DOCUMENT RESUME

ED 065 921

AUTHOR Bergen, J. J., Ed.


INSTITUTION Alberta Univ., Edmonton. Dept. of Educational Administration.

PUB DATE 71

NOTE 71p.

AVAILABLE FROM Department of Educational Administration, University of Alberta, Edmonton 7, Alberta (Canada) ($3.00)

EDRS PRICE MF-$0.65 HC-$3.29

DESCRIPTORS *Administrative Change; *Administrator Role; Budgeting; Community Schools; Differentiated Staffs; Educational Accountability; Evaluation; Learning Experience; *Management Systems; Planning; *Principals; Program Evaluation; Programming; Systems Approach; Systems Concepts; *Teacher Evaluation

ABSTRACT This collection of papers by various authors offers varied comments on (1) a systems approach to accountability, (2) accountability and PPBES, (3) program evaluation, (4) the principal's role in clinical supervision, (5) some practical approaches to the evaluation of teaching, (6) teamwork within the school, (7) differentiated instruction, (8) the community school, and (9) a "learning" system of education. A related document, EA 004 487, provides a history and an evaluation of the leadership course. (JF)
SCHOOL PROGRAM AND ACCOUNTABILITY

THE LECTURE SERIES

of

THE 1971 LEADERSHIP COURSE FOR SCHOOL PRINCIPALS

Edited by
J. J. BERGEN

THE POLICY COMMITTEE, LEADERSHIP COURSE FOR SCHOOL PRINCIPALS
Edmonton, Alberta
1971

PRINTED BY THE INDUSTRIAL RESEARCH AND TRAINING CENTRE
LEADERSHIP COURSE PUBLICATIONS

The Role of the Principal, 1959*
Professionalism in the Principalship, 1960*
Skills of an Effective Principal, 1961*
Organization: A Means to Improved Instruction, 1962
The Tasks of the Principal, 1963*
The Principal and Program Development, 1964
Program and Personnel, 1965*
The Principal and Educational Change, 1966*
Developing a Concept of the Principalship, 1967
The Principal as Administrator, 1968*
Administration for Student Development, 1969*
The Principal's Role in the 70's, 1970
School Program and Accountability, 1971

LEADERSHIP COURSE PUBLICATIONS ARE AVAILABLE FROM THE DEPARTMENT OF
EDUCATIONAL ADMINISTRATION, THE UNIVERSITY OF ALBERTA, EDMONTON 7

(Note: Titles marked with an asterisk are now out of stock.)
THE POLICY COMMITTEE

E. K. HAWKESWORTH (Chairman) .................................. DEPARTMENT OF EDUCATION
G. L. MOWAT ................................................................. FACULTY OF EDUCATION
H. A. PIKE ............................................................ ALBERTA SCHOOL INSPECTORS' ASSOCIATION
W. A. PENROSE .................................................... ALBERTA SCHOOL TRUSTEES' ASSOCIATION
K. W. BRIDE ............................................................. ALBERTA TEACHERS' ASSOCIATION
F. D. OLIVA ................................................................. COUNCIL ON SCHOOL ADMINISTRATION
J. J. BERGEN (Secretary) ........................................ DIRECTOR OF LEADERSHIP COURSE

OTHER ADVISERS

H. T. COUTTS ................................................................. DEAN, FACULTY OF EDUCATION
S. C. T. CLARKE ........................................................... DIRECTOR, SUMMER SESSION
LOWELL WILLIAMS ........................................................ EXECUTIVE DIRECTOR, ALBERTA SCHOOL TRUSTEES' ASSOCIATION
# TABLE OF CONTENTS

<table>
<thead>
<tr>
<th>Title</th>
<th>Author</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Foreword</td>
<td>W. R. Duke</td>
<td>15</td>
</tr>
<tr>
<td>The Principal and The School</td>
<td>H. L. Hastings</td>
<td>7</td>
</tr>
<tr>
<td>A Systems Approach to Accountability</td>
<td>W. R. Duke</td>
<td>15</td>
</tr>
<tr>
<td>The School Principal, Accountability and PPBES</td>
<td>W. R. Duke</td>
<td>15</td>
</tr>
<tr>
<td>Program Evaluation</td>
<td>D. Friesen</td>
<td>21</td>
</tr>
<tr>
<td>Clinical Supervision: The Principal's Role</td>
<td>D. A. MacKay</td>
<td>27</td>
</tr>
<tr>
<td>Evaluation of Teaching: Some Practical Approaches</td>
<td>B. K. Johnson</td>
<td>33</td>
</tr>
<tr>
<td>Team-Work Within the School</td>
<td>C. Safran</td>
<td>39</td>
</tr>
<tr>
<td>Differentiated Instruction - “Theory” and Practices</td>
<td>John O. Fritz</td>
<td>43</td>
</tr>
<tr>
<td>The Community School: Hope or Heresy?</td>
<td>Gordon McIntosh</td>
<td>51</td>
</tr>
<tr>
<td>A “Learning” System of Education</td>
<td>Lowell Williams</td>
<td>59</td>
</tr>
</tbody>
</table>
FOREWORD

When resources are plentiful, there may be a tendency not to count the cost, but to spend whatever is necessary in order to achieve certain objectives. When resources become scarce, two questions are asked with increasing frequency: How can the same ends be achieved by using the available resources more efficiently? If all ends cannot be achieved with the available resources, what are the priorities – that is, which objectives must be curtailed or even dropped?

Consequently, a more careful auditing takes place, and those who are charged with the expenditure of resources are asked: Have you done the best you can with the resources which have been placed at your disposal?

There is a danger of grasping at simple solutions for very complex problems. Under pressure one may be tempted to restrict one's efforts to those ends for which results can be demonstrated most easily in relation to the resources expended. One may concentrate on the measurable, and neglect those aspects of education which are more difficult to assess. The value of judgement cannot be discounted – judgement, subjective though it may be, but based on much training and experience and verified by that of many others who are knowledgeable.

An end cannot be dropped simply because we are not able, at this time, to define it precisely in measurable terms, and because we cannot measure accurately what progress has been made toward the attainment of that end. After all, much of human progress in the arts and in philosophy has been of this nature. And where measurement is more easily accomplished, as in the sciences, it has later been found to be much less accurate than anticipated.

The reader will find that some papers in this volume present a more convincing point of view than others that accountability processes can be applied effectively in the school program. Some will argue that the onus of proof may rest upon those who insist that the principles of accountability applied in industry and business can be applied in schools also. Certainly, whole school systems ought not to be moved in this direction before some pilot projects appeared at least convincing.

The production of a moon-rocket may be much more costly than the education of a child, and it may require the contribution of many specialists. Computer technology and educational specialists may be engaged, but the fact remains that the child is infinitely more complex than the moon-rocket. Also, his social milieu is much more complex than the physical environment in which the moon-rocket travels. "Stimulus-response" theories may be completely adequate for controlling the rocket, but they explain only a fraction of a child's learning behavior.

The principal and his staff, under the pressure of reduced resources, must assess the priorities for the school, and must work creatively in the effective use of resources. This, too, is accountability – professional accountability. However, the latter may be difficult to demonstrate in ledger columns.

William G. Walker, Dean of the Faculty of Education at the University of New England, Armidale, Australia, expressed his concern as follows:

Teaching is both an art and a science. The interaction between teacher and child is almost mystical, and mysticism is difficult to measure in terms of productivity. Perhaps teachers tend to over-emphasize the art, but administrators and researchers tend to over-emphasize the science by stressing productivity and accountability.

(R & D Perspectives, University of Oregon, Fall 1971)

J.J. Bergen, Course Director
ACKNOWLEDGEMENTS

The success of the Leadership Course for School Principals depends upon the interests and efforts of all who are involved: sponsors, leadership personnel, and of course the participants. Special mention must be made of the members of the Policy Committee and the organizations which they represent.

The Department of Educational Administration, from the very beginning of the Course, in 1956, has contributed substantially in personnel and material resources. An insignificant portion of these costs have been charged to the budget of the Course itself. For the three years during which this director has been responsible for the Course, he has received the unreserved support of Dr. G. L. Mowat, Chairman of the Department of Educational Administration.

An interesting and thought-provoking series of lectures was presented by the following:

Dr. W. R. Duke, Associate Director of Field Services, Department of Education
Dr. D. Friesen, Associate Professor of Educational Administration, The University of Alberta
Dr. J. Fritz, Professor of Education, The University of Calgary
Dr. H. I. Hastings, Consultant on Innovative Projects, Department of Education
Dr. W. H. Johns, President Emeritus and Professor of Classics, The University of Alberta
Dr. B. K. Johnson, Coordinator of Curriculum Development, Calgary Public Schools
Dr. D. A. MacKay, Professor of Educational Administration, The University of Alberta
Dr. R. G. McIntosh, Associate Professor of Educational Administration, The University of Alberta
Dr. C. Safran, Superintendent-Elect, Calgary Public School Board
Mr. Lowell Williams, Executive Director, The Alberta School Trustees' Association

Group discussions on the lecture series and other group activities were under the direction of the following consultants:

Mr. L.E. Harding, Superintendent of Schools, Drumheller Valley School Division
Dr. B.K. Johnson, Coordinator of Curriculum Development, Calgary Public Schools
Mr. John J. Nearing, Coordinator of Secondary Education, Calgary Separate Schools
Mr. H.A. Pike, Consultant in School Administration, Edmonton Regional Office, Department of Education
Dr. M. T. Sillito, Coordinator of Professional Development, The Alberta School Teachers’ Association
Mr. Lowell Williams, Executive Director, The Alberta School Trustees’ Association

The services of the Edmonton public and separate school systems is also acknowledged. The principals of the following schools, along with members of their faculties, provided illustrations of what was being attempted particularly with respect to
individualized instruction and differentiated staffing:

Mr. R.P. Baker, M.E. Lazerte Composite High
Mr. F.X. Bischoff, Louis St. Laurent High
Mr. C.A. Clement, Forest Heights Elementary
Mr. A.B. Wocowich, Sir John Thompson Junior High

Some sessions were conducted jointly with the Counsellor Leadership Seminar which was held at the same time. The contribution made to the Principals' Course through these joint sessions, as well as that which occurred through the informal interaction of principals and counsellors is acknowledged to Dr. D. Sawatzky, Director of the Counsellors' Seminar. Also, Dr. Paul Koziy added variety to the activities of the Principals' Course through his presentations on "experience-based learning" and his informal seminars on communication. Dr. Sawatzky and Dr. Koziy are members of the Department of Educational Psychology, University of Alberta.

Special thanks are due to Mr. Dan J. Cornish, graduate student in the Department of Educational Administration, for his capable assistance as Assistant Director of the Course. Mr. Cornish also contributed considerably in the preparation of this publication. Miss Joan Zowtuk assisted as Course secretary and provided efficient and invaluable service throughout the year. Assistance was provided also by the other members of the clerical staff of the Department of Educational Administration, and particularly by Miss Hazel Dobyanski.

The Leadership Course was accommodated in the Alberta School for the Deaf. The services of the School, and particularly the arrangements made by Mr. F. G. Cartwright, Superintendent, were much appreciated. Mr. Cartwright also conducted an evening tour of the School, and gave Course members illustrations about the nature of educating hearing-handicapped children.

The sixteenth consecutive Leadership Course was attended by sixty-one principals and vice-principals. All but three of these came from the breadth and length of the province. One came from the Yukon Territory and two from the North West Territories. Course members were nominated and sponsored by their respective school boards. Over the years about 970 individuals have been Course members. It appears that school boards have continued to conclude that the cost of sending principals to the Leadership Course is an investment bearing dividends in terms of more enlightened leadership within the schools. The contribution made by school boards in making this singular opportunity available to their administrators is most significant.

J. J. Bergen
THE PRINCIPAL AND THE SCHOOL
WALTER H. JOHNS

INTRODUCTION

My credentials for addressing such a group as this may be open to question, but I can include among them a life-long interest in education at all levels, and some experience in a situation not unlike that in which school principals find themselves. A great deal has been written about the role of the principal, and the authors of the many books and articles on the subject have been men who have devoted their lives to teaching and research in the field of educational administration. I shall not attempt to speak from the same point of view as these writers. Instead I shall try to set out some ideas of my own. You may, of course, disagree with me.

The theme of this year's course is "School Program and Accountability." I had not run into this word, accountability, until recently, but I think it contains a most important concept. I have always believed that a person should fulfill his role to the utmost of his powers and that if he fails to live up to his responsibilities through any defect of competence or will, he should give up his profession or his position in it and turn his talents to "fresh woods and pastures new." I believe in the individual's right to happiness, and if he cannot do his job well he cannot be happy in it and should get out -- not marshall all the forces of his colleagues to keep him in his misery.

My first point has to do with the importance of the school in the community. I am not speaking here of the importance of education generally, but of the significance of the particular school. To the student and to his parents, the school system and the school board tend to be looked upon as vague abstractions, but the school which the student is attending, whether elementary, junior high or high school, is the heart and core of the whole system. Here he will probably spend six years of his elementary school life and here his parents will come for Home and School meetings. In later years the fact that he went to school in Edmonton, for instance, will be less significant than that he went to Queen Alexandra Elementary, McKernan Junior High, or Bonnie Doon High School. I fear that those engaged in research in professional education tend to overlook this fact, or tend not to give it sufficient weight.

The school, then, his school, is not just a building or group of buildings to the student; it is the place where he spends almost half his waking hours. It is here he receives the formal part of his education for twelve years, and the teaching process that goes on within that school is a vital part of his mental and physical development. The responsibility for guiding and fostering this development lies with the teachers, and every teacher is important to the students and to the school. But far more important still is the principal. I realize that this statement is open to challenge, but I firmly believe it to be true -- if not actually, then at least potentially.

I make this statement because I have seen so many examples of schools which were the reflection of the principal to an astonishing degree -- both for good and for ill. You will be able to recall schools with a reputation for lack of discipline, lack of academic excellence, and lack of morale among the staff, which changed in a matter of two or three years to become models of excellence in every way because of the leadership and high standards of a new principal. On the other hand, there have been first class schools which have lapsed into mediocrity after a good principal was succeeded by one who was mediocre.

THE PRINCIPAL AND ACCOUNTABILITY

In my tenth and final report on the state of the University to the Faculty Association of The University of Alberta two years ago I cited "complexity of organization" as perhaps the most serious problem the university has faced as an institution. I said in part that:

Many of this faculty have toiled hard and long to design a system of checks and balances, largely through committees of all kinds, that should permit their colleagues to have a responsible voice in decision-making at all levels and on every conceivable subject. They have forged terms of reference, procedures, regulations, statutes, and by-laws until nothing can be done by way of decision or action without referring to a manual on how to do it...The result has been what someone has called "the constipation of action and the diarrhea of debate."
By way of solution I suggested that we should trust administrators. If you can't trust them they should not be appointed to administrative posts. If they demonstrate in office that they cannot be trusted, they should be fired or put in less responsible positions, but at least they should be chosen with care on the basis of proven competence and then given a chance to show what they can do, without having to spend endless hours at the frustrating task of consultations and leafing through manuals of procedures. They should be expected to have some powers of discretion and judgment, and should be permitted to exercise these powers within reasonable limits. This is surely at the heart of accountability.

ORDER AND DISCIPLINE

I shall instantly reveal how old-fashioned I am by saying that the first thing for which a principal should be accountable is discipline. I realize that those responsible for the administration of schools in the great cities of the United States where the pupils have often grown up in festering slums with no family life or parental guidance may have a hopeless task, but principals in Canadian schools do have a chance to develop good behaviour and good morale in their schools. For the vast majority of students, discipline cannot be achieved by force or threat of force. It must come from within as a result of pride of one's school, pride in one's class, and pride in one's self. That is the kind of spirit a principal can inculcate in his teachers and his students, but he must first feel that pride himself and demonstrate it at every opportunity. There will be a few who will not follow such a lead and there may be a very few for whom there is no answer but swift punishment or expulsion. Here, I think, the ultimate authority should be that of the principal, and he should be able to act without fear or favour.

I hasten to say that he should not act entirely alone in these extreme cases, but should have the advice of two or three teachers and the same number of students. If they endorse his proposed action, that should be the end of it; it should not go beyond the school. One of the worst features of so-called justice in these days is the endless avenues of appeals, the thousand tricks of legal quibbles and of rhetoric which deface the courts in so many countries. Another defect is the imbalance between the rights of society and the so-called rights of the individual. Our ideas of punishment have softened considerably over recent years and no one is more aware of this than rebellious students. If they are aware that they need have no fear of punishment, they will laugh at authority, infect other students with their attitudes, and weaken a principal's best efforts to run a good school.

With such authority in his hands, the principal has a great burden of responsibility, and appointments to these posts must be made with the utmost care. Once appointed, the principal must be made accountable for his decisions and actions and subject to demotion or dismissal if he cannot successfully defend them. Here we look to the good of the school, not the welfare of the individual, and I believe that this is the right approach.

Sometimes, of course, the principal may make a mistake; he would hardly be human otherwise. In such cases I hope he would have the grace to correct it, apologize if appropriate, and learn from his experience. If there is one trait of character he should not have, it is rigidity. A completely rigid structure is not as strong or as reliable as one which combines great strength with some flexibility. A strong principal must be accountable to society and he will not lose in dignity, but rather gain, if he makes an admission of his error and tries to correct it. Perhaps you will say that I am describing ideal situations and that in some schools the principal is, or can be, in hot water all the time, whether on matters of student dress, student behaviour in the school, student behaviour out of school, the problems of theft from lockers, smoking, or scores of other such things. Of course there are such schools, though they are not common in Canada - at least not yet. In such cases it is of special importance that the principal take the lead in setting and enforcing a high standard of behaviour for everyone in the school.

Standards of behaviour in schools vary widely as do the societies in which they are located. Some of you may recall the article by Anthony Lewis of the New York Times Service published in the Edmonton Journal of May 10th, 1971 entitled “Martin’s Dream World Outraged the Teacher.” Here was a case of what we would consider extreme punishment, a caning inflicted on a group of eight boys and girls about thirteen years of age in a secondary modern school in Croydon, England. One student rebelled. The charge concerned an essay assignment in which the essays handed in by these eight students were judged to be "obscene, flippant, and derisory." Martin Woodhams refused to accept his caning because in his mind there was nothing in his essay at all which could be criticized as obscene or flippant or derisory. The case came to the school's board of governors and the headmaster's action was supported by a vote of five to three. But somehow the story reached the press and Martin's essay was published. The general public came to the
student's defense and one newspaper described the punishment as "ludicrous." The headmaster took the position that he regarded Martin's essay as flippant rather than obscene, but that there was other misbehaviour involved as well.

The main point of this case is that the headmaster was probably put in a position from which he could not withdraw gracefully with his dignity and authority unimpaired. The other seven students involved, including the girls, had taken their canings and their cases were closed. Letting Martin off would have been impossible under the circumstances, but perhaps earlier in the affair the teacher, the headmaster, and perhaps some students, might have arrived at a decision in which all the factors were fully considered. Perhaps the boy had been "cheeky" and this may have been the major basis for his punishment. In any case the story made the front page of every newspaper in Britain. I am sure none of those in the Croydon School had any idea of the extent to which this case might become a cause célèbre, nor can we say what effect this may have for good or ill on regulations for student discipline in British Schools. It does remind one, however, of the lines of Kipling on Norman and Saxon:

The Saxon is not like us Normans.  
His manners are not so polite.  
But he never means anything serious  
till he talks about justice and right;  
When he stands like an ox on the furrow  
with his sullen set eyes on your own;  
And grumbles,"This isn't fair dealing,"  
my son, leave the Saxon alone.

CURRICULUM

An area in which there is a growing tendency for greater local authority in the school district and even in the individual school is that of the curriculum of studies. The position paper on the nature of the teaching profession presented at the Annual Representative Assembly of the Alberta Teachers Association this year noted "that teachers, like other professionals, are increasingly practicing within bureaucratic frameworks of rules and regulations, a setting not conducive to high quality teaching in Alberta schools" (The ATA News, May 10, 1971). There is no question but that greater freedom is being accorded to the teacher for preparing and carrying out his own curriculum of study — and this trend will almost certainly be extended. It will demand much greater responsibility on the part of the teacher and make it more important that schools appoint and retain those teachers who can demonstrate high competence in their professional duties.

