curriculum development process in order to ensure that the Department and the other levels are able to carry out their respective functions.

DEFEATED (Primarily because this concern was attended to in previous Motions).

15. WHEREAS the educational programs of the Curriculum Branch are becoming more closely linked with other branches of the Department of Education and/or other departments;
It is recommended that a task force, conference, or liaison
committee be convened to outline the implications of attempting to articulate the work of other social service and community agencies with the school program.

CARRIED

16. It is recommended that a resource bank in the format of an information retrieval system consisting of such things as:
   a) content development materials,
   b) audio-visual materials,
   c) problem and test items, and
   d) process strategies
be developed for use by teachers, schools and school systems in the province. Existing projects in this area, e.g., Curriculum Resources Information Bank, would serve as models in the formative process. This project would foster, facilitate and support local curriculum development and implementation.

CARRIED

17. It is recommended that the Department of Education assume the responsibility for establishing a clearing house for the dissemination of curriculum materials and that the Department facilitate the production and distribution of requested materials.

CARRIED
CHAPTER VIII

IMPLEMENTING THE RECOMMENDATIONS

I. THE RECOMMENDATIONS

Background

"Curriculum Decision-Making in Alberta" was the theme of a major conference held in Red Deer, March 25 - 28, 1974. The conference was jointly sponsored by the Department of Education, the Alberta Teachers' Association and Alberta School Trustees' Association, and was attended by 165 teachers, administrators, students, trustees and parents. The conference had two objectives:

i) It was intended to be a worthwhile learning experience for each individual participant.

ii) The conference was also intended to produce recommendations which would assist stakeholders in the formulation of curricular policies. Significant issues regarding the "who", "what", and "how" of curricular decision-making had to be resolved.

Post-conference evaluations indicate that participants found the conference to be a worthwhile learning experience. The degree to which the second objective was achieved is indicated by the fact that 104 resolutions were formulated by the twelve action groups into which participants were divided. These resolutions were combined into seventeen recommendations, fourteen of which were approved by majority vote during the final morning of the conference.

Assessing Priorities

A copy of the seventeen recommendations debated at the conference appears in Chapter Seven. In comparing the final recommendations with the resolutions originally drafted by the action groups, it was found that:

Recommendation # 1 was supported by 12 draft resolutions.
Recommendation # 2 was supported by 28 draft resolutions.
Recommendation # 3 was supported by 10 draft resolutions.
Recommendation # 4 was supported by 3 draft resolutions.
Recommendation # 5 was supported by 3 draft resolutions.
Recommendation # 6 was supported by 6 draft resolutions.
Recommendation #7 was supported by 2 draft resolutions.
Recommendation #8 was supported by 6 draft resolutions.
Recommendation #9 was supported by 4 draft resolutions.
Recommendation #10 was supported by 5 draft resolutions.
Recommendation #11 was supported by 7 draft resolutions.
Recommendation #12 was supported by 3 draft resolutions.
Recommendation #13 was supported by 4 draft resolutions.
Recommendation #14 was supported by 2 draft resolutions.
Recommendation #15 was supported by 2 draft resolutions.
Recommendation #16 was supported by 4 draft resolutions.
Recommendation #17 was supported by 14 draft resolutions.

It is assumed that the strongest recommendations are those which are reflective of the greatest number of draft resolutions. Hence, Recommendations numbers 1, 2, 3, and 17 are most deserving of attention. Fortunately, these four recommendations provide a framework into which all other recommendations have a natural fit.

Interpreting the Key Recommendations

1. It is recommended that the Department of Education set the broad goals of education that represent and reflect the desired educational outcomes as expressed by society.

CARRIED

Conference participants did not want the Department of Education to abandon its role in curriculum decision-making. On the contrary, participants saw the need for the broad goals of education to be set at the provincial level. Interpreted narrowly, Recommendation #1 could mean that a publication like "Goals of Basic Education" is all that the Department of Education need produce. However, a study of the draft resolutions reveals that something more may be expected. Resolutions from a number of different action groups suggested that the Department of Education should assume the tasks of outlining a "base level of curriculum", "a core program", "a broad program", and "broad curriculum guidelines".

2. It is recommended that the Department of Education support the ideal of shared responsibility in curriculum decision-making by helping to provide the necessary resources (such as time, money and expertise) to facilitate local curriculum development activities.