Perhaps the trend to a greater local and regional autonomy can be seen also in the appointment of more consultants in subject areas such as social studies and mathematics, and in counselling and guidance. With services of this kind available, and with a general guide from the Department of Education and the universities about goals to be achieved in subject areas, the teacher should have greater scope for initiative and greater challenge. Thereof the principal in setting general standards of academic matters in his school will be greatly enhanced also.

STAFFING

I think it important to the success of such an academic system that the principal have the power to select his own staff, though I am fully aware of the difficulties this would entail especially in such large school systems as those in our major cities. I firmly believe that the best school is one that has the feeling of a kind of family structure in the best sense, one in which the principal and the teachers work together in a spirit of harmony which is reflected in good morale and effective teaching. In pursuing this idea I consulted a man who has had wide and successful experience in teaching and administration and has carefully studied practices elsewhere. He was convinced of the value of the principal being able to select his new staff and agreed that the principal should do so in consultation with the head of the department concerned. If he were looking for someone to teach English, he should consult with his senior English teacher. In this way the decision would be their own and each of them would have a feeling of commitment to the new teacher and a determination to make sure that the choice worked out well. If, on the other hand, the choice is made by a central office, this feeling of commitment cannot be present to an equal degree.

The question naturally arises whether such a policy is feasible; my informant believed it was possible for high schools, and with modification, for junior high and elementary schools as well. It works in Toronto school districts where principals and their associates interview teachers who are candidates for certain positions as advertised. Principals and department heads have a chance to meet candidates for positions in their schools — and vice versa. Perhaps a final decision cannot be made then and there but negotiations can at least be started, and a principal will have some idea whether the candidate will be appropriate for his school. Surely this is better for everyone involved than the alternative of the more or less arbitrary assignment of a new staff member by a central office.
NEW APPROACHES TO LEARNING

There are many new approaches to learning in the schools, nearly all of them designed to permit greater freedom on the part of the student to pursue his education in his own way. These recognize that children have a natural desire to learn, an inborn curiosity that makes them eager to find out about everything in their world. These recognize also that the old didactic approach to instruction according to a strict regimentation of students in forms or grades within a detailed curriculum leaves much to be desired, for it tends to produce a rebellious attitude on the part of many students and a hearty dislike for the process of learning. The professional education of teachers has been extended over several years in an attempt to provide them with greater understanding of the learning process and of the psychology of the child and the adolescent.

Some provincial jurisdictions in Canada are conservative in their approach to change, while others are more liberal. The same differences occur in school districts and even in individual schools. Because this is the case, it should be the principal's responsibility to achieve an approach to classroom teaching which all the teachers in his school can support willingly and enthusiastically. This must, of course, be worked out in consultation with his teaching colleagues. If a particular approach has been agreed upon, all the teachers should cooperate in adhering to it. If they cannot do so, they should seek transfer to another school where the pedagogical climate is more suitable to their tastes.

I understand that the school, in these matters, should be more or less an independent unit, but that it should also be consistent within itself. I think this is of the utmost importance, and the development of this pattern devolves on the principal. It is for this reason that his role and that of his senior colleagues is so important in dealing with staff changes.

These new approaches to education are not really new theories, but old theories in new situations. Anyone who has read, even casually, the comments of Plato and Aristotle, Quintilian and St. Augustine, Rousseau and Montessori, will understand what I mean. Furthermore, I should like to state my faith in the role of the teacher as educator. I have recently read "Nobody Can Teach Anybody Anything" by Dr. Wilfred Wees, and I strongly disagree with his basic premise and with most of the arguments he uses to support it. Children should be encouraged to use their curiosity and their initiative in pursuing the answers to their questions and they should be encouraged to do this in the classroom, but along with this free-ranging approach there must be a very important element of teaching and learning the fundamentals of reading, writing, arithmetic, and the general areas of the social studies, science, and literature. The exceptionally bright youngster, who is a natural student in the best sense of the term, might quickly master these fundamentals with little in the way of teaching in an organized curriculum, but the vast majority must have guidance, encouragement, and teaching from the teacher. To confine the teacher to the role of "resource person" is a reductio ad absurdum of the worst kind.

NEW INSTITUTIONAL MODELS

About twenty or more years ago I had the privilege of taking part in a series of evening classes for adults arranged by the late Leonard Bercuson. His main aim in life was to support the concept of what he called "The Lighted Schoolhouse." For several weeks one winter I spoke on current events to classes of adults in Eastglen on Monday evenings, Westglen on Tuesdays, and Garneau on Wednesdays, followed by about an hour of discussion with each class. From the comments I received I believe the "students" derived pleasure and profit from these evenings. The same is true of similar programs arranged by the University Department of Extension, but my point is that in a city as large as Edmonton, we might have adult education centres in far more communities than we do at present. This city has ten public high schools and about 160 schools at the elementary and junior high school level. Programs for adults are being carried on in six high schools, but if the need and the demand exist, if the instructors can be found, and if the costs can be met, there is scope for tremendous expansion. The Division of Extension Services of the Edmonton Public School Board is doing excellent work in providing for continuing education, but it can only go as far and as fast as the public demands and supports. However, as people have more leisure time on their hands due to a shorter work week and more labor and time-saving devices in the home, there is a growing desire for more information available through community groups, for more communication among neighbors, and for active participation rather than passive receptivity in such widely differing fields as sports and the knowledge of human affairs — political, economic, and social. Community leagues have contributed much in these areas, but the local school is becoming a valuable complement as well. These aspirations tend to become centered in the local school, rather than in the system as a whole, and it is on the school principal that leadership devolves.
The role of the community school is also changing in the whole pattern of education of children and adolescents. This change is extremely complex and grows out of a dissatisfaction with the existing pattern of standardized classroom instruction. In a recent article entitled “The Alternative to Schooling” (Saturday Review, June 16, 1971) Ivan Illich, Director of the Centre for Intercultural Documentation in Cuernavaca, Mexico, lists three proposals for new educational patterns:

- The reformation of the classroom within the school system; the dispersal of free schools throughout society; and the transformation of all society into one huge classroom. But these three approaches—the reformed classroom, the free school, and the worldwide classroom—represent three stages in a proposed escalation of education in which each step threatens more subtle and pervasive social control than the one it replaces.

Whether or not we can agree with his judgments, we must, I believe, accept his assessment of the trend he recognizes. The concept of a worldwide classroom is not likely to be realized in our time, if ever, though there already exist instances of students receiving their education at the secondary level by actively studying community problems at first hand rather than by reading about them in books or by studying them in the classroom. Such experiments as those being conducted in Philadelphia will be of interest to everyone concerned with education in large urban centers. The problems of logistics and control in such methods must be very large indeed, but experience may go a long way to solving them.

Free schools already exist in Canada, and their success or failure should be evident in a few years time. They are in most cases, but not all, a feature of the trend to communal living that is a product of our contemporary society. We should remember, however, that these are far from new but have occurred for hundreds of years in Europe and America as well as in other parts of the world. The parents usually carry on the instruction themselves, and the emphasis lies chiefly in avoiding anything that resembles the structured approach to education in the existing school system.

Another type of change of immediate concern to Canadians, is taking place at the present time in a number of cities in Alberta in both elementary and secondary schools. One example, that of Belgravia Elementary School, was described in The Edmonton Journal of June 22, 1971. The initiative came last summer from the parents of children attending the school who approached the public school board for permission to donate some of their talents to the school program. Approval was given under the board’s “continual instruction improvement program,” and about 75 parents with varying professional backgrounds spoke to the students on Friday afternoons. Others provided transportation on field trips. All became personally involved in contributing their services on a volunteer basis to the education of their children in such varied fields as pottery, music, pets, and folk dancing. This was a year of experimentation and the group hopes to make the program much more effective next year on the basis of the experience gained to far.

This is by no means an isolated case. The movement in this city has grown to such an extent that the Edmonton Public School Board appointed a co-ordinator of the parent involvement program which involves a total of 39 schools, almost 1000 parents, and some university students. There are plans to call on service organizations to supplement the supply of volunteer parents. Such developments make the local school and the education of children a genuine community enterprise, and lay a heavy burden on the principal. In an article entitled “The Lighted Schoolhouse is Not Enough” (The Community School and its Administration, March, 1971) Dr. Ernest O. Melby says:

I would make the principal the primary educational administrator. He would be responsible directly to the Superintendent. I would give him wide decision-making power, but I would select him because he is the kind of person who gives decision-making power to teachers and because of his capacity to work with people in and out of the school.

An interesting development at the M. E. Lazerte High School in northeast Edmonton was initiated by the M. E. Lazerte Day Care Association and M. E. Ladies. They prepared a brief for the School Board recommending that M. E. Lazerte be developed as a Community School in which parents, principally mothers, could pursue their own education while having their pre-school children looked after in a nursery. Girl students taking a course in child care would help a designated teacher to look after the children and provide instruction at the kindergarten level. Their brief states in part:

Since the community (the “students” in particular) is to reap the benefits of community schools, it stands to reason that the chief responsibilities should lie within the local community. This has two important
implications: first, the community needs more than an advisory capacity. It must have the power of decision-making. Secondly, there should be no additional financial burden on anyone outside the community. In fact, if the school is serving the community, there has got to be a large saving of money somewhere since learning is taking place outside the school facility more often than within, and school facilities presently available would be used to capacity. Members of the community would, in fact, function to a limited extent as teachers are now, which would enable our teachers to serve in a far more effective capacity as resources and advisors.

The recommendations growing out of this brief are of interest and demonstrate not only genuine concern on the part of the parents in the area, but a high degree of competence in arriving at sound proposals for the use of the facilities in M.E. Lazerte High School and other schools in the area.

The Extension Services Division of the Edmonton Public School Board prepared a report entitled The Community School: A Focus on Living (May, 1971). The report contains a total of 37 recommendations on the total concept of the community school and on all aspects of planning, organization, and administration of schools so designated. It recommends the involvement of other civic, provincial, and private agencies such as public libraries, social services, public health, and churches to make the school a genuine community centre for all aspects of education in the modern world. It also recommends decentralizing administration, including finance, so that the principal and his staff can plan to meet local interests and needs in collaboration with neighborhood advisory councils and with other professional workers in the community. Two specific recommendations are of special interest in the context of this paper:

13. That a factor in the selection of principals be the applicant's knowledge, understanding of, enthusiasm for and capability to accept the approach to education suggested by the community school concept.

14. That through in-service training programs, incumbent principals be made more aware of the community school concept and its potential.

**CONCLUSION**

These are exciting days in the field of education and changes of far-reaching effect are certain to take place. There will be resistance to these changes on the part of parents, teachers, administrators, school boards, and provincial Departments of Education. Such resistance may be due to apathy in certain cases, but it also may be due to a genuine belief that the present approach to education is more viable than the community school concept. It is important to retain a high degree of flexibility so that parents in any specific community may have the kind of program that they prefer, subject, of course, to the agreement of the teachers, the board, and the Department of Education. In any event the responsibilities hid on principals, superintendents and counsellors is a heavy one and they will have to be experts in public relations as well as in teaching and administration if they are to meet these responsibilities effectively. An exciting prospect lies ahead of us and I have every confidence that those responsible for the education of our children will meet the challenge well. Perhaps a quotation from James Russell Lowell will be appropriate in conclusion:

*New occasions teach new duties:
Time makes ancient good uncouth;
They must upward still, and onward,
Who would keep abreast of Truth.*
A SYSTEMS APPROACH TO ACCOUNTABILITY

H. I. HASTINGS

INTRODUCTION

In the recent rather tranquil past, educators indulged in rather leisurely speculations about change in education. Almost without challenge by taxpayers, large quantities of resources have been channelled into education. However, there appeared to be little evidence of increased productivity. This period of somnolence has abruptly ended. The sheer pressure of growing expectations for education, the increasing tax loads, the public impatience with and rejection of expertise, and finally, perhaps most important, a tougher attitude and a closer scrutiny by the various publics that demand performance, are forcing educators to come to grips with the neglected concept of accountability in education.

The importance of improving the ability of the schools to deliver quality education at a reasonable cost has become a central concern. Lessinger (1970) builds a case for accountability around "three basic rights": (1) that of a child to learn regardless of his initial interests, cultural background, homelife, or his mental ability; (2) that of the taxpayer to see tangible, objective results of his expenditures; and (3) that of the school to draw on a wide range of talents from all sectors of society to resolve social-educational problems.

ACCOUNTABILITY

Three concepts, accountability, and two means of achieving accountability, educational engineering, and performance contracting, suggest constructive approaches to helping systems achieve their educational promises. Accountability revives the commitment that every child shall learn, that every child has a right to learn, and that every child has a right to be taught what he needs to know in order to take a productive and rewarding part in our society (Lessinger, 1970).

Garve (1971:4) states that:

The concept of educational accountability is concerned basically with techniques to guarantee a certain level of pupil performance relative to specifically stated performance objectives with an accompanying efficient use of resources.

The concept of accountability means more than measuring and evaluating the outcomes of teaching. It includes a consideration of social problems, political processes, and educator competency. The relationship between educational administration, instruction and learning is many-faceted; inextricably intertwined are social, political and economic forces which affect the technical means of doing the educational job. Accountability is a matter of knowing, inventorying, and using cooperatively public, governmental, and professional resources. The responsibility for policy, organization, and management does not reside alone with the public at large, with any government agency, nor with the educator. The responsibility is a joint one. Educational accountability must provide decision-making opportunities for the public and the educator. Effective and relevant change in the educational enterprise can take place only through a broad base of involvement and participation. Operationally, this means greater localization of educational administration, differentiation of various functions, and the integration of new resources from the larger community to the task of improving learning. It also means making systematically recorded information about educational success, failure, and limits of expertise available for all to see.

Administrators, in particular, must be accountable for stating and explaining directly to their immediate publics the discharge of their responsibilities.

"Accountability as only a professional exercise is unworkable. Accountability as a combined community, educator, political exercise is workable" (Briner, 1969:5). The educational management process might well include the participation of various publics in determining priorities of educational needs, allocating resources, and in evaluation. The engineering aspect of accountability is the organizing of material and human resources to accomplish stated performance objectives. The accountability movement seems to center around the need to find ways to relate dollars to output (i.e., the cost of a unit of learning of defined quality and quantity in terms of dollars spent).

In applying the engineering process to
education, it is not proposed that schools treat students as unfinished products in a factory, but rather that we devote to the fashioning of educational programs at least as much imagination, skill, and discipline as we routinely apply to building a color TV set. Educational engineering is not an inhumane process. On the contrary, by guaranteeing performance its approach is positive. To label thousands of kids as failures, as we frequently do is to place them on the educational scrap heap. The concept of accountability means: (1) deciding what is going to be done; (2) doing it; and, (3) proving that you have done it.

In summary, accountability may be viewed as a public policy statement which may be expressed as a ratio of "actual performance" to "intended performance."

\[
\text{Accountability} = \frac{\text{Actual Performance}}{\text{Intended Performance}} = 1 \text{ (or more)}
\]

ACCOUNTABILITY IN EDUCATION

Pressures on the public educational system are intense and increasing at an exponential rate. The ever increasing numbers of pupils and the increasing expectations for education demand new organizational arrangements, new decision-making processes, changes in the behavior of both internal and external participants, and the improvement of services, programs, and products. The question of effectiveness and efficiency is paramount.

Traditions rather than current needs have determined the curriculum. Inflexible instructional pacing, often dictated by administrative convenience rather than by the actualities of student performance, must be strenuously questioned and challenged. Obsolete and inadequate approaches to learning must be eliminated. Limited resources must be used to produce viable and productive programs.

The fragmentation of resources and programs is a great deficiency in the present system. Most available programs are discrete entities, and not really the consequence of well-planned educational and manpower management systems. Accountability means more than the provision of such simple indices as numbers of dropouts and the results of reading tests. Evidence must be provided to indicate what specific educational results can be achieved with different groups of students with the expenditure of varying amounts of money. Educational accountability relates process, level of student performance, stated goals and objectives, and the use of resources.

Implementation of the concept of accountability may help to change the present mode of instruction which is concerned with covering courses of subject matter in fixed periods of time. By specifying our objectives, student unrest and boredom could be reduced. Also, more efficient use of time in developing skills could well mean more time for the arts and the humanities.

If a rational approach to accountability is to be realized, the criteria by which the schools will be assessed should be based on a systems approach. School systems must develop operations which relate outputs to clearly defined objectives, and which assess output in order to adjust the system. This approach produces a dynamic institution, and makes possible more relevant programs and more efficient use of resources. Initially, techniques of systems analysis and accountability development may need to concentrate primarily on small manageable units within the social-educational system. Inputs to large elements of the system are difficult to measure and to relate to performance objectives.

The electorate is entitled to complain about school deficiencies. It can help make a diagnosis by specifying the symptoms, and it can also suggest possible cures. However, it is the professional educator's task to assess demands for educational improvement and to produce effective programs. Unfortunately, educators have not placed sufficient emphasis upon proof of results.

Teaching is not yet a well-defined science. Educators must carefully systematize, define, and assess their needs, goals, performance objectives, programs, activities and outcomes with considerably more precision. Systems approaches, first applied to industry, require that standards of good practice are spelled out clearly. It may be possible that in the future educators will be able to apply standards of measure or moral principles so that an aggrieved student may well have legal recourse for not having been taught properly.

The present commitment to bring better educational opportuni-ties to all young Canadians is having an unprecedented impact on the educational establishment. Already, the proposals are beginning to mount: more remediation, more tutorials, more inservice training programs, more advanced technology, more demonstration projects--in short, more money for many of the same things we have been doing for the past ten years. Adding more resources alone will not solve our problems and will not provide an appropriate approach to accountability.

The conceptual model represents an attempt by the writer to view accountability in terms of a systems approach that includes the learning
management tools of: multi-level needs assessment, goals, performance objectives, programming, and evaluation (see Figure 1). It is necessary to establish the tools by which accountability can be determined: (1) the goals to be accomplished (performance objectives); (2) the methods for achieving predictable results (programs); (3) the methods for deciding among alternatives; (4) the methods for the management and control of educational operations; and (5) the methods (indicators) for ascertaining the degree and extent to which needs and associated objectives have been met.

The primary function of education is to bring about relevant learning, and the primary task of educators is learning management. The learning management job can be conceived as being the planning, organizing, designing, implementing and evaluating of learning situations and outcomes, and the making of necessary continuing revisions.

It is not uncommon for educators, erroneously, to determine HOW something should be accomplished before WHAT is to be accomplished has been adequately identified and defined. This may be due to the lack of a comprehensive model for program development in relation to changing conditions.

PLANNING FOR ACCOUNTABILITY

In planning for change and consequent management of learning, the following six-step system problem-solving model has been suggested:

(1) identification of the problem arising from needs;
(2) determination of alternative solutions;
(3) selection of a solution and related strategies and tools;
(4) implementation of a solution;
(5) determination of performance effectiveness;
(6) revision of previous inter-related steps as required.

Accountability becomes another bit of educational jargon unless it is translated into a well-developed plan for action. Well-planned changes are essential if a school system is to provide the best educational opportunities for its students.

A relatively simple and straightforward strategic plan for action, involving a multi-level systems approach, is shown in Figure 1.

The model provides an approach to identifying needs at all levels of the system (A-B-C-D) and not just primarily at "A-level" (the provision of programs and support services). The vertical dimension, an important aspect of the grid, consists of a multi-level (A-B-C-D) classification framework believed to represent an improved approach to planning and accountability. Needs assessment, the first critical step in the planning process, must be made more relevant and precise in order to ensure that the resources expended will be more responsive to underlying and emerging educational problems and not be mere aimless educational bandwagon trips. The model emphasizes the need for well-planned educational management and organization renewal. Without change at levels "D" and "C", attempts at bringing about behavioral change in the classroom are frequently frustrated. Needs assessment at all levels is a basic step toward achieving accountability.

The alignment of educational goals, performance objectives, and programs to the needs of the major educational sub-systems (indicated in the four levels) provides a new perspective to the decision-maker who must determine prior ties and develop effective and efficient educational plans.

The horizontal dimension of the model indicates five accounting processes. Each is described below.

Needs. The first step is to define the problems based upon identified needs. A NEED may be defined as the difference between "what is" and "what should be." A problem is defined when a particular difference or a set of differences has been selected for solution.

Goals. The second step is to formulate general statements regarding the nature of required programs and the allocation of resources.

Performance objectives. The next step is to define the required outcome or behavioral objectives. This step identifies precisely that for which the system can be held accountable. The particular outcomes are stated in measurable performance terms. It is necessary to state (a) what is to be done, (b) by whom it is to be done, (c) under what condition it is to be done, and (d) what criteria will be used to determine what is accomplished. While most discussions of behavioral objectives have dealt with pupil learning, performance criteria must be applied to other levels of activities as well. The process of accountability assumes the need to provide behavioral descriptions for the role of the teacher, the custodian, the principal, and the superintendent.

Program Components. Possible strategies and tools are identified for accomplishing the requirements. These include criteria for
# Planning Innovative Projects

<table>
<thead>
<tr>
<th>Multi-Level Classification</th>
<th>What?</th>
<th>How?</th>
<th>Performance Indicators</th>
</tr>
</thead>
<tbody>
<tr>
<td>D: Organization Renewal</td>
<td>Better</td>
<td></td>
<td></td>
</tr>
<tr>
<td>*Goal, Objective Setting</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>*Internal Organization</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>*External Federation Arrangements ( Consortia)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Co-operation With &amp; Among</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>*Private/ Public/Separate Schools</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>*Other School Jurisdictions</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>*Industry</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>*Community</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>*Community Colleges, Universities</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>C: Key Decision-Making Process Improvement</td>
<td>Improved</td>
<td></td>
<td></td>
</tr>
<tr>
<td>*Planning</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>*Operations</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>*Evaluation</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>*Process</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

For Management of:

* Finances/Budgeting
* Personnel
* Curriculum
* Facilities
* Program
## INDIVIDUAL BEHAVIOR DEVELOPMENT

<table>
<thead>
<tr>
<th><strong>INDIVIDUAL BEHAVIOR DEVELOPMENT</strong></th>
<th>External Participants</th>
<th>Industry, Family, Community (Minority populations, property owners, etc.) Information &amp; Participation Programs</th>
</tr>
</thead>
<tbody>
<tr>
<td>*Cognitive</td>
<td>*Affective</td>
<td>*Psychomotor</td>
</tr>
<tr>
<td><strong>Internal Participants</strong></td>
<td>Form/In service</td>
<td>Education of Educ. Management at all levels: School Board, Administration, Education Specialist, Teacher, Pupil, Custodian.</td>
</tr>
</tbody>
</table>

## IMPROVED SERVICES AND PRODUCTS

<table>
<thead>
<tr>
<th><strong>IMPROVED SERVICES AND PRODUCTS</strong></th>
<th>Indirect</th>
<th>Business Support &amp; Services</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Direct</td>
<td>Facilities, Equipment &amp; in support of educational plant &amp; learning process</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Instr. Support &amp; Services</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Program for Various Grade Levels &amp; Target Groups</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Organization</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Content</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Method</td>
</tr>
</tbody>
</table>
determining advantages and disadvantages of each strategy in relation to the required outcomes. These criteria may include cost-benefit or other effectiveness-efficiency indicators.

Performance indicators. The outcomes are evaluated to determine the extent to which performance objectives have been achieved. Data for terminal achievement (summative evaluation) and process utility (formative evaluation) are analyzed and used to determine required revisions in the program.

Performance objectives may be of two types: (1) criterion-referenced measurements, and (2) norm-referenced tests. The Independent Educational Audit Accomplishments (IEAA) is a managerial tool to assist quality control in providing an external evaluation of educational achievement. The position of the educational auditor is somewhat analogous to the fiscal auditor. Like the fiscal auditor, the educational auditor publicly reports educational results in factual, objective, and meaningful terms.

For example, at level "B", Individual Behavior Development (Figure 1), everything necessary must be done to provide relevant and effective in-service programs to change the performance of individuals or groups who are judged important to the success of the over-all program. Within the constraints of the system, the administrator must know in specific and measurable terms what the precise job-performance requirements are for each staff member. He must also have effective methods for determining when performance has not been satisfactory. The administrator has to be as empirical as possible in his approach in order to identity problems and deficiencies. He must have effective diagnostic and remedial methods available for trainees who are in difficulty. He must collect relevant data in order to revise, improve and maintain the learning process. A non-accountable approach can afford to ignore the job and make intuitive rather than empirically-based judgments about the design and performance of the system. The accountable approach can not. The first directive, for example, might state: "No person shall proceed from training to the job until there is complete and objective evidence that he can do the job according to established criteria." The supervision by objectives approach has been well explicated by Lucio and McNeil (1969). In order to assess accountability, the function of each component, in each of the four levels of the model must be specified.

Specification of standards and corrective feedbacks must take place at all four levels if accountability is to be achieved as an operational concept. "Seeing to it that specifications and quality control work at all levels is accountability" (Deterline, 1970:15).

IMPLEMENTING ACCOUNTABILITY

Educational accountability is a management concept. It is useful in persuading policy-makers at all levels to "hold the line" on spending until institutions can guarantee that additional funds result in improved performance. Schools and teachers are judged not by what they promise but how they perform. However, it is doubtful whether teachers can be held accountable when they have virtually no control over the kind and extent of resources made available to them. Accountability can be achieved only if outputs, on the basis of internal and external evaluation, are clearly in accord with intended accomplishment as agreed upon by the contractor (teaching staff or private firm) and the school board which represents the parents and school community. The contract must indicate who is responsible to whom and for what. The contract should also indicate the program components and resources by which the performance demands can be met.

Implementing accountability means that a public or private agency, entering into a contractual agreement to perform a service, will be held answerable for performing according to stipulated terms, within an established time period, with a stipulated use of resources, and according to defined performance standards. The contractee is required to keep accurate and precise records which become available for review. Penalties as well as rewards may be implied.

So that the accountability concept can operate at the level of the classroom, the school, or the school district, public consensus is needed regarding needs, goals, objectives, and resources. In summary, it is necessary that the school:

1. adopts an accountability policy and makes it public;
2. develops performance objectives for each program;
3. develops feedback systems (quality-control — to provide some assurance that the process is goal-directed);
4. has an independent educational audit;
5. sets aside at least one per cent of its budget for review and public reporting of its program.

Barro (1970) sees decentralizing of administrative decision-making from central office to the local school principal as an approach contributing to accountability. The shift of
Figure 2
ACCOUNTABILITY PARADIGM
(A Systems Approach)

STAGE I - Planning & Programming

INPUT EVALUATION

ASSESSING THE NEEDS AND ESTABLISHING PRIORITIES

STAGE II - Implementing Selected Strategies

ANALYZING & SELECTING ALTERNATIVE(S)

DEVELOPING EVALUATION DESIGN

DEVELOPING PERFORMANCE OBJECTIVES

DEVELOPING ALTERNATIVE STRATEGIES

PROCESS EVALUATION

PRODUCT EVALUATION

STAGE III - Providing Feedback on OUTPUT

- Analyze OUTPUT in terms of performance objectives
- Do both External and Internal Evaluation

CONTEXT EVALUATION

DEVELOPMENT

INPUT EVALUATION

CONSTRUCTING PERFORMANCE OBJECTIVES

DEVELOPING ALTERNATIVE STRATEGIES

Establish in terms of INPUTS - Constraints & Capabilities

External
1. Limited Subcontract
2. Total Prime Contract
3. Individual Contract
4. Voucher

Internal
1. Student - Teacher Contract
2. Collective Bargaining Contract
3. Internal Incentive Contract
4. Professional Growth

- Effectiveness
- Efficiency
- Risk
- Policies
- Norms, values

- Internal - IAA
- Cost Effectiveness
- Program Calendar
- PERT
- CPM

External
1. Limited Subcontract
2. Total Prime Contract
3. Individual Contract
4. Voucher

Internal
1. Student - Teacher Contract
2. Collective Bargaining Contract
3. Internal Incentive Contract
4. Professional Growth

- Effectiveness
- Efficiency
- Risk
- Policies
- Norms, values

- Internal - IAA
- Cost Effectiveness
- Program Calendar
- PERT
- CPM

T.C. Byrne
H.J. Hastings
authority should enhance greater professional responsiveness to local conditions and needs, and facilitate greater local initiative. It allows responsibility for results to be decentralized, and, in so doing, it provides the framework within which various performance incentives can be introduced. Accountability can include responsibility for both selecting and achieving relevant goals.

The paradigm (Figure 2) outlines a total system-action model of accountability. It extends the model in figure 1 in that it indicates in stages II and III the implementation of selected strategies and the provision of feedback on output.

Educational accountability can be promoted by educational engineering processes such as: limited sub-contracting REP; total prime contracting; voucher plans; student-teacher contracts; collective bargaining contracts; merit pay; and by becoming knowledgeable in educational planning, programing, budgeting, and evaluation.

PROBLEMS AND DISADVANTAGES IN APPLYING ACCOUNTABILITY CONCEPTS

Several problems and dangers are inherent in applying concepts of accountability. Some of these may be listed as follows:

1. More effective objective approaches to performance evaluation at all levels (Figure 1) must be developed and adopted if the educational process is to be improved. The quantitative, measurable side of performance could be emphasized to the exclusion or diminution of the personal, qualitative and humane side, as outcomes for the latter do not appear to be readily quantifiable. Priority might be placed on the cognitive skill areas which can be more easily measured. However, better measures of the affective domain may be developed.

2. Construction of performance objectives could be so time consuming that insufficient time is left for actual program planning and teaching.

3. There could be an attempt to hold professionals accountable for specified performance, when, in fact, various inputs are beyond their control. Learning is affected by a multitude of factors other than teacher competency.

4. Teachers could teach for tests which measure only a band of the objectives to which the school community subscribes. Some performance contracts with public schools have indicated a bias toward progress reflected on standardized achievement tests. Safeguards must be planned to preclude the contractor from teaching for such tests.

5. There is a danger of accepting the myth that all parties in the private sector are held accountable. This is not so and the expense in attempting to become totally accountable in education could be more than we can afford.

6. There is a concern that the movement to accountability may not be professionally based. Legislators are not justified in cutting grants just because the educational system cannot prove beyond a question of a doubt that every dollar has been used to its best advantage. The idea that education can solve all ills is a myth. Many problems are social problems which the schools are not equipped to deal with.

7. The accountability concept is good for education, but we should be aware of the pitfall of becoming the only public institution to which it is directed. All public institutions must be included.

8. Decision makers have a strong reluctance to delegate decision-making to those who probably will be held accountable. Without such delegation, responsibility cannot be demanded.

CONCLUSION

Teachers, administrators, and school boards are under pressure to show results. The accountability concept has potential for educators in thinking more precisely about educational outcomes. However, accountability in education cannot be measured as precisely as in business systems. Through cautious and careful planning, the implementation of the accountability concept may assist in the provision of solutions to some of the problems which face those involved in education.

BIBLIOGRAPHY


INTRODUCTION

It is somewhat trite to say that we are in the midst of an institutional crisis. All institutions, in the private and public sectors — from General Motors to federal penitentiaries — are experiencing either recurring manifestations of dissent or outright confrontations. Public schools have not been spared in this regard; in fact, internal and external pressures continue to grow. These pressures are often the result of social problems which society has dumped on the school's doorstep, too often warmly welcomed by zealous educators seeking to gain greater public endorsement and recognition. The educational system has been relatively successful but its failures are more evident to an increasingly critical public in search of a scapegoat. The "everything for everybody" concept of a school, often promulgated by well-meaning educators, sets the context for disillusionment. Parents, business in general, community influentials, and students are pointing accusing fingers at the schools for their failure to deliver the expected outcomes. It is becoming increasingly clear that wherever the fault lies, educators must take a stand — one that will enable them to be answerable with the kind of credibility that will reaffirm the public's commitment to education.

WHAT IS ACCOUNTABILITY?

Webster's New World Dictionary, defines accountability as "the condition of being accountable, liable or responsible." It is the now word and clearly the byword of all constituents within society.

The former associate commissioner of the U.S. Office of Education, Grant Venn, says that whereas schools were once accountable for selecting out students for the unskilled labour force, there is now little need for unskilled labour. "Suddenly," he says, "the situation is such that schools are expected to educate everyone to the point that he can be successful in a new kind of technological society" (Stocker, 1971).

Anna Hyer, director of NEA's technology division, defines accountability as a concept that involves "agreeing upon objectives, deciding upon the input to achieve the objectives, and measuring the output to see the degree to which the objectives have been met" (Stocker, 1971). Governor Russell Peterson of Delaware, chairman of the Education Commission of the States, says accountability involves making what the student learns rather than what the teacher teaches, the educational objective and thus the basis for measurement. Leon M. Lessinger, former associate commissioner for elementary and secondary education of the U.S. Office of Education, cites as an example of accountability the writing of a program objective in terms as specific as this: "Given three days and the resources of the library, the student completing this program will be able to write a 300 to 500 word set of specifications for constructing a model airplane that a workshop student could follow and build to specifications" (Stocker, 1971).

Accountability is a consumer-based notion which pervades North American society. Fiscal accountability is only part of educational accountability (Dyer, 1970). The broader concept is somewhat romanticized, as may be illustrated by the awe in which Ralph Nader, the consumer's watchdog, is held. Nader has become the champion of the little guy by his successful David and Goliath confrontations with big business, government, and other organizations characterizing modern-age bureaucracy. His effectiveness in making monolithic technocracies responsive and accountable has made him one of the most admired individuals in North America.

SOME APPROACHES TO ACCOUNTABILITY

Coping with accountability in organizational life has manifested itself in several ways. Basically, there are two categories: (1) those outside of the organization or institution, and, (2) those within the organization.

Approaches Outside the institution

Some approaches are advanced as alternatives to the traditional educational institution. The
most common of these are performance contracting and the voucher system.

**Performance contracting.** A performance contract is one in which the achievement of a task is specified in accordance with established criteria. Performance contractors are typically private organizations such as Behavioral Research Laboratories of Palo Alto, California (A.A.S.A., 1970). This private company is to take over the entire operation of an elementary school in Gary, Indiana, for four years.

The Gary school system is to pay Behavioral Research Laboratories $800 per student - the current cost of operating the school - to reorganize the all-black Banneker Elementary School, where student achievement has been two months to two years below grade level in several subjects.

The school is to be run by a manager, to whom a learning director is to report. B.R.L. is to hire a staff of thirty instructors and thirty paraprofessionals. Five instructors are to be designated as curriculum managers and specialists in the areas of reading and language arts, mathematics, social studies and foreign languages, science, and enrichment arts (arts, music, drama, and physical education). Individual instruction is to be stressed in all subject areas.

According to the agreement, B.R.L. guarantees that unless a student's achievement scores will be at or above the national grade-level norms in all basic curriculum areas, the fees paid for the child will be refunded. An independent agency is to evaluate the results after three years.

Typically, however, a performance contract does not assume full responsibility for the entire education of a child, but is limited to one or two subject areas, usually reading or mathematics. For instance, Project Read, perhaps the most common of performance contracts, states that the average rate of reading progress will be doubled for the students enrolled. Behavioral Research Laboratories, developers of Project Read, have submitted a proposal to the Edmonton Public and Separate School Boards.

This type of project is generally an adjunct to the existing reading program in that the fee levied (about $20.00 per student) covers preschool and in-service training of teachers, B.R.L. materials, consulting services, community information, and evaluation (usually a nationally standardized test given by an independent agency). Contracts are of one-year duration but can be renewed as agreed upon by both parties.

Although performance contracting in education is still in the early stages, the demand for such services is considerable. Unresponsive bureaucracies and volatile ghetto schools are two contributing factors in this movement. Furthermore, the success enjoyed by performance contractors is related in no small way to the singleness of purpose limited to highly visible areas such as reading and mathematics. To take the whole child over the entire elementary and secondary span of years would likely lower the success ratio.

**The voucher system.** This system is based entirely on the market mechanism of free choice by the individual consumer. In simple terms, every child gets a voucher which is worth a year's schooling. He (or his parent) redeems it at an institution of his choice. In theory, this includes not only a choice of the institution but also choice of the teacher. Consequently, schools and teachers may compete for students in the same way that Safeway of Canada competes for customers. Carrying the analogy further, only good schools would survive and poor schools would go bankrupt.

In the United States a number of federally financed experiments regarding the feasibility of voucher plans are in progress. These include grants to school districts such as Gary, Indiana; Seattle, Washington; and Alum Rock, California (Alkin, 1967). Economist Henry Levin was awarded a $40,700 Ford Foundation grant to examine the possible economic and fiscal effects of a voucher system and the educational benefits that may be derived by students of various classes and races (A.A.S.A., 1971). The Office of Economic Opportunity has approved a $100,000 study directed to the application of the voucher system to child day care centres.

**Approaches Within the Institution.** Several approaches within the educational organization are related to the accountability phenomenon. These approaches may be identified as humanistic, economic, managerial, and systems oriented.

The humanistic approach is based on the premise that humanizing the learning process will in effect remove the inequities in learning outcomes which underlie the cries for accountability.

The economic or cost-benefit approach focuses on the input-output equation and attempts one of two things:

1. to obtain maximum benefit at an acceptable level of cost (cost is fixed); or,
2. to obtain a set level of benefit at a minimum level of cost (performance is fixed).
The concept of cost-benefit analysis evolved from welfare economics. Its application to education in a purely quantitative sense (that is, dollars of input equals dollars of educational benefit) is virtually impossible to demonstrate.

The managerial approach is best typified by the management by objectives movement. This approach has been particularly effective in the industrial world where the product can be standardized. However, this approach is demonstrable in education only to the degree that specific objectives can be defined.

The systems approach in making an organization more effective is an attempt to encompass the humanistic, economic and management approaches by integrating in one system such interacting variables as context (the situation), input (what goes in), process (what goes on), and output (what is achieved) (Alkin, 1967).

One such system is known as PPBES (Planning, Programming, Budgeting, Evaluation System). A number of these systems are in circulation and although the emphasis differs, the essential components are the same (see references to Blaug, Fisher, Haggart Hartley, and others).

A PPBES System involves:
Planning — assessing, identifying of educational goals, and specifying performance-based objectives;
Programming — designing corresponding activities or programs and alternative methods for achieving objectives;
Budgeting — allocating funds on the basis of programs, and cost determination and analysis; and,
Evaluation — determining the effectiveness of programs in achieving specified objectives.

Inherent to an operating PPBES System are:
1. a standardized accounting system;
2. a program budget format;
3. an effective reporting system, locally and provincially;
4. increased analytic capability, locally and provincially; and
5. an improved data base facilitating better short and long-range planning.

These elements comprise the immediate objectives of the Provincial Program Accounting and Budgeting in Projects supervised by the PPBES Project staff of the Alberta Department of Education. The long-range objective of this project is the development of a base-line for the implementation of a full PPBES System by local boards — namely, assessment of needs, identification and specification of objectives, and so on. The ten pilot school systems engaged in the program accounting and budgeting project are testing the feasibility of the objectives specified above.

An essential aspect of the pilot project is the in-service training of all the publics involved; namely, teachers, building administrators, school system administrators and supervisors, school business officials, school board members, and various referent groups. Unless there is a reasonable level of understanding and consequent behavioral change, the system will not make any significant difference to the way in which schools operate. Furthermore, a PPBES System has direct implications for reform in educational decision-making. The system recognizes various levels of decision-making, each requiring its own set of decision-makers.

THE PRINCIPAL, ACCOUNTABILITY & PPBES

Any educator who has enjoyed several years of tenure as a school principal has experienced the phenomenon of accountability. The school principal is the bumping post position in education paralleling the line position of foreman in Etzioni's industrial organization model (Etzioni, 1962). On one side of the bumping post are vice-principals, department heads, teachers, students, parents, and referent groups while on the other there are central office supervisors, the superintendent, the school board, department of education officials, and the public at large.

"As the most visible manifestation of the school authorities," says Wildavsky (1970), "principals are easy to blame and to pillory in public." Since principals already are being held responsible according to vague standards and rules that tend to guarantee dissatisfaction, more clearly defined objectives shaped by principals would establish a more realistic basis for accountability. The school board's role should be one of monitoring the system of accountability and suggesting revisions to the parties concerned. On the other hand, the school board has areas of responsibility in which it is primarily accountable to its publics, such as the qualifications of its teaching staff and its transportation policies. A PPBES System facilitates the implementation of the accountability concept at all levels of decision-making.

The components of PPBES System in relation to the principal's role may be reviewed as follows:
Planning—Does the principal play a significant role in the determination of the needs of the students
and the community and in specifying educational goals (explicitly or implicitly) over a period of time?

**Programming** — Does the principal design and implement activities or programs which have stated or implied objectives?

**Budgeting** — Does the principal allocate resources (financial and non-financial) at the school level? Does he have any impact on the school or system budget?