CARRIED

* NOTE: that some draft resolutions contained support for more than one recommendation. Hence, this column totals 115, rather than 104.
It can be noted that Recommendation #2 really contains two ideas: first, "that the Department of Education should support the ideal of shared responsibility in curriculum decision-making"; and second, "that the Department of Education . . . (help) to provide the necessary resources (such as time, money and expertise) to facilitate local curriculum development activities". That these two ideas should be tied together in one recommendation is understandable. How better can the Department support an ideal than by providing resources?

3. It is recommended that structures be established which would ensure input into the curriculum development process from all levels of involvement ---- Department of Education, local school systems, teachers, parents, learners.

CARRIED

The one recommendation which, along with #2, seems best to have captured the spirit of the C. D. M. A. Conference is Recommendation #3. By recommending that "structures be established", #3 is really asking that the curriculum decision-making roles of various stakeholders be clarified and, if necessary, modified. It is asking that the relationship between and among these stakeholders be reviewed. By recommending that each of these stakeholders have an opportunity to provide "input into the curriculum development process", the conference was saying each group has needs which must be expressed and expertise which must be tapped.

Recommendation #3 may be the key recommendation of the conference. It outlines the basic premise on which all other recommendations rest. This being the case, it is probably worthy of special attention from those charged with implementing conference recommendations.

17. It is recommended that the Department of Education assume the responsibility for establishing a clearing house for the dissemination of curriculum materials and that the Department facilitate the production and distribution of requested materials.

CARRIED

Recommendation #17 sets forward very clearly the expectation that the Department will establish a production and distribution facility. What is not clear, however, is what kind of materials this facility is to produce and distribute? Are these to be student materials, such as books and A-V resources? Are they to be teacher materials, such as curriculum guides, unit plans, etc? Or both? Support for departmental help in the production of both kinds of "curriculum materials" can be found in the draft resolutions.
A Coherent Framework. The Department of Education should continue setting the broad parameters of the Alberta curriculum; local participants should be established through which involvement can be facilitated; curriculum materials developed at the local level should be reproduced and distributed for province-wide use. This eminently logical framework for curriculum decision-making allows for the incorporation of other recommendations from the C. D. M. A. Conference:

- the role of parents should be clarified and evaluated (#4)
- field testing and the gathering of feedback on new curriculum should continue (#6)
- even after being implemented new curricula should undergo continuous evaluation (#8)
- teachers should receive pre-service and in-service education designed to prepare them as curriculum decision-makers (#9, 10, 11)
- curriculum designers should consider the effects of new curricula on buildings, finances, and resources (#12)
- implementation of the C. D. M. A. recommendations should be periodically assessed (#13)
- articulation of school programs with those of other agencies should become increasingly important (#14)
- curriculum materials should be readily retrievable (#16)

In summary, the recommendations appear to form a coherent package; they offer a clear mandate. The question now is, "How to implement these recommendations?"

II. A THREE-PHASE PLAN

Phase I

It is proposed that the C. D. M. A. Recommendations be implemented at a deliberate pace. Phase I (the present until March 31, 1975) will be a period in which all stakeholders take time to address questions such as "How do we want to be involved in the curriculum decision-making process? What changes or additions to present organizational structures should be made? As resources are made available for local curriculum activities, how should these resources be distributed? How should recipients of these resources be held accountable?"
Responses to these questions will be gathered during the period October, 1974 to January, 1975. It is probable that a series of meetings dealing with these questions will be held throughout the province; written submissions will be requested; position papers will be circulated.

February and March of 1975 will be devoted to formulating policies and finalizing details regarding the funding of local curriculum decision-making activities.

Phase II

Submissions are now being made to the Budget Bureau of the Provincial Government that, if approved, will have the effect of providing resources to facilitate local curriculum development activities within the framework of guidelines set by the Department of Education. The intent of the submissions now before the Bureau is to provide monies in the 1975-76 budget for the commencement of a three-year program of action-research. The purpose of the action-research program would be to discover the most efficacious ways of mixing centralized and decentralized curriculum decision-making.

Both formative and summative evaluation would be built into the action-research design. A second conference on "Curriculum Decision-Making in Alberta" (C. D. M. A. - II) would be held near the end of the action-research phase.

Phase III

March 31, 1978 would mark the end of the action-research phase. It is anticipated that the more successful of the alternatives tried during Phase II would be funded for continued operation during what might be considered the third and final phase of this project.

III. SOME ALTERNATIVES TO PONDER

The C. D. M. A. recommendations give a clear indication of what the participants want and why they want it. We must now address ourselves to the important question of how to fulfill these wants.