**Evaluation** — Does the principal evaluate instructional and non-instructional programs in his school?

The answer to all of these questions is "yes," — so, what is new about PPBES? Nothing, except the refinement and integration of these components and extended participation in decision-making relating to these.

It becomes obvious that these functions cannot stop at the principal's office. The same cycle of decision-making must take place at other levels in the school, such as that of the department head, the department (heads and teachers), and the classroom (teacher and students). On the one hand, the central office personnel, and on the other, the community, impinge upon the decision-making process of the principal (Simms, 1960).

The typical organizational pyramid should not be viewed as symbolic of decision-making at the apex, but rather as a configuration representing the greater number of decisions to be made as one approaches the base of the pyramid. An organization requires fewer policy decisions than it does operational decisions — most of the latter are made in the schools.

**DECENTRALIZATION AND PPBES**

A fully operating PPBE System in education requires decentralization of decision-making in that the instructional process (how one teaches) is the prerogative of the teacher, that is, the pedagogical license of the professional. Whereas in the past factors outside the school building controlled the allocation of resources by curriculum or service area, or by subject, the present trend is to place fewer controls on expenditure items so long as the total is within the requisition control limit set by the board. This procedure must still meet fiduciary requirements (audit) and satisfy a reporting system that identifies actual expenditures and expenditure areas for planning, analysis and evaluation purposes.

The school board could choose to delegate to the principal the responsibility and authority of allocating the entire operational budget (including salaries) of his school. This would mean a shift from virtually complete centralization of power and accountability to that of a participatory decision model with commensurate accountability within defined limits. This modified collegial approach replaces the paternal hierarchical system which existed when teachers possessed neither the qualifications nor the desire to participate in decisions that affected them directly. This is no longer so. In fact, teacher militancy and student activism, on occasion strangely allied, pose new demands on principals.

If the principal opts for a participative approach to resource allocation decisions with built-in accountability, how would he proceed to prepare the school staff? What are the prerequisites for such a system? Can the components of PPBES be applied to the school level; that is, would needs assessment, goal specification, programming and generation of alternatives, cost-effectiveness analysis, and evaluation better rationalize educational decisions? Upon examining a new or existing program the following questions may apply: Is there a need for the program or service? Can this need be demonstrated? What are the objectives of the program? Can these be stated in performance terms? Can the program's relative effectiveness be demonstrated? What are the different approaches to this program that can be used, and what resources do those alternatives require? How effective is the existing program? What are the standards or criteria of effectiveness in performance terms? What evidence is there to support the stated value of a program?

The potential for rationalizing the merits of instructional programs is greater than generally held to be so. If teachers examine their work more analytically and critically, the process of doing so is likely to improve the quality of service rendered. Hence, the better the quality of service rendered, the easier it is to rationalize its worth. Ultimately, however, the goal is not merely to substantiate the importance of an educational service, but rather to make a larger contribution to the intellectual and personal-social development of pupils.

How can teachers and principals better rationalize their work? The ultimate criteria for assessing the effectiveness of any decision-making system in education is the degree of improvement in learning in relation to the resources allocated. Although certain economies and efficiencies can be effected outside of the classroom, instructional effectiveness is primarily classroom oriented; that
is, student learning is the "proof of the pudding." Specifically, the primary emphasis must dwell on the identification and specification of instructional objectives and the design and evaluation of instructional programs.

Objectives are in the broad sense - statements of value; in the narrow sense - benchmarks for performance or learning behavior (Kapfer, 1968). The process of setting instructional objectives follows the assessment of needs. The school principal and his staff are most closely attuned to student needs. With the assistance of professional consultation, they are best able to reflect on the total learning environment of the student. The principal and his staff are best able to operationalize programs derived from the examination of the needs assessment of pupils, the school, and the community.

Furthermore, the instructional staff must take the prime responsibility for the evaluation of instructional program objectives in the cognitive, affective and psychomotor domains (Kapfer, 1968; Dyer, 1970). The perspective for evaluation includes the consideration of both the instructional and non-instructional factors that affect learning behavior. To what extent can and should the school assume responsibility for personal and social problems? What is the role of other agencies in the community? These are questions to which the principal and his staff must address themselves also.

In summary, the role of the principal in a PPBE System in the instructional context is that of a facilitator in:

1. the specification of educational objectives pertaining to the intellectual and personal-social development of pupils, and assisting in the identification and specification of conditions and services that facilitate or impede pupil development; and,
2. the identification of indicators useful for the evaluation of existing programs and the development of evaluative criteria for new specified objectives.

A principal's training and experience should enable him to provide perspective and assistance in defining objectives and evaluating programs. Accountability, in its starkest form, merely asks the question, "How well are we doing?" -In simple terms, "What are our goals?" and "How well are we achieving them?"

A word of caution is in order. The needs, either covert or manifest, may determine the point of entry and the scope of the thrust. Since a fully operative PPBE System will require at least five years to implement, initial returns must be viewed realistically with an emphasis on long-range outcomes. To demonstrate the worth of educational programs empirically is not an impossible task. The place to start, then, is the examination of what is being done in relation to objectives held for existing programs.

**SUMMARY**

I have attempted to look at the role of the principal regarding accountability. The concept of accountability was examined and general approaches regarding its application have been outlined. Performance contracting and the voucher system were viewed as alternatives to the present educational system, and PPBES was viewed as an adaptation within the present system.

The role of the principal within PPBES and the implication of decentralization of decision-making were examined. The components of PPBES were related to the school level with the primary emphasis placed on objective setting and evaluation of educational programs.

I realize that I have by implication underscored the need for accountability in our schools. My purpose for doing so, however, differs from most of the critics who envision a hopeless situation. Although pessimism may be the order of the day, I feel that the great need is for realistic optimism. This is no time for imprecise-thinking "dogooders" to mouth slogans which comfort the uncommitted and pedagogically insecure within the educational force. Rather the time has come for hard-headed capable educators to take positive action. Rationality works in a number of directions: it exposes both strengths and weaknesses; it raises havoc with mythology and time-worn truisms; it can also upset the status quo and lower the level of "dogmatic" conviction.

I am confident that the school principal will help the school account effectively to all its publics, but most effectively to its most important client - the student.

**REFERENCES**


PROGRAM EVALUATION

D. FRIESEN

INTRODUCTION

Making judgments about the quality of a school program is a very common activity, an activity engaged in by many members and groups of society. If you ask any student, parent, teacher, administrator or anyone remotely associated with education what the program of a particular school is like, he will have a ready answer for you. He may describe the school program as being progressive, exciting, stimulating or innovative; he may describe it as one in which successful attempts are being made to help all the learners who are involved; or, he may point out serious problems of the school program. In recent years questions of quality and efficiency of school activities have been raised in increasing number by parents, ratepayers, professionals and students.

Clearly such evaluation is informal in nature; there is no careful collection of data, and there is no careful analysis of data to arrive at the conclusions which are offered so readily. The conclusions just emerge from a few dominant feelings about the school programs. The feelings, in turn, usually result from a few experiences directly encountered, or accepted through hearsay. Probably this type of evaluation has had more impact on schools and school programs than must formal evaluations that have been carried out.

There is no denying, though, that informal and global evaluations have not been limited to students and parents. The foremost critics of educational programs of the past two decades have based their condemnations of school programs on very meagre and fragmentary evidence. It is safe to say that their evaluations have usually been informal and supported by a selective screening and handling of the little data that has been made available to them. Frequently these self-named critics have missed their own philosophies with the evaluation, and as a result their evaluations are even more subjective than those of students and parents.

During the last few years a new attempt has been made to develop a more formal approach to the evaluation of school programs. There is growing support for the notion that educators must move toward a reduction of judgmental error and bias by developing a more scientific approach to the evaluation of what happens in schools.

IMPETUS FOR FORMAL EVALUATION OF SCHOOL PROGRAMS

Each era in education has its dominant motivating factors for education in general, and for evaluation of educational activities, in particular. The Eight Year Study carried on at the height of the progressive movement, illustrates this point well. The evaluation during this experiment was designed to assess the results of implementing a program for the development of the whole child. Some of the salient features of the program were the experience curriculum, the absence of prescribed textbooks, individualized instruction, variable groupings of students, the reduction of lecturing time, and the elimination of external examinations. It is interesting to note that the rather favourable evaluation of this program did not lead to its full scale adoption; in fact, it was discarded in favor of a more subject-centered program. There is every indication that even careful formal evaluation may not overcome informal judgments.

It appears that evaluation of school programs must be linked closely to goals or aims as they exist in society. As these goals, aims or emphases in society shift, schools may need to adapt in order to remain relevant and useful, and in order to obtain the needed support from society. The one facet, the evaluation of the effectiveness of the program, is not sufficient. It is also necessary to establish whether the program is relevant to society's goals.

Today's problems in education are enormous. In order that schools will be viewed favorably and receive the support they need, they will have to examine themselves carefully to see if they are moving toward goals that are socially acceptable and desirable. To this end there are at least three reasons why program evaluation has suddenly become important enough to merit much attention. This need has also raised the issue of developing formal evaluation procedures and designs.

1. Formal evaluation is essential for decision-making in the planning of school programs. Information beyond the informal feelings and biases must be collected, classified and readily available to those who decide. These decision-makers may be students, teachers, or
administrators. Stufflebeam (1969:52) explains this clearly when he says:

A Rationale

If decision makers are to make maximum, legitimate use of their opportunities, they must make sound decisions regarding the alternatives available to them. To do this, they must know what alternatives are available and be capable of making sound judgments about the relative merits of the alternatives. This requires access to relevant information. Decision makers should, therefore, maintain access to effective means for providing this evaluative information. Otherwise, their decisions are likely to be functions of many undesirable elements. Under the best of circumstances, judgmental processes are subject to human bias, prejudice, and vested interests. Also, there is frequently a tendency to over-depend upon personal experiences, hearsay evidence, and authoritative opinion; and, surely, all too many decisions are due to ignorance that viable alternatives exist.

Clearly, the quality of programs depends upon the quality of decisions in and about the programs; the quality of decisions depends upon decision makers' abilities to identify the alternatives which comprise decision situations and to make sound judgments of them; making sound judgments requires timely access to valid and reliable information pertaining to the alternatives; and the availability of such information requires systematic means to provide it. The processes necessary for providing this information for decision making collectively comprise the concept of evaluation.

2. Formal evaluation is also receiving increased support because of the expanding number of alternatives to traditional school practices. Most of these practices are still implemented or rejected on the basis of very informal judgments. It is essential that they be accompanied by a constant monitoring which will provide data for changing, for refinining, for accepting or rejecting the change. Unfortunately the means to carry out this monitoring are not clearly developed, but the beginnings are present. The object of the evaluation is to help teachers find out which innovations are paying off and which are not. One of the more difficult problems in this monitoring process is to establish criteria for measuring payoff. Regardless of the difficulties presented, the numerous changes in education provide an impetus for more formal approaches to evaluation of school programs.

3. The third motive for greater attention for formal evaluation of school programs originates to a much greater extent than the first two, from outside the school system. Recently this motive has been loosely subsumed under the title of accountability. This concept is rapidly replacing other motives for changing school programs. For this presentation it may suffice to say that, at this juncture in time, people are very much concerned with payoff. They want to see that the output in systems warrants the inputs. This feeling has spread rapidly through society, and has now made significant inroads into education.

It is not surprising therefore to find that governments, school boards, parents, and even students are beginning to raise questions on accountability. To whom are you accountable for your school program? Do parents and students have a right to receive answers to questions about the relationship of input to output in your schools and school systems? Do professionals have this right? Do taxpayers? Do governments? There is a growing belief that they have the right, and this belief is demonstrated in the increase in alternatives to the compulsory public schools as we know them. Illich (1970) refers to no schools as a viable alternative to schools. Others talk about the voucher system as an alternative where parents and students may choose the school that best meets their needs. Still others consider performance contracting as an alternative. It is interesting to note that each person who holds educators accountable will develop his own criteria and will develop these in his own informal way. Does this in itself pose problems? Will it affect what people are willing to accept as evidence of accountability?

The important consideration for this paper is that formal program evaluation is receiving much more attention because of the increasing need for information for planning programs, the need for monitoring innovations that are being tried, and the drive for accountability in education.

THE CURRENT STATE OF EVALUATION OF PROGRAMS

The Meaning and Purpose of Evaluation

The term evaluation can be defined without regard to the object under consideration. Stufflebeam (1969:53) describes evaluation as the "provision of information through formal means such as criteria, measurement, and statistics, to provide rational bases for making judgments which are inherent in decision situations." He defines
evaluation as "the science of providing information for decision making." This definition is accepted for the model of evaluation to be presented later.

The definition touches on both the purpose and the processes of evaluation. The purpose of program evaluation is expository in nature by providing information. Stake (1967:5) claims that for complete evaluation of educational programs two main kinds of data are collected:

1. the objective descriptions of goals, environments, personnel, methods and content, and outcomes; and,
2. personal judgments as to the quality of the appropriateness of those goals, environments, etc.

Both kinds of data should assist those concerned about the program to make better judgments or decisions.

Formal evaluation should not be confused with making judgments on the basis of the data collected. This judgment means the placing of value on parts or on all of the data. In the models of evaluation that are currently proposed, the concern is precisely at gathering the data that is needed for decision-makers.

Concepts in Program Evaluation

In order to develop a professional approach to evaluation, it is essential to examine some of the current concepts that are emerging in the field. Several of these are reviewed briefly below.

1. Intrinsic vs. Payoff Evaluation. Scriven (1967:55) points out that the evaluation of the teaching instrument itself, by examining such features as content, goals, attitudes, and the like, represents intrinsic evaluation. This approach is likely to be somewhat subjective in nature, but it still aims at obtaining data.

In contrast, payoff evaluation is the assessment or the study of the educational program on the student. Historically, payoff evaluation has been limited to the differences between pre- and post-tests. The concept of payoff evaluation may have to be extended to include the effects of the program not only for the student, but for society as well, and not only in the short term perspective.

2. The Roles and Goal of Evaluation. Consider Scriven's (1967:40-43) differentiation between the goal of evaluation and the roles of evaluation. The goal of evaluation is to obtain answers to the questions on educational programs. Which program is better with regard to desired output? The goal of evaluation is to determine the worth of something.

The evaluation roles refer to what you wish to do with the answers you obtain — your purpose in gathering data. Such roles might be to obtain information to assist in the improvement of programs, of teachers or of administrators. Another role could be simply the classification of a number of programs on over-all quality.

Clearly it is inappropriate in the light of these distinctions to focus on student performance alone when evaluating a program. Stake (1969:17) suggests that three questions should be asked before developing an evaluation plan:

a) What is the entity to be evaluated?
b) Whose standards will be used as reference marks?
c) What subsequent decisions can be anticipated?

3. Formative and Summative Evaluation. The purpose or role of evaluation has been further clarified by two concepts developed by Scriven (1967:42). Formative evaluation occurs during the development and improvement of programs. It is evaluation that occurs between the initial and adoption stages of program development. Summative evaluation is a sort of final evaluation of an educational program. It represents a gathering of information for continuance or discontinuance of a program, a textbook, a course of study, or a form of school organization for learning.

The lines of demarcation between the two forms are less clear than they seem, but the distinction can be helpful in organizing an evaluation program.

4. Objectives and Outcomes. Presumably in an ideal model of evaluation the degree of congruence of outcomes to objectives would provide a fairly accurate assessment of the quality of an educational program. This conviction has led to numerous statements on the necessity for developing specific behavioral objectives for all planned educational activities in schools. Bloom's (1956) Taxonomy of Educational Objectives is a good example. It is further argued that the measurement of success of a program is almost impossible if the objectives for it are not clearly spelled out. In a simple organizational model the rationale for explicit behavioral objectives may be perfectly justifiable and easily implemented. The school, however, is a complex organization with numerous ill-defined and constantly changing objectives. Too much concern with objectives may delay or prevent evaluation. For these reasons several concerns have been raised that need to be considered when drawing up a list of objectives for a unit, a course, or a program in education. Goodlad admits that "...a reaction has begun against specification of precise, behavior objectives..."
rediscovered and reinterpreted humanism are rubbing against each other abrasively," indicates the first dilemma.

On the one hand you have society's goals of efficiency and accountability, and on the other you have the individual's goals of freedom, creativity, and humanism.

The contradiction becomes even clearer as we examine values in society. We prize diversity in almost all areas, yet tend to develop common sets of objectives for all students in public schools.

(b) The purpose of objectives. The intended purpose of objectives is to define the learning task for the teacher and student. This definition will guide the decisions on content, experiences, and evaluation, and as such the objectives are essential.

There are unintended consequences of stated purposes of educational programs. Do clear-cut objectives reduce creativity in learning? Do they act as self-fulfilling prophecies which restrict the reach of the students in these programs? Should they be attainable or should they always be some - what beyond the achievement level of the learners? Do objectives embody the aspirations, needs and discontents of the society, of the individual or of all those involved? Taylor and Maguire (1966) have argued that objectives should originate from the values of the people involved, not just from the aims of the professional educators.

Stake (1970:182) maintains that objectives are high-value targets, targets that have high priority among many goals. There are many people who feel that values are difficult to put into words, and that attempts to do so are more hurtful than helpful. "If you are not part of the solution you are part of the problem" reflects this sentiment.

Evaluators need to be specific in what they are doing but they also need to be sensitive to the slowly emerging values. This is essential in order to remain relevant in education.

(c) The effect of clearly developing objectives has not been demonstrated. So far no evidence is present that teachers teach better when they state their objectives behaviorally.

(d) A great number of educational objectives are pursued simultaneously. Time and resources restrict educators to assign priorities and from spelling out all objectives behaviorally.

(e) Frequently, good teaching occurs when teachers depart from clearly specified objectives. Stake (1969:33) claims that "a skilled teacher will seize the opportunity to reconsider objectives" while teaching.

Recognition of these problems in drawing up educational objectives helps educators to realize the importance of developing a more complete model for evaluating the school program.

PROGRAM EVALUATION MODEL

Having examined briefly some of the major concepts in evaluation, we now turn to a model for program evaluation. This model relies heavily on that developed by Stake (1969:14-17) as well as on the rationale of Stufflebeam (1969:56-68).

Evaluation is seen primarily as the process of obtaining and using information for decision-making relating to school program. Four somewhat discrete stages of evaluation can be identified. They are context, input, transaction and product.

The context evaluation attempts to assess the preconditions and the needs existing in the situation. It raises issues, reveals problems, and sets limitations for the programming.

The input evaluation measures the system's capabilities and the available input in terms of strategies and resources. The evaluation will in this section assess the goals, the school organization, the physical plant, the instructional materials, curricular content, teacher characteristics, and student characteristics.

In the transaction or process phases of evaluation, the evaluator will examine such processes as communication, time utilization, sequencing of experiences, school climate, and leadership.

In the product evaluation phase the evaluator will look at student achievement, student attitudes, effects of the program on teachers, and the effects on the organization and beyond.

The model may be presented in simple form in the following table.

A SCHOOL PROGRAM EVALUATION MODEL
(Simplified)

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>situation needs</td>
<td>objectives</td>
<td>communication</td>
<td>student achievement</td>
</tr>
<tr>
<td>problems values</td>
<td>school organization</td>
<td>time organization</td>
<td>student attitudes</td>
</tr>
<tr>
<td>aims</td>
<td>physical plant</td>
<td>sequencing</td>
<td>effect on teachers</td>
</tr>
<tr>
<td></td>
<td>instructional materials</td>
<td>climate</td>
<td>effect on organization</td>
</tr>
<tr>
<td></td>
<td>curriculum content</td>
<td>leadership</td>
<td></td>
</tr>
<tr>
<td></td>
<td>teacher characteristics</td>
<td>morale</td>
<td></td>
</tr>
</tbody>
</table>
Most of the evaluation attempts in the past have focused primarily on student achievement outcomes. The proposed model suggests that the evaluation of educational programs must include other areas as well. Information must be obtained about the context, the inputs, and the transactions as well as the output. How else can the congruency be examined? Note also that each factor to the left constrains everything to its right.

At this stage two specific questions are suggested as central to the evaluation process. To what degree have the objectives been achieved as observed in the output? To what degree are the inputs and transactions appropriate to the aims and needs existing in the context?

**Congruency Evaluation**. First, the evaluator will examine the data to see if the observed data are congruent with the intended results, or to what degree they are congruent, or in which section they are least congruent. This will provide that needed information for decision-making in educational programs.

**Contingency Evaluation**. Second, the evaluator will examine the relationships between the outcomes and objectives in order to see if the intended inputs and transactions actually achieved the aims or met the needs of the situation. This calls for the reexamination of all the inputs and transactions mentioned in the model. The evaluator will examine such things as the adequacy of the objectives, curriculum, content, climate, leadership, attitudes of students, and attitudes of teachers.

**Measurement**. One of the more perplexing problems in the whole design is that of measurement. If evaluation is the science of providing information, it must provide data for each of the four sections in the model. This depends upon valid and reliable measurement.

The final section of this paper illustrates a few techniques, strategies, and methods that begin to shape what may be called the technology of evaluation.

**PLAN FOR PROGRAM EVALUATION**

The plan for program evaluation assumes a major role for the principal himself. Certain decisions may have to be made by him especially in the initial stages. In this paper however, the focus of the decisions will not be specified to clearly. The focus will be more on the practical application of the concepts presented to the school situation. The plan calls for a series of decisions as follows:

1. Decide what part of the program is to be evaluated. If you decide to evaluate the product, you need to decide whether student performance, student attitudes or teacher attitudes is your evaluation target. If you wish to focus on the transactions, you may wish to examine climate or leadership or communication. If you wish to examine the input you could use the objectives, or a textbook as target. Should you wish to examine some of the pre-conditions you might want to concentrate on dominant values or aims of education. On the other hand you might want to examine the total program, and as a result look at all four areas.

2. Decide on the roles and goal of the evaluation. Whether the type of evaluation is going to be summative or formative, intrinsic or payoff is important. Whether you intend to examine congruency of the intended and actual outcomes, or whether you wish to examine the efficacy of inputs and transactions to the needs and aims needs to be specified.

3. Decide who is going to be involved with the evaluation, and to what extent the participants will be involved. Clearly this decision requires careful study on the part of the evaluator or administrator. If outputs are chosen as the area of investigation, then students and teachers must be involved. Again if objectives are going to be examined more groups may need to be drawn in. However, if a textbook is to be evaluated the number of participants may be fewer.

Involvement of various groups and individuals requires careful preparation by the principal. How do you get the full support of parents, students, and teachers in an evaluation project?

4. How do you measure the important variables for the evaluation? How do you gather the information that is required? The task of measuring values, attitudes, objectives, and standards is difficult, yet not insurmountable. Measurement is crucial to evaluation. The principal who wants to design a plan for program evaluation must be able to suggest, have someone on staff to suggest, or have access to someone who can suggest, ways and means of measuring priorities, values, attitudes, judgments, and standards.

Four means of collecting information for program evaluation are gaining support in the literature. They are:

1. Professional judgment
2. Surveys using specially developed instruments:
   a. checklists
   b. rating scales
   c. semantic differential
   d. observation and interview
3. Professionally designed scales:
Once the information is analyzed and available, decisions can be made about the adequacy of programs and about changes to bring programs more in line with the aims and needs existing in the situation.

After all this has been done it is possible that the evaluation of the school program may still be primarily informal in nature but it will be based on somewhat more reliable and valid information. What is required to go beyond this stage is still a moot question.

There are educators and others who for various reasons point to a much greater need for evaluation of school programs in their entirety. The theory and methodology is beginning to be felt at the level of practice. It may be that the time is not too distant when each school system will appoint an evaluator to coordinate program evaluation. Program evaluation may be coming of age.

REFERENCES


CLINICAL SUPERVISION : THE PRINCIPAL'S ROLE

D. A. MacKAY

INTRODUCTION

This paper consists of three main elements: (a) a brief analysis of the possible roles of the school principal in evaluating teaching performance, (b) a presentation of the essential features of the process of clinical supervision, and, (c) a discussion of some of the issues and problems associated with the principal's involvement in various aspects of supervision. In no way does this purport to be an extensive analysis of evaluation of teaching as an administrative function. Instead, a fairly limited set of assumptions about the nature of the principal's role is presented; then one approach to the problem is discussed in some detail. Such basic questions as: Who should evaluate? What are the best techniques for evaluation? and, so on, are dealt with in an indirect way only, or, are included in one of the assumptions underlying the approach to supervision which is emphasized in this paper. In dealing with a complex problem in a very limited way, many important factors will be neglected; but the approach discussed here would seem to merit serious consideration as a valid and useful one for practitioners.

A PRINCIPAL'S ROLES

A Basic Assumption

Basic to the approach taken here is the assumption that some person or persons in a school must become involved in evaluation of classroom teaching. Evaluation in this context refers to both formative (for improvement) and summative (for final decisions) purposes of evaluation. The point is that some one should be involved; that is, the classroom walls do not constitute an impregnable barrier against "interference" or involvement by people other than the teacher and pupils inside the walls. There are, of course, serious questions stemming from this assumption. Some of these are as follows:

1. Should evaluation be carried out by some one resident full-time in the school, or should it be a central office function?
2. To what extent should colleague evaluation be built into the organization of the school?
3. What techniques for evaluation should be used?
4. Who should establish the criteria to be used for evaluating instruction?
5. Should pupils be involved in evaluating teachers?
6. What does one expect to achieve by engaging in evaluative activities in the first place?

As mentioned above, these questions will not be dealt with in any detail here. But what follows does, to some extent, indicate the direction of some recent thinking on this topic. To take the questions one at a time, the following points may be made:

1. Evaluation is probably best seen as a joint function for resident and central office supervisory personnel. A clear cut formal organizational distinction which prevents principals from being involved no matter what the situation is not really useful.
2. Evaluation by one's colleagues has long served important purposes in the traditional professions such as medicine. Introducing it to the organizational context where large numbers of professionals work as salaried members of a hierarchical organization presents problems. Yet there are indications from some research and development activities currently underway or completed that would support an increased commitment to colleague or self-evaluation of teaching.
3. While school systems unfortunately continue to rely heavily on such techniques as rating scales, there are appearing some promising new techniques which can assist an observer in obtaining an accurate and useful picture of what happens in a classroom. These techniques can be learned by teachers and supervisors and the traditional argument that there is no systematic way of observing classroom teaching is no longer valid.
4. The criteria for evaluating the results of instruction should be established jointly by teachers and supervisors. Moreover, provision can be made for the involvement of students and others.
5. Pupils, at appropriate stages of the supervisory process, may become involved in such activities as establishing the goals of instruction, and providing feedback data to teachers and, possibly, supervisors. A simplistic approach which turns over to pupils a tradition-bound approach to
evaluation does nothing more than change the who without affecting the techniques, the purposes, or the outcomes of the evaluation. As in other aspects of the debate as to who should evaluate, the emphasis is too often on the politics of evaluation rather than upon rationality or effectiveness of treatment.

The big question had to do with what would be evaluated. As a “trainer” or organizer of training in supervisory positions, evaluation may be viewed as part of a clinical process which emphasizes improvement of teaching so that a mediocre or adequate performance becomes a superior, or at least an improved performance. While none of these three purposes apparently contradict the others, one can order them in priority will indicate one’s philosophy of supervision, and will also affect how one behaves in organizing and carrying out the evaluative function. The assumption underlying the approach presented here is that the purpose of evaluation is to improve competence and that the other purpose of protecting education from incompetence or identifying suitable candidates for positions other than classroom teaching can and have interfered too often with achievement of this primary purpose. This is not to suggest that these other purposes are not legitimate. The point is that the purposes and results are different and that one should not try to achieve too many different things with any one supervisory activity.

Aspects of the Role

Before moving to the discussion of clinical supervision as such, it is possible to identify at least four ways in which a principal may be involved in the process of supervision:

1. As an active clinician; i.e. he or she visits classrooms, confers with and counsels teachers, and, in general, works as an evaluator.
2. As an organizer of a system of procedures which uses resources from within the school; e.g. collegial evaluation.
3. As a facilitator of the use of evaluators from outside the school; i.e. he arranges for consultative and other types of assistance from central office, other schools, the university, the teachers’ association, etc.
4. As a “trainer” or organizer of training in evaluative skills so that teachers themselves, as well as such persons as assistant principals and department heads can carry out the evaluative function in a reasonable and useful way.

It would not appear that these “roles” are an “all or nothing” matter. Rather, in a given situation a principal will emphasize one or another of these elements in his general role as administrator of the school. In the final part of this paper, some attention is given to what a suitable strategy would be in terms of emphasizing one or another of these roles.

CLINICAL SUPERVISION

Overview.

The approach to clinical supervision which is described here certainly does not originate with this paper. Nor, one suspects, is it the product of any one educational developer at any one point in time. In fact, it sums up or reconstructs much of what good practitioners of the art of supervision have been doing for some time. What a systematic analysis of the process enables one to do, however, is to communicate the nature of a general approach or set of procedures and it does provide the framework for developing and implementing procedures in a typical school situation. The best available single reference to clinical supervision is the book by that name written by Robert Goldhammer (1969). His involvement with a program at Harvard University enabled him to define and modify his thinking in the light of practical experience with the techniques described in this paper. Interestingly enough, his approach to supervision is a blend of traditional administrative skills in human relations, organization, and interpersonal communication, and the skills of the psychological counselor who works in the clinical setting in a counsellor-client relationship.

The cycle or process of clinical supervision comprises five stages:

1. The preobservation conference;
2. Observation of classroom teaching;
3. Analysis of the observed data and development of a strategy for the conference;
4. The conference between supervisor and teacher;
5. The post-conference at which supervisors analyze their own performance as supervisors.

In the discussion which follows the general terms “supervisor” and “teacher” will be used without coming to grips with questions about the principal’s involvement in the process.

The Preobservation Conference

A preobservation conference with the teacher is
required in order to achieve several goals:
(1) To establish rapport between teacher and supervisor. This is needed even if the two have worked together before. The simple human need to be relaxed before engaging in a demanding activity more than justifies this stage of the process.
(2) To clarify the objectives which the teacher has and the methods he will use to attain them. There is, of course, a good deal of research supporting the idea that when one has explicit goals, performance does usually improve. Moreover, a whole host of studies on role expectations suggests that, when supervisors and teachers are in agreement about goals and performances, various desirable outcomes are likely to result.

In simple terms, if teacher and supervisor do not arrive at a clear mutual understanding as to what the teacher will do and to what purpose, it will be patently unfair to permit the supervisor to find fault with the ends or means which he eventually observes unfolding in the classroom itself.
(3) To check through and, in a sense, rehearse, the lesson beforehand. This purpose may or may not be important in a given situation. If teacher and supervisor would like to check through procedures to any extent, the preobservation conference provides them with an opportunity to do so. For beginning teachers this may well be a very important purpose of the conference.

Observation of Classroom Teaching
The second stage in the cycle is actual observation of what happens in the classroom. If the supervisor does not obtain accurate data by visiting the classroom, he is in no position to help the teacher with classroom problems. In spite of the recent tradition in Canada of downplaying the utility of classroom visitation as part of the repertoire of supervisors, it still remains as one of the single most important elements of supervision. It has many drawbacks because of the rather high degree of reactivity it possesses as a measuring device. By reactive is meant the fact that the supervisory visit interferes to some extent with ongoing activities in the classroom; the supervisor is visible; he sits at the back of the room; he may be a stranger to the pupils, who probably have some generalized impression of what a supervisor is and does, and so on. Moreover, if the visits are of the "one-shot" variety, the reliability of the visit as a measuring stick is suspect. Finally, a teacher who would do so, can produce his or her one "good" lesson of the year and, thus, decrease the utility of a particular observation.

In spite of all these measurement problems, our present technology leaves us with the personal visit as the most easily available method for procuring natural data on teacher performance. Indirect measures do exist and should be used to advantage; but like many indirect or unobtrusive measures they have a fatal flaw from an administrator's point of view. That is, it is very difficult, and probably unethical, to make any serious decisions about personnel on the basis of information gained in indirect ways. For example, a casual walk down the corridor may give a supervisor an interesting sample of teacher performances in the school. If these observations prove reliable upon repetition of the casual walk-observation, the evidence is probably good. But, the point which one should make is that using this kind of information is, at best, very tricky. To shorten the argument and make the point, one may suggest that suspected criminals are protected from methods of collecting evidence which border on the techniques of espionage agents. Surely, one's professional colleagues in an educational enterprise should not be exposed to spying however meritorious and clean-handed the purposes of such scrutiny might be. No, if one wants to know what is happening in a classroom, one should, in the opinion of this writer, make a visit or a series of visits to the classroom with no disguises, no cover stories and no dissimulation. This is the only ethical way to gather data and it is the only way of providing a sound foundation for attempts to improve performance.

As mentioned earlier in this paper, one purpose of supervision may be to obtain evidence for getting rid of incompetent teachers. Again, the evidence should be gathered in an open, legitimate manner. But, since this paper is not intended to emphasize that particular and rather negative purpose of supervision, no more shall be said about it at this point in the discussion.

Analyzing data and preparing a strategy
The third stage is quite crucial to the success of the whole supervisory cycle. Assuming that fairly accurate observations were made during the visit, it still remains to select what aspects of the lesson ought to be discussed with the teacher and what sorts of suggestions for improvement should be made. There are, of course, many techniques for classroom observation (e.g. Flanders; Gallagher; etc.) which combine the observation and analysis parts of the supervisory cycle. If one uses such a technique, much of the analysis is predetermined by the selection of a particular system for observing behavior. Although such systems for observation are very helpful, one should be way
of having them become too restrictive upon the supervisor. Nevertheless, any system of observation implies restrictions in the scope of observation, and the number of variables to be observed. One would prefer a restrictive system even with its inherent dangers to a "seat-of-the-pants" approach wherein the supervisor relies on his faith in his own sensitivity. Such faith has contaminated supervision too often in the past; one would want to temper it with some structure and a common basis for communication with the person being supervised.

Several points can be made regarding the criteria which should be met when engaging in analysis and strategy development. The supervisor is, at this point, sifting through a lot of data in order to select the most important material and will then plan what his approach ought to be during the subsequent conference between himself and the teacher. What he might keep in mind as he makes his selection of observed items or patterns of behavior are the following criteria:

(1) Importance. That is, those patterns of behavior which stand out as being crucial to the success or failure of the lesson should be selected for discussion.

(2) Limited in number. That is, if the critical and important factors have been identified, only a small number should be selected for discussion. Because of time limitations during the conference and because teacher and supervisor can cope only with a limited number of things, a careful selection of a limited number of important topics must be made.

(3) Treatability. That is, the things to be discussed should be those which are more likely to be susceptible to attempts to obtain improvement. On the basis of his knowledge of the particular teacher or of teaching in general, the supervisor may acquire skills in identifying those behaviors which can be improved. There may well be patterns of behavior which are important; but which, because there is no way of changing them, the supervisor will not include in his strategy for the conference. This may seem to exemplify a defeatist attitude; but a more accurate description would be to call it a realistic attitude. The supervisor cannot "play God" and, in many instances, would do well to remain quiet about elements in the teacher's behavior which although not satisfactory, are unlikely to be improved.

The Conference

The whole process of clinical supervision reaches its climax during the conference. Here is where all of the efforts during the preobservation conference, the observation itself, and the analysis and strategy phase are put together in an attempt to give the teacher a sound basis for decision-making. If the conference enables the teacher to cross-validate and check out his perceptions of what went on in the classroom, it serves part of its purpose. In addition, it ought to suggest what elements of the situation and of teacher and pupil performance contributed to successes and failures.

Out of the interchange between teacher and supervisor might come a plan of attack on problems that lend themselves to some kind of solution. Agreement should be reached on what changes are to be made during the next lessons and these planned changes should become an important part of the preobservation conference which marks the beginning of the next round of the supervisory process.

The skills required by the supervisor during the conference are those of the personnel counsellor. Not only must he be a good listener; but he must have skill in communicating the results of his observation to the teacher. While one hopes that this feedback session will usually be non-threatening, it would be unrealistic to suggest that the feedback will always be of a positive, non-threatening nature. One of the greatest skills that a supervisor can rely upon during this phase is his ability to predict how a particular teacher is likely to respond to a particular kind of feedback. For an over-anxious teacher, almost any kind of feedback may be threatening; the fundamental question will be: How will the teacher react to feedback which he perceives as negative? If reactions in the past have been good, chances are good that negative feedback can be tolerated to some degree. If, however, there is a history of over-reaction to criticism, a supervisor may have to decide to remain silent about some aspects of observed teacher behavior.

Only extensive clinical practice in the conference situation can provide supervisors with the experience and skills needed. The educational supervisor who would plunge in unaided to his first supervisory conference is like a psychiatrist whose first clinical experience is acquired at the expense of his first paying patient. Human reactions are not easily predicted; the possible effects upon individual personality and performance of an untrained practitioner must never be under-rated by supervisors. To repeat something that the present writer has said on numerous other occasions: Just because the hierarchical organization requires administrators to "do" something is no guarantee that it can be done successfully.
The Post-Conference

In a situation where more than one supervisor is working, it is possible to organize the supervisory cycle so that supervisors are able to observe at least parts of their colleagues' performances as supervisors. When this is so, a post-conference provides opportunities for supervisors to evaluate critically one another's performances and to offer suggestions for improvement. If there is only one supervisor working in a given situation, the post-conference may take the form of an introspective review of one's own performance. One possibility is that the supervisor could ask the teacher to make some evaluative statements about his (the supervisor's) performance; but it is probably better to carry out this review in some other manner. In any case, the question which the supervisor should have before him at this point in the clinical process is: How did my behavior as a supervisor contribute to the professional growth of the teacher with whom I worked? If the answer is favorable, all is well. If the answer is unfavorable, there is always room for improvement and professional growth on the part of the supervisor himself.

SOME PROBLEMS AND AN APPROACH

In the first part of this paper reference was made to a fundamental assumption about the need to have some interaction between classroom teachers and some other professional observer of events in the classroom. Everything that followed that basic statement was designed to suggest a process which would guide this necessary interaction. A number of problems and questions were suggested at the outset and the brief description of the process itself implied that success in implementing clinical supervision is not going to be easy. To provide a single, summative statement which would capture all of the complexities associated with this matter is not really possible. What will be provided will fall far short of any ideal strategy. However, if one can fall back on the three criteria referred to earlier in the paper, perhaps a limited number of important issues which are susceptible to treatment by a school principal can be discussed.

To this end, a review of the possible roles of the principal may help. It was suggested earlier in this paper that he could play one of, or some combination, of the roles of: active clinician, organizer, facilitator, or trainer. It would seem that no principal should overlook the possibility of engaging in all of these activities. However, having said that, a note of caution should be sounded. Not all school administrators possess the skills or attributes which make good clinicians. Some of them are unlikely to be sensitive enough to individual, as opposed to organizational, needs to be successful counsellors. Moreover, their skills in observing classroom teaching may be severely limited especially if one introduces the factor of probable differences in subject area or grade level background within a school. Principals who lack skills should attempt to acquire them; but having failed to acquire them would be well advised to stay away from clinical supervision except insofar as they can play the other roles of organizer and facilitator.

One hopes that there are a good many school principals and, especially, candidates for such positions who could develop, to a reasonable level, the skills required to be clinical supervisors. Such principals should be identified or identify themselves immediately and begin the difficult task of changing the attitude of several generations of educators towards supervision. As clinicians, trainers, organizers, and facilitators, school principals are in a key position. They can help determine the success or failure of anyone's attempts to introduce developmental or formative evaluation to the area of supervisor-teacher interaction.

So far in this concluding argument, the apparent assumption has been that the principal has to rely on his own skills or the skills of those from outside the school in meeting the need for clinical supervision. That such is not really the case is indicated by the several references to his role as trainer and organizer. The point is that teachers themselves can acquire skills as clinicians which will enable them to interact, in the supervisory process, with their own colleagues. Opening up clinical supervision so that supervisor can mean a colleague teacher, increases the pool of talent enormously. It helps solve the problem of providing enough time so that every teacher can have enough supervision, and also gets at difficulties associated with differences between subject areas and across grade levels.

In many ways, this version of colleague supervision, which does not necessarily exclude hierarchical supervision by a principal or other formal position holders; is a closer approximation to professionalism than some of the more usual interpretations of that over-worked term. Unlike some of the popular versions of "self-evaluation," clinical supervision gets at the heart of the matter, that is, performance in the classroom. It provides for participation among colleagues with respect to the fundamental activities of the teaching profession. Participation in the direction and improvement of these fundamental activities is
surely more important than participation in decision-making about numerous environmental and organizational factors which, although important, are only peripheral to the teaching-learning process.