Some Basic Principles

In attending to this question, it seems advisable to isolate some basic principles that must be recognized. These principles derive from, and are consistent with, the C. D. M. A. recommendations.
1. **Opportunities must be available for the widest possible involvement in curriculum decision-making.** Involvement can consist of providing ideas of one's own; at the very least, everyone must have the opportunity of reacting to the ideas of others.

2. **There must be compromise between the relative values attached to involvement and efficiency.** This principle recognizes that involving large numbers of people in the decision-making process can be very time consuming; it is sometimes more efficient (and equally satisfying) to involve fewer people and make decisions more quickly. That is not to say, however, that involvement and efficiency are mutually exclusive. On the contrary, increased involvement usually produces more acceptable resolutions which can then be implemented more efficiently.

3. **Ultimate responsibility must be assumed by someone or some agency.** In Alberta, legal responsibility for education rests with the Provincial Government. This responsibility is exercised through the Department of Education and through school boards and their employees to whom certain powers are delegated. The Department and others to whom curriculum responsibilities are delegated must be held accountable for the teaching and learning that occurs in Alberta schools.

4. **Those to whom responsibility is assigned must provide leadership.** This principle does not specify the kind of leadership style that should be utilized. Leadership could consist of solution-giving. That is, curriculum materials produced at the local level could be as prescriptive (or even more prescriptive) than materials developed by a central agency. On the other hand, leadership can be used to stimulate the creative involvement of others. For example, those learners, teachers, and parents who do come forward to provide local leadership could (instead of simply producing the product themselves) provide "leadership as stimulation" by involving their colleagues in making decisions.

5. **Many alternatives are better than one.** This principle implies that no one method of making curriculum decisions is satisfactory in all circumstances. A variety of approaches is both desirable and feasible: desirable in that different people need to satisfy different needs; feasible in that different approaches can co-exist—in a symbiotic relationship wherein they reinforce, rather than interfere with, each other.

**Sample Alternatives**

Bearing in mind the principles cited above, some means of securing involvement in curriculum decision-making are listed below. These are put forward as possible alternatives and not as recommendations. Interested stakeholders doubtlessly will come up with additional suggestions.
1. Transfer of Department of Education curriculum committees to a local base. Instead of teachers from diverse systems meeting in Edmonton (as now happens), local school systems could be "commissioned" to develop a particular curriculum for the province. Personnel from the Curriculum Branch would work with the locally based committees in the same ways that they now work with committees that meet at the Department.

2. Locally based committees funded through Regional Office of Education. Regional Office consultant would identify teachers, parents, and students interested in building curriculum. The consultant would have at his disposal funds to pay travel and subsistence expenses, the costs of substitute teachers, the procurement of learning resources, etc.

3. Curriculum consortia. Interested personnel from one or more school system(s) could be funded to develop curricula suited to their own needs. Consortia could be established on the basis of geographic proximity (e.g. two neighbouring countries) or according to commonality of interest (e.g. four school systems with a common concern over Native education).

4. Teacher Centres. Funding could be provided for the establishment of comfortable centres in which the teachers from a small area are provided with both the leadership and resources for building curriculum. The centres could be modelled after those in the U.K. where they serve both social and professional purposes.

5. Support for A.T.A. specialist councils and Local P.D. committees. It is conceivable that funding could be provided to teacher groups interested in developing curricula in specific subjects or to meet particular needs.

6. Funding for student and parent groups. Groups interested in developing alternative curricula might qualify for access to human and financial resources.

7. Released time for individual teachers and school staffs. Some means of allowing teachers to gain released time for curriculum activities could be arranged by providing substitutes or through differentiated staffing. One C.D.M.A. participant has suggested that a team of substitute teachers travel from school to school releasing part or all of the staff for two-weeks (more or less) so that they could work on curriculum.

8. Requests for proposals. Some or all of the money designated for curriculum decision-making at the local level could be administered by a broadly representative Proposals Review Committee which would solicit proposals from interested persons or agencies. Approved proposals would receive funding. They would be monitored by staff attached to the Proposals Review Committee.

9. Etc. You and your colleagues should add your own ideas about HOW to facilitate wide involvement in curriculum decision-making.
The Challenge

A number of specialist councils, school systems and other groups have already held meetings to consider practical means of implementing a shared approach to curriculum decision-making. These groups will be ready to provide input when ideas are gathered during the fall, as outlined in Phase I above. If you and your organization have not yet considered the ways and means by which you want to become involved, you are encouraged to do so in the very near future.
APPENDIX
C.D.M.A. Conference

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