One hesitates to toss out challenges in the manner of a guest speaker at a high school graduation; but if challenge-tossing is acceptable, one can suggest to school principals and to senior administrators in school systems that the implementation of clinical supervision could mark a major shift in our thinking about the professional practice of supervision and of teaching.

REFERENCES
INTRODUCTION

Perhaps the point at which principals feel most keenly the responsibility of evaluation is at the classroom level. As soon as one mentions the word “accountability” the principal wonders about his accountability for what goes on in the classrooms with the question how to go about the business of placing a value upon the instructional efforts of his colleagues. He finds himself on the horns of that hoary dilemma that no “expert” has been able to resolve and that time and the changing structures of schools and school systems have not assuaged: the dilemma of acting in the dual capacity of instructional leader and evaluator.

Some take the view that it is impossible to operate in both of these ways, promptly dropping one role or the other, and since the evaluative role tends to be the more threatening and stressful of the two, it is the one that is usually sacrificed.

But the question whether the principal should be involved in evaluating the performance of teachers in his school is debatable only on the basis of a clear understanding of what is meant by “evaluating”. If an evaluation model such as that suggested by Friesen (1971) is adopted, it seems inescapable that the transactional or process stage must be dealt with; and, if the principal is to be involved in program evaluation then he is automatically involved in evaluation of process as well as the other stages of the model. Secondly, if the distinction between formative and summative evaluation (Scriven, 1967) is valid the former must be an integral part of any program for the improvement of instruction, an area which falls squarely within generally accepted notions of the principal’s function in the school.

PREMISES FOR EVALUATION OF TEACHING

The approaches to evaluation of classroom teaching discussed in the following pages are presented on the basis of three premises: (1) that the principal must be involved in evaluating teaching because it is central to any overall program evaluation; (2) that the problem of duality in the principal’s role can be solved by his engaging in formative rather than summative evaluation; and (3) that an “informational” definition of evaluation is accepted.

If there is misunderstanding about the second of these premises there will be difficulty with the evaluative task. When teachers perceive evaluation as a passing of judgment upon their merit as teachers, or worse still their worth as individuals, they will resent it and when principals feel that their task is to pass such judgment they will be threatened by the prospect and avoid the task. It is only when all participants in the evaluative function perceive it as a part of the continuous evolution and improvement of instruction that it can be effectively accomplished.

The third premise complements the second and focuses the attention of the evaluator on the collection of information upon which decisions can be based rather than on the assignment of value or merit.

EVALUATION PROBLEMS

Assuming, then, that evaluation in the classroom is based on the three premises suggested the following major questions arise:

1. What kinds of information are relevant?

There are at least three types of information that can be gathered in the classroom: each of them comprises a number of variables that might be observed, measured and compiled as data from which to draw conclusions and upon which to base decisions: (a) Teacher Information, (b) Student Information, (c) Interaction Information.

An examination of one model, devised by Biddle and Ellena (1964), shows the kinds of relationships that have been postulated between these variables. As shown in Figure 1, this model includes a number of contextual variables in addition to the three groups of variables mentioned above, and is typical of attempts that have been made to represent the areas in which information relevant to the effectiveness of instruction might be gathered.

The emphasis in the model seems to be on teacher information – three of the seven classes of
variables (III, IV and V) are concerned with
teachers and several of the variables within these
classes might be observed directly in classroom
situations. The model is presented here as a
framework within which to consider some
approaches to information gathering; but before
proceeding to outline these approaches a second
major question requires some comment:

2. What are the problems involved in collection
and use of information?

If it were a simple matter to take a model such
as the one shown in Figure 1, apply it to a given
situation, process the gathered information and
produce an evaluative decision, there would be no
further comment required on practical
approaches to evaluation. However, the
application of the model is made difficult and
complex, if not downright confusing, by several
problems.

Problem One. First there is the fact that research
has failed to discover reliable correlations between
teacher and interaction variables on the one hand
and student variables on the other. That is to say
that if we regard the student variables as outputs
(and after all what we are seeking to do in the
classroom is to change student behaviors) much of
the research of the last fifty or sixty years has
failed to give us reliable ways of predicting the
outputs.

Writers who review the extensive literature in
this field usually begin their reviews with
statements like the following:

After 40 years of research on teacher
effectiveness, one can point to few outcomes
that a superintendent of schools can safely
employ in hiring a teacher or granting him
tenure (Gage, 1963).

Various writers have drawn the following
conclusions:

Teaching methods do not seem to make
much difference . . . there is hardly any
evidence to favor one method over another.

Very little is known for certain . . . about
the reaction between teacher personality and
teacher effectiveness.

Until very recently, the approach to the
analysis of teacher-pupil and pupil-pupil
interaction . . . was, that of examining and
quantifying certain 'monadic' variables . . . the
examination of such variables has tended to be
unrewarding and sterile (Gage, 1963).

Byrne (1962) summarized the results of
research on teacher attributes as follows:

(1) There is no such thing as a universally
effective teacher;

(2) There is wide diversity in the concepts of
what constitutes a good teacher;

(3) The subjective judgments of the observer
are involved in every evaluation;

(4) There is no single trait that can be said to
be essential to good teaching;

(5) There has been increasing attention to
the classroom as a social system.

According to Gage (1963) the prevalence of
negative findings has caused some writers to
conclude that "practically nothing seems to make.

Figure 1. A seven-variable class model for teacher
effectiveness.
(Note: Variables listed in each class are examples.)
any difference in the effectiveness of instruction." Some have gone so far as to propound theories of "spontaneous schooling" which emphasize contextual or background variables as being dominant in accounting for any learning that takes place.

Problem Two. A second problem is posed by the difficulty in finding reliable measures of the three types of variables. We are all aware, for example, of the imperfection of student achievement tests. There is ample documentation of the fact that achievement test scores are of low reliability (they are inconsistent in their indication of what gains the pupil has made) and low validity (they don't give an accurate picture of what they purport to measure). So imperfect are these tests that there is a general disenchantment with them. We have gone from a position in which the results of an external exam were considered the criterion of teaching effectiveness, through a period of increasing doubt to a point where we have almost totally rejected pupil achievement tests as criteria of teacher effectiveness.

The problems of measuring teacher variables and interaction variables have perhaps been even greater—teacher attitude inventories have been developed but widely criticized and until fairly recently interaction measurement was entirely a subjective matter.

Problem Three. The two problems so far discussed have led to a third problem—namely the adoption of an intuitive approach to teacher evaluation. The necessity of making promotion decisions, severance and transfer decisions means that the problems of measurement cannot be used as an excuse to do no evaluation but they have been used as an excuse for us to fall back on a "seat-of-the-pants" kind of evaluation which takes the evaluator into the classroom at irregular intervals for indeterminate periods of time to observe unspecified phenomena.

Even when rating instruments are used they tend to concentrate on teacher variables only and the evaluator justifies his decisions on the basis of his experience—rather than on the basis of the data he has gathered.

This third problem is perhaps the most difficult of the three for some administrators to overcome. Not only have they adopted habits of evaluation that are inadequate but they are thoroughly convinced that there is no other way to go about the task. There is no way to overcome this "mindset" unless it can be shown that there are evaluative procedures that can be learned, and that do yield information about teachers, students and their interaction: information that is useful in reaching rational decisions about the quality of instruction.

EVALUATION APPROACHES

The need for such demonstration gives rise to another major question: In view of the kinds of information that are required and the problems involved in their collection, what approaches to instructional evaluation seem to be promising?

Expectations Approach

The first approach to be discussed is one which attempts to bring some order to the observation of some teacher properties and teacher behaviors (Sorensen and Gross, 1968). An essential feature of this approach is its recognition of the subjective element in teacher evaluation and its attempt to make allowance for it in the evaluative process. On the check-lists that are often used to aid administrators in their evaluation one finds items such as the following which have been adapted from a self-evaluation guide of the Alberta Teachers' Association (1965):

- Teacher maintains a dignified manner without being too formal.
- Teacher displays good taste in dress and grooming.
- Teacher uses mimeographed material in lieu of dictated notes or extensive material to be copied from the board.
- Teacher promptly corrects all assignments.
- Teacher is enthusiastic.
- Teacher uses audio-visual aids and illustrative material.
- Teacher arrives promptly and commences classes on time.

The list could be vastly extended by sampling items from the multitude of check lists and evaluation guides that have been devised. Everything from the teacher's dress and appearance to his punctuality, class discipline and lesson presentations, has been mentioned as having bearing upon his effectiveness as a teacher. It would be easy to challenge any of the items, but it is just as difficult to prove that they have no relevance to instructional effectiveness as it is to demonstrate that they do.

The basis of the approach suggested by Sorensen and Gross is that such items represent the various expectations of evaluators rather than a set of traits or attributes which are exhibited by good teachers:

If we cannot assume that the "good teacher"
is something “real” out there, but rather is relative to the values, expectations, and perceptions of the person evaluating him, then what needs to be predicted ... is not the way an individual will behave as a teacher but the way his behavior will be seen by the particular persons evaluating him. It would seem, therefore, that the first step in predicting teacher effectiveness is to spell out the nature of the role expectations which determine the responses of teacher evaluators (Sorenson and Gross, 1968:2).

Accordingly these writers have tried to isolate and categorize the various expectations that are held by evaluators. They suggest that there are two major groups of expectations: “Non-Instructional” and “Instructional,” each of which can be further subdivided into categories.

Non-instructional Expectations. The non-instructional categories of expectations are: (1) Relations with Super-ordinates; (2) Appearance and Manner and; (3) Order and Routine. An evaluator who has strong expectations in any of these categories will downgrade a teacher who does not meet those expectations no matter how trivial they may appear. To one evaluator sloppy dress and shaggy hair will be sufficient reason to rate a teacher as “poor” while by another evaluator these attributes will scarcely be noticed.

Instructional Expectations. The three major categories of instructional expectations delineated by Sorenson and Gross are: (1) Beliefs about Ends or Objectives; (2) Beliefs about Teaching Means or Methods; and (3) Beliefs about the Effects of Teacher Personality on Pupils. These categories in turn are divided into subcategories: beliefs about “ends” may be subject oriented, student oriented, or oriented towards the socialization of students; beliefs about “means” may favour either “didactic” or “discovery” approaches; while beliefs about personal influence of teachers may lean towards friendliness and “warmth” or towards aloofness and “coldness.” Thus an evaluator who believes that transmission of knowledge (subject matter) is the main end of education, and thinks that the best means of transmitting such knowledge is by “telling” the students, in an atmosphere that is formal and business-like and in which the teacher maintains a certain psychological distance between himself and his pupils, will rate a teacher quite differently from one who places student development, discovery learning approaches and friendliness higher on his scale of expectations.

Having isolated the various types of expectation held, the authors of this approach suggest that a primary task of evaluation should be to match teachers with judges “who are likely to value their characteristics” (Sorenson and Gross, 1968:15).

Although the approach has apparently been designed with the primary goal of improving rating techniques in teacher training institutions it has important implications for “field” evaluators. First there is the need for evaluators to be aware of the expectations with which they enter upon the evaluative task. The Sorenson and Gross approach offers a framework which could be most helpful in organizing and developing awareness of evaluative expectations. Second, because in the school situation it may be impossible to match teachers with evaluators, the model suggests that expectations of evaluators should be made explicit, developed and modified in consultation with teachers before evaluation begins. It emphasizes the point that the goals of evaluator and teacher may not be congruent and that an attempt should be made to find common ground before even formative decisions are made.

Student Variables Approach

The second approach to be discussed concerns the measurement of student variables. In the Biddle and Ellena model these variables are mainly in Class VII (Long Term Consequences), and the obvious way to measure them is by testing pupil achievement.

Some of the recommendations arising out of recent research and thinking about this area seem to be so obvious that it is incredible that they have been ignored for so long, and that they continue to be ignored in school testing programs. Glaser (1968), for example points out the need for:

1. The setting of behavioral objectives (the foreseeable outcomes of instruction must be described if they are to be measured);
2. Diagnosis of the initial or (entry) state of the learner; and,
3. Continuous assessment to develop what he calls “short-term histories” that are developed into long term histories and associated with this the use of measures devised by psychometricians.

Gagne (1968) has tackled the problem of measurement of learning outcomes from the point of view of a learning theorist and has provided some insights into the kinds of tests that are useful.

He suggests that the two problems in testing are those of:

Distinctiveness: What is being measured?
**Distortion:** How much of what is being measured is there?

For example, if we ask a class ten questions about the geography of Western Canada are we measuring retention, learning or transfer? If the questions are structured in a certain way it may be any of the three. There are promising developments in psychometrics that might enable us to know what we have and how much there is of it.

In terms of practical approaches to evaluation these developments need to be built into student achievement testing. The evaluator who wishes to use information about change in students as one of the bases of his decisions must be sure that change has in fact been measured. There is need for much more detailed record keeping and for the development of criterion referenced testing (that is: testing which measures the student's performance against a pre-determined standard rather than against other students) if useful information about student variables is to be available for evaluative decision making.

**Interaction Approach**

A third approach which is yielding profitable insights into the collection of information about teacher/student interaction (Biddie and Ellena's Class I and Class VI variables) is the practice of various models of "interaction analysis."

These models are simply systematic ways of observing and recording group behaviour, but the amount of training and practice required to master their intricacies has perhaps inhibited their general usage in the classroom. Some people, too, are wary of the claims made for interaction analysis and of the degree of precision to which some models pretend:

In recent years, the sophistication with which observers have attacked classroom problems is almost frightening. Observation schemes and explanatory constructs have become so multi-dimensional that the classroom observer may soon be forced to choose among several hundred descriptive dimensions every few multi-seconds (Popham, 1968).

The danger of amateurism is real and there is need for caution in the application of this form of analysis. However, it has some insights to offer the evaluator particularly in sensitizing him to the need for periodic observation and to the various types of classroom behaviour which might otherwise be overlooked. The ten categories of analysis propounded by Flanders (1961), for example, indicate things which an evaluator might be alert to and seek to observe systematically in his classroom visits.

**Teacher Talk**

**Responses**

1. Accepts feeling tone of students
2. Praises or encourages
3. Accepts or uses ideas of students
4. Asks questions

**Initiation**

5. Lecturing
6. Giving directions
7. Criticizing a justifying authority

**Student Talk**

**Response**

8. Student talk-response

**Initiation**

9. Student-talk-initiation
10. Silence or confusion

In the preceding discussion approaches to the collection of useful information about teachers, students and the interaction between them in the classroom, have been briefly outlined and their possible applications in evaluative situations suggested. The problem of relating the variables, however, still looms large. It is obviously pointless to develop sophisticated and highly accurate measures of the three sets of variables if we can find no significant relationships among them. Gage (1963) for one rejects the view that if there is a relationship it is inscrutable. He suggests three broad relationships that are well documented by research evidence.

1. There is a positive relationship between a dimension of teacher behaviors and attitudes that we might call "warmth" and pupil achievement and positive regard for the teacher.
2. There is a positive relationship between "the guided discovery method" or indirectness in teaching and pupil achievement.
3. There is a positive relationship between the teacher's "learning structure" or "cognitive organization" and pupil achievement and understanding.

**CONCLUSION**

The following six points are offered by way of conclusion. They are consistent with the conclusions drawn by theorists and researchers in the field of evaluation and provide a sound basis upon which a practitioner might begin to build his own approach.

1. There is work being done which holds promise of eventually solving some of the major
problems of assisting teaching performance. The findings, though by no means complete, can already be applied to some extent.

(2) By and large we are still at the "intuitive stage." In a recent National Education Association (1969) survey of 213 school districts, in the United States, enrolling 16,000 or more pupils, only eight reported any setting of performance goals by both evaluator and teacher in conference before the evaluation.

Over 50 per cent of the 213 districts gave the principal the sole responsibility of evaluation; in the others he was assisted by other building administrators.

(3) Teacher evaluation cannot safely ignore any of the three sets of variables that have been described. "Product" or "outcome" measurement in the form of student growth or change must be measured and related to the other variables.

(4) Classroom observations need to be structured in some way so the data—not just impressions—are collected.

(5) Teacher evaluation should be "formative"—(designed to improve and develop the teacher's skills and effectiveness) rather than "summative" (designed to pass final judgment on his capacity as a teacher).

(6) The first step in any evaluative procedure should be the establishment of objectives and this is particularly so in teacher evaluation; because of the wide variety of expectations that exist for teacher behavior this step is vital and should involve the teacher as well as the evaluator.

REFERENCES


TEAM-WORK WITHIN THE SCHOOL

C. SAFRAN

INTRODUCTION

To follow the direction that this paper presents, one must understand the changing role of society and its aspirations or lack thereof. Much of the background material with respect to pressures of society are gleaned from an earlier article.*

So many statements have been subscribed to by leading educators, that we are faced with a plethora of statements "full of sound and fury" and signifying either a complete revolution in Education or inevitable decay. It has become popular to postulate educational change based on increased technological advancements, community pressures, and the different value orientations of our youth. Accountability and the pressures of society accelerate our desires to "get on the bandwagon" and trumpet inevitable doom for our schools, unless drastic surgery is performed on all our educational schemes.

Attitudes towards authority are changing rapidly under the guise of participatory democracy - there is a current belief that no one should have the right to control, or to command or to determine the life styles of individuals. Therefore, there is the belief that authority must rest with the group and that by means of discussion and consultative techniques the group aids the determination of policy and direction. Because of this change we now see a growing challenge to the teacher in the classroom and the policeman on the street and the cleric in his pulpit, and eventually to all aspects of "big business" and free enterprise.

Dissent has a tremendous value. Dissent can stir the "dying embers" of a supposedly traditional educational system. Yet dissent must have some direction and with dissent must come the implied inference that responsibility has a "hand to play" in the game.

Obviously the role of counselling, guidance, administration and team-work in the schools in this "super-heated" atmosphere must change to be in consonance with the times.

In this rapidly changing world an individual must learn to cope with stressful situations if mental health is to be maintained. One of these rapid changes lies in the fact that the educational system is being revised. No one can conceivably object to the principles of "continuous progress" or individualized instruction in education. The danger may be that one may overemphasize a continuity of success without interjecting some failure. How does one learn without failure? Is this not "part and parcel" of the implication of feedback? If one has constant success, how does one really know whether one can cope with any type of failure? This rapidly changing world as enunciated earlier is replete with failure as well as success. However, let one hasten to add before accusations are levelled, that the author does not agree with a repetitive failure or constant frustration which may be more debilitating and stultifying than any other action in the learning process.

PRESSURES ON THE SCHOOL

Accountability. In the changing educational face of the 70's one detects greater and greater pressures on the schools, these pressures on education are becoming so traumatic that there must be a breakdown somewhere, unless we are prepared to face them with a planned attack. What are some of these pressures? Firstly, the term "Accountability" has rapidly come to the fore. The business man is really not interested in the counsellor's statement: "I am helping this child to grow so that he will reach his maximum potential socially, emotionally and educationally." He would like to know exactly what you mean by growth. He wants this "growth business" spelled out in units. Did he grow two inches in height? - has he now 78% more emotional stability? has he now developed 37 1/2% more social maturity? These are the answers he is searching for. You, as a teacher or counsellor, will then hasten to reassure him that you cannot "spell out" these growth matters in increments, but really growth is taking place. This is not enough accountability and will mean that we had better learn to "spell out" our definitions rather clearly. The new term PPBES (planning, programming, budgeting, evaluating systems) will be forcing educators to think in terms of objectives (clearly defined), alternatives to reach these objectives, and the cost factors involved.
Community Influences. A second pressure which is extremely powerful is the new "community influence." In many respects the slogan of "participatory democracy" is closely involved with this area. All who are affected by a certain decision should have the opportunity of participating in this decision. Obviously the community is greatly affected by educational decisions and should therefore have its say. There may be some danger in defining the "real" community, since a few people act as the spokesmen and when the total community is polled on a decision, they are not even aware of all the implications. The trend today is towards "community centred" schools and no one can deny that the "community" has the right to participate in the "decision-making" process, provided also it is prepared to accept a measure of responsibility for the decision.

Student Protest. A third force is the growing strength of "student protest" movements. Terms such as "alienation," "generation gap" and "participatory democracy" are bandied about indiscriminately. Students are demanding a say in curriculum and other faculty and administrative decisions. "What is taught," and "how it is taught," have become vital issues to students in the university and in the secondary school. This influence is now filtering into the junior high school or middle school levels. Efforts are being made to democratize the fairly rigid authoritarian structures that the school systems have been. Students with changing value systems have every right to participate in the decision-making process, provided they are ready to accept a measure of responsibility for the community. It is still difficult, however, for students to maintain a clear parity in "decision-making" on curricular and functional matters which affect the schools because their experience must be weighted against the expertise of scholars in the field.

Urbanization. A fourth force is the terrifying growth of urbanization. No longer do we speak of the metropolis, now we even postulate the megalopolis, a gigantic, heartless, impersonal environment, removing the very freedoms of privacy and isolation that have dominated our vistas for centuries. Increased urbanization will have a tremendous impact on education. The very rules and boundaries of educational thought must be expanded to cope with the pressures of the change from the pastoral past to the shattering pace of the future.

Technological Changes. A fifth influence, obviously, will be improved and increased technical and scientific advances, which, in many ways, can be of great benefit to the educator and yet in other ways may constitute threat. The movement from "automation to cybernetics"-"soft-ware to hardware"-"T.V. to the multi-media" approach will improve the means of storing and disseminating educational information. Yet the interaction between teacher and pupil and the accompanying feedback will still remain an integral part of our educational system.

We have postulated five forces that are affecting the schools and educational change in the 70's. There are many more which could be mentioned and some others obviously will gain greater significance in the next decade. These particular contributing factors have been mentioned because every educator is bombarded by these facts.

TEAM-WORK WITHIN THE SCHOOL

The counsellor, teacher and principal must have a plan or rationale to cope with the changing forces and the changing face of education in the 70's. The one clear factor which emerges at the present is the aspect of "confrontation." We live in a volatile, turbulent time. Society has abrogated to the schools certain responsibilities, but it does not stop there. It now wishes to foist more responsibility on the educator and the school. If the school has not responded as rapidly or as well as society has demanded, then "Education" is said to be at fault. Confrontation is all around us. Note carefully now "Education" is always one of the partners in the confrontation. We have confrontation between the "Community and Education," we have confrontation between "Students and Education," we have confrontation between "Business and Education," we have confrontation between "Urbanization and Education." Education is always involved. Perhaps with "tongue in cheek" one might postulate that the educator suffers from a "masochistic" or "self-flagellating" syndrome, but always he is the one involved in the struggle or confrontation and with "bowed" and "bloody" head is prepared to face his accusers.

Obviously many educators in the past have postulated plans for "team-work" to cope with existing personnel and educational needs. Administrators have coined the terms "leadership and climate." Counsellors speak of "warmth and empathy."

So what else is new?

Team-work in the schools now must countenance the changing climate within which we, as educators, perform. Being aware of external and internal pressures is insufficient unless we develop a rationale to cope with these changes.

In general if one accepts my premise and
rationale one detects a further dimension in the “team-work” aspect. One now sees that the community or members thereof, become important elements in the school sphere. The community, the counsellor, the teacher and the principal are the key components to the mix—all working for the benefit of the child.

Let us then look at the expectations we hold for each of these three bodies working within and for the school.

The Counsellor

The counsellor must contribute directly to the purposes of the school in helping students maximize educational benefits. He does this essentially by helping students:

(a) achieve smooth transition from a fairly immature infantile stage to “a reaching towards adulthood;”

(b) achieve techniques of “decision-making” for educational and life-long planning based on a theory of cutting down “risks of error;”

(c) achieve control of emotional upheavals within oneself so the benefits of an education become truly apparent; and,

(d) achieve the ability to adjust to a changing world so that one can become a contributing member to society.

To do this the counsellor must work directly with teachers, principals and members of the community so that transition and change are not debilitating experiences. More and more he must develop a knowledge of social psychology, the broad spectrum of needs within his own educational community and the needs of his fellow workers. Perception becomes a key word in his case.

The Principal

The Principal is the recognized educational leader in his school. He must see his school not only as a microcosm of life but rather as life itself. He must feel that the school and the community must “mesh gears” in order to maximize the educational benefits for young people in his charge. The principal can accomplish these ends by helping:

(a) teachers feel that there is a great deal of trust between colleagues in the school;

(b) counsellors and teachers feel that they will have consistent and constant support when merited;

(c) community members feel that they are part of the team and yet be prepared to “speak up” for the benefits of the child and his school staff if plagued with undue censure; and,

(d) senior administrators feel that the “ship is in good hands” and that if necessary the school’s budget and staffing can be decentralized without undue hardship.

The Community

The community pressures in the western educational world will become much stronger in the 70’s. The community wishes to be involved and wishes to participate in the education of its children. The community too can assist students to grow to their full potential by:

(a) participating in a whole-hearted fashion with educational personnel in innovative projects, curriculum planning, lending resource people and “swinging open” the doors of outside resources to the schools;

(b) accepting a shared responsibility with school personnel for those educational aspects which are good as well as for those that are bad;

(c) being accountable as are the schools for “crisis situations” which must of necessity’s sake occur in the educational system; and,

(d) treating educational personnel as truly “professional” and recognizing the expertise that the principal, counsellor and teacher bring to bear on the educational process.

Team-work in the 70’s will only truly be accomplished if the above mentioned personnel are prepared to trust each other, to act responsibly for each other, and to attain empathy one with the other.
DIFFERENTIATED INSTRUCTION - "THEORY" AND PRACTICES

JOHN O. FRITZ

In the spring of 1969 the Alberta Human Resources Research Council initiated a baseline study of individualization practices in an attempt to document recent efforts of schools to accommodate the learner more effectively. Early explorations revealed that these efforts to establish more appropriate learning conditions for each youngster were represented by a wide and diverse array of teacher practices, differentiated programs and school approaches. Yet it was undeniable that the struggle to "individualize instruction" was no mere foray into yet another school innovation but represented a determined commitment of practitioners to close the pedagogical gap between individual learner needs and the group-based instructional practices still prevalent in most schools today. And this determined effort has all the earmarks of a significant "movement" in schooling that is likely to dominate the educational scene throughout the seventies.

SOURCES OF THE INDIVIDUALIZATION MOVEMENT

Any movement, however, gains impetus and inducement from powerful sources. We can identify at least four such significant origins which have inspired and are sustaining present school efforts to individualize instruction:

1. Significant differences in individual characteristics of learners are empirically well established and the existence of which has long been acknowledged by practicing educators (Anastasi, 1965). This fact of learner differences has been solidly documented for decades now. Yet the circumstances in most schools continue to lock teachers and learners into often ineffectual group- or class-based instructional procedures.

2. A second development is found in the evolution of instructional technology and newer media. These communications devices have become increasingly individual learner oriented. This development, involving the self-directed usage of cassette tape recordings, filmstrips, and related programmed devices has offered schools a considerably enlarged capability for individualizing learning.

3. The third factor is a composite array of organizational changes that provide an important facilitative function in operationalizing more varied instructional and more flexible institutional procedures. Such innovations as team teaching, continuous progress, teacher aides, learning resources centres and the like have already been incorporated into some of the more sophisticated individualization systems as critical components.

Recognition, finally, must be made of the use of the "systems approach" to the handling of practical problems in education. This strategy is essentially a self-conscious attempt to bring reflective intelligence to bear upon the solution of practical problems. The detailing and sequencing of identifiable tasks to eventuate in the attainment of specific objectives is particularly evident in the development of more elaborate instructional systems such as IPI and Project PLAN.

All four of these factors or developments provide a matrix of impelling and facilitating forces that have given the individualization movement its necessary impetus.

THE NEED FOR DESCRIPTION

The overriding need at this point in time is to achieve a working description of individualization that would be of practical assistance to teachers and administrators. Three attempts of major proportions have been made in an effort to clarify and describe individualization of instruction. Edling was commissioned in 1960 to do a two-year survey study of individualization practices in American schools, a study which was to be of particular usefulness to administrators seriously committed to the idea (Edling and Buck, 1969; Edling, 1970). The Alberta Human Resources Research Council initiated its examination of individualization in the spring of 1969. Finally, Gibbons (1970) produced an early report in 1970 in an attempt to answer the question, "what is individualized instruction?" All three efforts struggled with the first and the necessary task of defensible articulation. Until some working map of identifiable components and their possible interconnections could be devised, description, analysis and appraisal of individualization would prove futile.
The Edling Study

Jack Edling of Teaching Research in Oregon embarked on a study of individualization practices in American schools. His approach was empirical in that he attempted to determine what schools were doing to individualize instruction. After locating 600 schools in the United States which reportedly were engaged in individualized instruction, he focused upon 46 exemplary school situations throughout his country and made intensive examinations of their activities through direct visitation on sites. To give some useful order to the enormous quantity of “data” he selected eight parameters or factors around which to describe each school’s activities. His matrix for data analysis is presented in Figure 1.

Edling’s findings and recommendations encompassed the wide variety of concerns of administrators and teachers regarding individualized instruction. But the central finding revealed a great diversity of programs, emphases, procedures and tactics that reflected the schools’ efforts to accommodate individual learner needs. In this respect, he, indirectly at least, supported Jackson’s position that there is no “one best way” to teach “Harold Bateman” (Jackson, 1969). In any case, American schools had clearly not yet found the one way.

For our purposes, however, Edling’s typology of individualization activities was a distinct advance in the articulation struggle. He was able to identify two dimensions along which school practices differed:

1. how the schools handled learning objectives and instructional media; and,
2. whether these were “school determined” or “learner selected.”

He obtained, as a result, four combinations of types of individualized instruction, A, B, C, D (Figure 2). We may question the use of some phrases such as self-directed and independent study, but if we keep in mind the bases of these types in the locus of decision-making in the two domains (objectives and media), then the phrases, in themselves, become unimportant. Edling, incidentally, resisted the temptation to judge any one type as intrinsically or strategically “superior” to another. He merely suggested a useful categorization or classification scheme of the diverse procedures which schools had devised to individualize instruction. Also, any one school, class or teacher may well discover that the instructional activities, particularly over time, may reflect or involve more than one “type” of individualized instruction. This would be especially true in different subject areas or with

<table>
<thead>
<tr>
<th>Objectives</th>
<th>Diagnostic procedures</th>
<th>Instructional procedures</th>
<th>Evaluative procedures</th>
<th>Reporting procedures</th>
<th>Evidence on Effects</th>
<th>Problems</th>
<th>Implementing procedures</th>
</tr>
</thead>
<tbody>
<tr>
<td>School No. 1</td>
<td>School No. 2</td>
<td>School No. 3</td>
<td>School No. 4</td>
<td>School No. 5</td>
<td>School No. 6</td>
<td>School No. 7</td>
<td>School No. 8</td>
</tr>
</tbody>
</table>

Figure 1. Matrix used to Analyze Data
different youngsters in different classes and periods of the year. Implicit, however, is the recognition of the importance of involvement in decisions selecting the objectives and/or procedures, especially for the learner.

The Gibbons Study

Gibbons (1970:28-52) also attempted to achieve a meaningful ordering of the individualization development. But he approached it analytically, using a set of 15 elements (primarily instructional or programmatic) and a similar focus upon the decisioning-choice-selection dimension. As is noted in Figure 3, a particular profile emerges when Gibbons applies the decisioning locus (generally, individual choice at one end and class-group prescribed at the other) to each of the elements. In this figure one notes that the IPI profile suggests wide latitude in pacing (as learner determined) while on most other elements manipulations are accomplished through school or teacher authority.

As in the case of the Edling study, Gibbons does not suggest that the "better" program will be revealed by that profile which locates farthest to the left on this decisioning continuum. Nevertheless, he is driven to surmise that, with the enlargement of varied and hopefully more learner-focused instructional arrangements:

The opportunity arises to develop a coherent instructional program that tolerates and nurtures widely divergent goals and accomplishment, a program designed to prepare students for complete control of their own education so that schooling, ultimately, is inseparable from living (Gibbons, 1970).

HRRC – Baseline Study of Individualization

The basic purpose of the baseline study on individualization was to ascertain the nature of school developments in the direction of individualization – their ingredients and their prospects for emancipating learners from existing limits in conventional school environments. Early in the first year, a number of realizations became quickly apparent:

1. That individualization of instruction was not merely a specific innovation such as team teaching, non-graded programs, independent study and the like, but a "movement" that would gain increasing thrust power through the 1970's in Canadian schools.

2. Secondly, that the wide array of possibilities, approaches and procedures that schools have begun to envision and implement will eventuate in a rich variety of "solutions" that will defy simple description and classification.

3. Thirdly, the term individualization of instruction tends to arouse the impression that the school's effort should be continually in the direction of making the learner an autonomous social isolate engaged in the separate and individual pursuit of specific learning tasks. This is
<table>
<thead>
<tr>
<th>1. PERCENTAGE OF STUDENT BODY</th>
</tr>
</thead>
<tbody>
<tr>
<td>2. PERCENTAGE OF SCHOOL TIME</td>
</tr>
<tr>
<td>3. ATTENDANCE</td>
</tr>
<tr>
<td>Optional</td>
</tr>
<tr>
<td>School Not Class</td>
</tr>
<tr>
<td>Class Not Sub-Group</td>
</tr>
<tr>
<td>Mandatory</td>
</tr>
<tr>
<td>4. MATERIALS FOR STUDY</td>
</tr>
<tr>
<td>Individual Choice</td>
</tr>
<tr>
<td>Individual Prescribed</td>
</tr>
<tr>
<td>Sub-Group Prescribed Or Discussed</td>
</tr>
<tr>
<td>Class/Grade Prescribed</td>
</tr>
<tr>
<td>5. METHOD OF STUDYING MATERIALS</td>
</tr>
<tr>
<td>Individual Choice</td>
</tr>
<tr>
<td>Individual Prescribed</td>
</tr>
<tr>
<td>Sub-Group Prescribed Or Discussed</td>
</tr>
<tr>
<td>Class/Grade Prescribed</td>
</tr>
<tr>
<td>6. PACE OF STUDY</td>
</tr>
<tr>
<td>Individual Choice</td>
</tr>
<tr>
<td>Individual Prescribed</td>
</tr>
<tr>
<td>Sub-Group Prescribed Or Discussed</td>
</tr>
<tr>
<td>Class/Grade Prescribed</td>
</tr>
<tr>
<td>7. ACTIVITY</td>
</tr>
<tr>
<td>Individual Choice</td>
</tr>
<tr>
<td>Individual Prescribed</td>
</tr>
<tr>
<td>Sub-Group Prescribed Or Discussed</td>
</tr>
<tr>
<td>Class/Grade Prescribed</td>
</tr>
<tr>
<td>8. DECISION-MAKING</td>
</tr>
<tr>
<td>Student (Permissive)</td>
</tr>
<tr>
<td>Student and Teacher (Responsive)</td>
</tr>
<tr>
<td>Teacher (Active)</td>
</tr>
<tr>
<td>Administrative Authority</td>
</tr>
<tr>
<td>9. TEACHING FOCUS</td>
</tr>
<tr>
<td>Values</td>
</tr>
<tr>
<td>Processes</td>
</tr>
<tr>
<td>Skill Concepts</td>
</tr>
<tr>
<td>Content</td>
</tr>
<tr>
<td>10. TEACHING FUNCTION</td>
</tr>
<tr>
<td>Teacher Available</td>
</tr>
<tr>
<td>Teacher Guides</td>
</tr>
<tr>
<td>Teacher Presents</td>
</tr>
<tr>
<td>Teacher Directs</td>
</tr>
<tr>
<td>11. TEACHING METHOD</td>
</tr>
<tr>
<td>Unspecified Discovery (Permissive)</td>
</tr>
<tr>
<td>Guided Discovery (Problem Solving)</td>
</tr>
<tr>
<td>Explanation and Discussion</td>
</tr>
<tr>
<td>Drill Exercise Repetition</td>
</tr>
<tr>
<td>12. ENVIRONMENT</td>
</tr>
<tr>
<td>Community</td>
</tr>
<tr>
<td>School</td>
</tr>
<tr>
<td>Classroom or Resource Area</td>
</tr>
<tr>
<td>Desk</td>
</tr>
<tr>
<td>13. TIME STRUCTURE</td>
</tr>
<tr>
<td>Non-Structured</td>
</tr>
<tr>
<td>Fluid</td>
</tr>
<tr>
<td>Structured</td>
</tr>
<tr>
<td>Structured</td>
</tr>
<tr>
<td>14. EVALUATION</td>
</tr>
<tr>
<td>Student Self-Evaluation</td>
</tr>
<tr>
<td>Broad Assessment</td>
</tr>
<tr>
<td>Quantity Of Task</td>
</tr>
<tr>
<td>Exam-Class Rank</td>
</tr>
<tr>
<td>15. PURPOSES OF PROGRAM</td>
</tr>
<tr>
<td>Continuous Development To Maturity</td>
</tr>
<tr>
<td>Adjustment</td>
</tr>
<tr>
<td>Understanding</td>
</tr>
<tr>
<td>Efficient Mastery</td>
</tr>
</tbody>
</table>

Figure 3. Profile of Individually Prescribed Instruction: The Oakleaf Project

An erroneous interpretation of present individualization activities. Indeed, group engagements continue to punctuate teacher-learner activities, however, more functionally geared to the needs and conditions of the learner participants. Furthermore, schools have for some decades attempted to adapt the teaching-learning process to the varied characteristics of learners through differentiated class-grade formations (albeit, largely ineffectual), enlarged program offerings (particularly at the high school level) and through increased recognition of the allowance for learner interest in laying daily instructional plans (most prominent in elementary grade classrooms). Hence, the term differentiated instruction is proposed as a more useful label since it provides for the more inclusive coverage of current practices and possibilities as a general designation.

(4) The fourth realization was substantively the most challenging in that it gave rise to the identification of three major component areas as parts of the differentiation movement:
1. the now typical set of instructional elements (12 instructional elements are listed in component area I in Figure 4);
2. a collection of innovations, largely organizational, that are labeled tactical devices (12 tactical devices comprise component area II in Figure 4); and,
3. the comprehensive instructional design that are called approach systems (3 approach systems included in component area III, Figure 4).

Any working description that further adequate articulation, analysis and practical application must make reasonable allowance for these three component areas. The conceptual schemes of Edling and Gibbons do not provide for the tactical devices, typically organizational changes that have been explored with considerable interest in the past decade by school practitioners. Secondly, some way needs to be devised whereby interlinkages can be posited in order that the "map" of component areas for differentiation of instruction serves the purpose of guiding more effective planning and managing of the schools' instructional program.
The columns of instructional elements and tactical devices will appear familiar. However, the approach systems may require some description. Unfortunately, brevity is indicated in the light of the time and space available for handling this task. IPI and Project PLAN are fairly sophisticated and detailed arrangements of teaching-learning operations which are designed to maximize mastery of these skills and the achievement of the designated objectives. As a result, they do possess similar characteristics. IPI is comprised of six major components:

1. Sequentially established curricular objectives in behavioral terms;
2. A procedure for diagnosing student achievement and ascertaining the proficiency level desired;
3. A comprehensive set of educational objectives grouped into modules with five objectives in each module;
4. Teaching-learning units, with six to eight units in each module to facilitate differentiation of instruction;
5. A set of tests which provide several items for each objective in the module;
6. Procedures for guidance and individual planning; and,
7. A monitoring and evaluation procedure to assess the efficacy of the total system.

Project PLAN is described as containing five major components:

1. A comprehensive set of educational objectives grouped into modules with five objectives in each module;
2. Teaching-learning units, with six to eight units in each module to facilitate differentiation of instruction;
3. A set of tests which provide several items for each objective in the module;
4. Procedures for guidance and individual planning; and,
5. A monitoring and evaluation procedure to assess the efficacy of the total system.

In contrast to IPI and Project PLAN, the Multi-Unit Organization approach that is being developed in Wisconsin by Klausmeier (1969) focuses primarily upon the professional teachers' capability to plan and manage appropriate instructional procedures. The principle underlying this plan is the belief in the enhancement of the teachers' professional capabilities for exercising the necessary discretion in creating the most appropriate learning conditions for the learner (Figure 5). The plan is primarily an organizational restructuring of a school, particularly the grouping of teachers into teaching units and the addition of aides, clerk or secretary, and an intern. At the building level there exists an instructional improvement committee which attempts to mobilize the professional resources to plan, manage and evaluate the instructional activities in the building. Teachers, in other words, are placed

---

1 The reader is encouraged to consult the appropriate references listed at the end of the paper for further information about these approach systems.
in a particular kind of relationship which enlarges their capability for facilitating more appropriate instructional experiences. Hence, it will be noticed, that the Multi-Unit Organization does not attempt to exercise direct manipulations over the instructional elements as does IPI and Project PLAN but focuses upon the intermediary of the teacher in the local situation to effect the appropriate manipulations.

We need to recognize that the actual conditions of learning will be determined by the appropriateness of the manipulations that are effected among the instructional elements. However, the degrees of freedom, the range of alternative possibilities and the efficacy of strategic interventions by teachers, administrators, and learners will be enhanced or diminished by the presence and functioning of these operations listed as tactical devices. It is clearly apparent that the latitude enjoyed by teachers and learners, for instance, in effecting appropriate changes among some of the instructional elements will be markedly affected by a continuation of a class-grading structure or by the presence of a continuous progress plan. And so on with other interdependencies among instructional elements and tactical devices. Similarly with the approach systems. There are key interdependencies between the IPI system, some tactical devices and particular instructional elements. IPI would be particularly inoperable without the employment of teacher aides, as a set of enabling operations, to oversee the detailed tasks of arranging of instructional programs, testing learners and recording student performance results and prescriptions and the like. Independent usage of media and peer tutoring have also developed as especially useful tactics in maintaining the steady advance of the learner through the sequenced learning tasks.

Furthermore, IPI as a system is so designed as to focus primarily and in a pre-determined definitive way upon the play of these instructional elements: (1) carefully specified and sequenced behavioral objectives; (2) a definite pattern of teacher-learner interaction involving largely consultation, diagnosis, prescription and remedial or advanced instruction; (3) flexible pacing as determined by each learner; and, (4) the prominent and specific provisions for learner diagnosis, evaluation of performance and adjustments in the task prescriptions. In the main, IPI is a highly specified set of operations,
allocating to learner, teacher and teacher aides different task assignments in which a wide range of instructional elements and tactical devices are covered by a predetermined set of decisions built into the total system.

Project PLAN is essentially similar to IPI in that it relies heavily on the use of teacher aides, peer tutoring and independent learner use of media. The developers, however, insist that continuous progress is a requisite for the effective use of the Project PLAN system. In addition, independent study, learning resources centers and resources specialists are necessary adjuncts to provide those facilitating operations in the school that would augment the practical implementation of the plan. Project PLAN’s potential impact on selected instructional elements is also similar to that of IPI, with the addition of subject matter content.

The Multi-Unit Organization, in contrast to IPI and Project PLAN, is focused upon the teacher and his enlarged professional involvement in the instructional program. Hence, it requires, as a requisite, team teaching as a predominant tactical device. As with Project PLAN, the Multi-Unit Organization also prescribes continuous progress and relies heavily upon the facilitating operations of autonomous usage of media, independent study, learning resources centers and resources specialists. As with IPI, the Multi-Unit Organization is heavily dependent upon teacher aides. As a system that is designed to increase the teacher’s professional capability to plan, implement and evaluate the instructional program, it does not stipulate or suggest any significant linkage with specific instructional elements, as is the case with IPI and Project PLAN. Given this focus, the instructional elements are theoretically all amenable to manipulation in keeping with teachers’ judgments of priorities, purposes, needs and local resource possibilities.

Given then the task of the school — that of creating the optimum environment for learning for learner X by enhancing the adaptive power of teachers and learners to institute the most appropriate set of learning conditions — we can first identify three categories or component areas of instructional elements, tactical devices and approach systems; then the apparent interdependencies among them; and finally, the implications for the administrator and teacher. If we can assume that decisions regarding the manipulation of instructional elements are most appropriately made closest to the point of learner encounter with learning conditions, then tactical devices and the approach system must be selected and introduced so as to (a) achieve complementarity among the various tactical devices (particularly as these give teachers and learners a wider latitude of control over a greater range of instructional elements), and (b) as tactical devices are combined simultaneously in implementation in order to exploit their synergistic power in the newly constituted “system” of instructional operations.2

FINDINGS AND SUGGESTIONS

A number of findings and suggestions are worthy of mention as these flow from the available studies of individualization:

1. Of all of the instructional elements, pacing is more likely to show heightened variability as a consequence of individualization efforts by schools.

2. The costs of individualizing instruction are likely to represent obstacles to most schools, though survey findings show that reallocation of funds (the purchase of a number of different workbooks rather than a textbook for all students), and reconstitution (replacing one certified teacher by a clerk plus a teacher aide as in Multi-Unit Organization) are promising possibilities.

3. Edling found that a significant number of principals emphasize the importance of visibility to help solve the communication problem in the school and in the community. Unless some way is found to give easy representation to an innovation or experiment and to permit observation, activity is likely to flounder.

4. In spite of the dangers of distortion or neutralization by the established practices in a school, it is still necessary to embark upon individualization efforts through the strategy of “minimum disturbance.” In the interests of feasibility of managing a set of new operations and assuring the community of acceptable learning achievement in general, the scope of innovation will of necessity have to be practically circumscribed.

5. On the other hand, the play of interdependent components suggests that the new system of operations must enjoy a minimum presence (in the number of components introduced or altered and the complementarity among them) in order to generate sufficient power by which

2. The second phase of HRRC’s baseline study is addressing itself to both of these implications.
document and establish the viability of the effort.

6. The evaluation of the effectiveness of individualization practices continues to pose serious problems for the administrator. Edling reports, for instance, that individualized instruction is not likely to produce dramatic improvements in cognitive achievement measures. Standardized achievement tests are inappropriate when administered in individualization programs. Furthermore, other educational purposes and learning objectives, involving growth in learner self-direction, were generally cited as important as subject matter mastery.

CAUTIONS AND PROSPECTS

The difficulty of producing demonstrable evidence of improvement in learning through any instructional contrivance is further complicated by the "n.s.d." phenomenon in educational research. That is, "no significant differences" are encountered with such frequency in evaluation efforts that any innovation, particularly of the pedagogical or organizational variety, is likely to obtain a similar inconclusive result (Fritz, 1960; Stephens, 1967). Unless the practitioner monitors the activity carefully, it is likely to produce indiscriminate outcomes that typically lead to the unjustified rejection of the innovation. The n.s.d. enigma is less likely to show if differentiation results in wider variations in the play of more instructional elements than merely pacing, especially those of objectives and content. As Jackson warned us, there is yet no one best way to teach any learner.

Perhaps this is unfortunate. While most of us would agree that the highest levels of intellectual competence and commitment to learning should be encouraged and facilitated, we would also acknowledge the value of cultivating the unique attributes of talent and interest within and among learners, those human qualities that reflect richness in variety of accomplishments and intensity of application of energies in personally meaningful pursuits. We must take care that individualization assures not only improved mastery of content and superior intellectual skills but preserves opportunities for enhancing individuality. Who knows? You may be out of step because you hear "another drummer."

REFERENCES

Individualization - General


Jackson, Philip W. "Is There a Best Way of Teaching Harold Bateman?" Individualized Curriculum and Instruction. Edmonton, Alberta: The University of Alberta, Department of Elementary Education, 1969.


Describing "Individualization"


Approach Systems


THE COMMUNITY SCHOOL: HOPE OR HERESY?

GORDON McINTOSH

THE COMMUNITY SCHOOL AS AN ORGANIZATION

The community school idea, the origin of which on this continent dates back several decades or more, has received increasing attention in recent years. It may be instructive to speculate about some of the reasons for this.

The Layman and the Community School

On the part of laymen the reasons for increasing attention seem to be two-fold.

First, a concern for rising costs in the development of community facilities, such as churches and community centres, has led many lay persons to look to the school as a home for many activities which in the not-too-distant past were usually housed elsewhere. We can refer to this as the community-use aspect of the community school idea, and note in passing that sharing facilities in the manner implied by the term community-use has only a minimal and indirect effect on the day program of the school.

A second reason for increased interest on the part of laymen in the community school idea, on the other hand, may be very significant in shaping the program of the school. Layman and professional alike, not only in education but in other professional fields as well, seem to be developing a sharpened definition of the limitations of professional knowledge in shaping decisions regarding school and other social programs.

Laymen are less likely now than in the past to accept the expert's judgement simply on the basis of the credentials he has earned and the public office he may hold. Associated with this, there seems to be a rising level of impatience, irritation, and hostility directed against "establishments" and the organizations which sustain them.

To be a member of an "establishment" at the present time (and, of course, school principals are the very model of an establishment figure, no matter how ludicrous this may seem to many) is to be exposed to critical attention in a way quite unlike the experience of even the recent past. The growing impatience of laymen at having decisions made for them by the experts, the professionals, is often expressed in negative ways - by carping criticism of what schools are doing, at the relatively benign end of the spectrum, to taxpayer revolts of varying degrees of malignancy in their effects on school programs, at the other.

There are positive outcomes emerging from these anti-establishment sentiments and activities, however. Many school principals share some of the concerns of the anti-establishment layman; in particular, the concern that professional knowledge must be supplemented by judgement and wisdom in educational decision-making. Such principals realize that the educator, no matter how well trained he is, has no monopoly on wisdom.

Consider an example. Suppose that the parents of a fifteen-year-old boy in his first year of senior high school came to see you, the principal of the school. They said to you: "We're concerned about our son. He lacks self-confidence. He's apathetic and seems to have no interest in doing anything. He just doesn't seem to have any sense of direction, and we think it's because he's lost confidence in his ability to do what he sets out to do."

What would you try to do in such a situation? You would know, of course, that the problem described by the worried parents was not unique to their son, that it's a problem faced by many young people approaching adulthood, and that it's accentuated by urban living where there's just not much adventurous experience open to youth wherein abilities can be tested. You would know also that the passage of time will likely solve the problem described by the parents.

There's something else you would know, although you likely would not so admit to the parents in front of you; namely, that there may not be much you could do within the four walls of the school to help the young person develop the confidence in himself which he seems to be lacking. You may even deny that this is a responsibility of the school. I don't think in fairness, however, that in an age when circumstances make young people the captives of the schools, you and the school can evade this responsibility.

To follow through on the example, there are ways in which the problem outlined above can be addressed. You would likely be well aware of the means I am suggesting, but you might not consider
them to be possible solutions because they're... well, they're not school! Besides that, community members wouldn't accept them. Or would they?

What are these possibilities? Work-study, community service internships, "underground" newspapers, film-making, radio/TV productions – or "Outward Bound" experiences where youth test themselves against the simple and elemental demands of the wilds.

The use of such educational possibilities requires judgement and experience which laymen can provide. Perhaps this is one reason why many principals are encouraging the development of community advisory councils made up of teachers, students, and parents. Such principals realize that many educational decisions require not only professional expertise but also experience and wisdom, and that laymen (including students) should have access to the educational decision-making process simply because they have this experience and wisdom.

In summary, the community school idea seems to be attracting attention from laymen for reasons both of economy and of growing insight into the limitations associated with turning over to specialists total responsibility for any community service, education included. An examination of these reasons has revealed two important aspects of the community school idea: (a) community use of school facilities; and (b) community advisory councils which participate in educational decision-making at the school level.

The Professional and the Community School

It should not be assumed from the above that only laymen are concerned with stimulating the development of community schools. Many professionals who recognize the fundamental social changes which are impinging on our schools are also providing leadership in the development of community schools.

What are these social changes? How are some professionals recommending that we respond to them? I am considering two aspects of social change which seem most closely related to the community school concept.

1. The Community School and the Welfare State.

The past twenty-five years and more have seen a vast proliferation of publicly administered social service agencies. Although social justice as envisaged by the Fabian socialists is far from an accomplished fact, Canada seems to have launched itself on an irreversible course towards the welfare state as a means of achieving social democracy.

And so it is that our governments have spawned a multiplicity of agencies and programs to ease the lot of the many persons – young and old – who are cast aside, at least temporarily, from the benefits of our relatively advanced technological society. So it is also that even our middle classes are dependent on many of the same programs, especially in the areas of medical care, hospitalization, and education.

For present purposes, however, I have in mind primarily those aspects of our welfare "delivery systems" which serve those of us who for one reason or another find ourselves outside the main stream. This may be the result of disruptions such as loss of job, marriage dissolution, handicaps arising from disease or accident, mental illness, or simply wanting to do better for oneself; or it may result from membership in cultural minority groups which have not yet achieved a suitable accommodation with the dominant culture.

Consider, for example, the young married woman with two small children whose husband leaves her. She had left high school in order to be married, and has no skills which would enable her to find a job with any kind of career or future to it. She is depressed and confused; anxiety is affecting her ability to make good judgments. There's the rent to be paid at the end of the month and groceries tomorrow.

Try to look at the world through this woman's eyes for a moment. There is help available to you, and you are aware of that. But look at the confusing array of contacts you must establish: with the city Social Service Department (or is it the provincial Department of Social Development?); with the Family Service Association; with Canada Manpower to inquire about re-training opportunities; with a day-care centre (where would I find one of those?); and on it goes.

When one tries to view the social services network from the perspective of the recipient, one senses something of the nightmarish complexity presented by the overlapping jurisdictions and imprecisely defined functions of the various community service agencies as they are presently organized.

Social service professionals, including many educators, are keenly aware of the limitations implicit in the present organizational basis for the delivery of community services to the people who need them. Thus, Red River Community College in Winnipeg is planning to provide office space for a wide range of community service professionals – who would continue to be employed by their respective agencies – in the college. The intention
of this plan is to ease the path for the recipient of services, and to improve coordination among the various service agencies in the delivery of services.

To summarize: the proliferation of social services in the modern welfare state demands that we find methods of organizing these services on a more personal, humane, and coordinated basis than is now typically the case. Many people are looking to the schools as centers for the coordinated delivery of community social services. Such people do not advocate placing such services under school administration; rather, they see the school acting as the host for service agencies serving the people in the most effective and human way we can.

2. The Community School and Community Resources.

It is very easy for us, caught up as we are in the hectic round of activities associated with the operations of our public schools, to forget that the concept of universal schooling is a relatively recent one.

Particularly at the secondary level the idea that all our young people should be educated in a formal way in schools has taken hold as recently as the post-World War II era. Even more recently, the universal schooling doctrine seems to be well on its way to application at the post-secondary level through the development across Canada of community college systems.

The trend over the last century has been in the direction of assigning the educational function (for which every human society, no matter how primitive, must provide) to formal institutions of schooling. Said another way, we have seen over the past one hundred years a draining of educational opportunity from the community as a whole with the effect that "incidental learning," as Paul Goodman (1970) refers to it, plays an ever less significant role in the development of our young people. Our communities are less educative now than they were a century ago, in the sense that now we have less opportunity for direct, personal experience with the fundamental human activities which make up our community life.

This has come about for two principal reasons.

First of all, school pre-empt so much of a youngster's time, both directly and indirectly, that he has less time to have personal experience of the diversity of community activity. This problem is by far the lesser one, however, and could be taken account of by educators rather easily were it the only factor.

A second factor poses a much more difficult problem for the educator. Just as education has become specialized and assigned to a specific set of institutions, so have many other social functions. Whereas community life of the not-so-distant-past was sufficiently simple that a walk from his home down main street could bring the youngster into direct, personal contact with most of the people doing the work necessary to maintain the life of the community, a comparable walk today would not take most youngsters beyond his immediate residential community in which a very narrow range of community activity is engaged.

Let's be specific. What are some of these essential activities to which I have referred? Birth, death, manufacturing, law enforcement, child care - these are some which immediately come to mind. How many of these activities do our young people - do we ourselves, for that matter - come into contact with in any significant way, i.e. in a fashion which enables us in a fully rounded way to understand from direct experience the various activities and events which are basic to our community life?

The answer, in my judgement, is: very few. We have so specialized the various essential functions of our society, and withdrawn them so completely to the deep recesses of institutions which are spatially and psychologically remote from our daily lives that few of us, let alone our students, are really aware of the community in which we live.

Some educators are now drawing attention to the way in which opportunities for incidental learning - i.e. for learning through direct experience with one's environment - have been denied our young people. In this sense, we are culturally deprived in a way that a child growing up amidst the most primitive of cultures is not. Paul Goodman and Ivan Illich (1971), to name two writers most eloquent in drawing this observation to our attention, are calling on us to rebuild "educative communities" and to "de-school society" in order to reverse this trend toward educational poverty in the most rich of contemporary civilizations.

The point is this: I think that if we as professional educators subscribe to the community school concept then we must see our work in the school in a radically different way. We must see our work in significant part as that of prying open the community to our students so that the community itself becomes a significant learning resource. This goes far beyond the occasional field trip and visiting speaker to include work-study programs, community service internships, and supervised "leaves-of-absences" in which students could "drop-out" to travel or work or create with the best wishes and assistance of the school.
Williamson (1971:213) puts it this way:

The school must become less of a closed institution and more of a facilitator and catalyst for marshalling the community's resources, as well as a monitor for the growth and development of human learning in the community, with particular but not exclusive attention to its youth.

In this section, I have examined two concerns of the professional which add to the case for the community school. Since these concerns are rooted in fundamental social changes, there is little possibility that support for the community school, as it has been implicitly defined up to this point, will abate. The need to relate more effectively social service delivery systems to the needs of people calls for experiments in grass-roots horizontal organization cutting across the various agencies, a form of organization which is responsive and accountable to the people who make use of the services. Furthermore, the present apparent barrenness of the community as a locale for incidental learning can be reversed if schools can see their role as one of "prying open" and stimulating the educational potentialities in other community institutions.

The Community School as a State of Mind

To this point I have considered the community school as a certain kind of organization with identifiable structures and functions. In summary, these are as follows:

1. provision for community use of school facilities;
2. provision for means to bring the knowledge and experience of the layman -- both parent and student -- to bear in school decision-making;
3. provision for means to cooperate with other social agencies in the horizontal coordination of community services; and,
4. provision for "opening up" the whole range of community resources so that incidental learning once again can be a vital part of community life.

To stop at this point would be quite unsatisfactory, however; I find a definition of a community school which depends on an enumeration of structures and functions to be without vitality and dynamism. It fails to emphasize sufficiently the very essence of our work as educators -- namely, the development of people.

For this reason, the community school may be viewed from a very different perspective, which I refer to as the community school as a spirit or a state of mind.

The Community School as a Community

Trying to catch the spirit of the community school is elusive but surely it has something to do with the key word community. This must be one of the most commonplace words in our very expressive language, but also one of the most complex.

What is a community?

Newmann and Oliver (1967:63) in their classic paper, "Education and Community," identify "a sense of common bond" as the essential criterion of a community. Some of the characteristics of a community which they identify are as follows. A community is a group:

*in which membership is valued as an end in itself, not merely as a means to other ends;
*whose members share responsibility for the actions of a group;
*whose members share commitment to common purpose and to procedures for handling conflict within the group;
*whose members have enduring and extensive personal contact with each other. (Newmann and Oliver, 1967:64).

These characteristics seem to point toward the very essence of what a community school is all about. It can be said very simply. A community school is itself a community; a community school works in its environment to develop a spirit of community.

Let me elaborate briefly on what is implied by the assertion that a community school is itself a community. A student did this very well and very simply. After a rather unhappy school experience, and a change to a new and different school, he explained the reason for his new-found happiness this way, "They make me feel that they're glad I'm here." "If I'm not here, the community is incomplete," he might have added, if he were using our language.

I am not continuing at length in developing the meaning of the school as a community, or in dealing with the ways in which such a community is built. One observation only: in a community all members, regardless of their formal status, have common rights and responsibilities. They share responsibility for the actions of the group. They care about each other as persons. How many of our schools make it possible for all school...
members — administrators, teachers, and students — to work together as a community in this way? Many schools have perhaps had fleeting moments when they could glimpse a "common bond." But it remains an ideal far from being achieved by most schools.

The Community School And Vocations

A very traditional way of linking school and community has been through a conception which sees schooling as preparation for life and work in the community. I use this conception but give it a different slant, and in so doing evoke the spirit of the community school in a second manifestation.

We begin this quest for the spirit of the community school with what may seem to be a wholly irrelevant question: why do our young men and women stay in school? Four reasons come to mind: (1) inertia; (2) companionship; (3) intrinsic satisfaction; and (4) credentials. Perhaps the most important and stable of these reasons is the last-named — the earning of credentials.

The credentialing function of the school has been written about with great insight by Edgar Friedenberg (1970). The term credentialing refers to the means by which society puts its stamp of acceptance on a student before he moves into employment or the next higher stage of education (which, in turn, "credentials" the student for employment, presumably at a higher level of income and status than would have been earned had the credentials not been acquired).

If the credentialing function of the secondary school is the principal basis for support of the school by students, parents, and the community-at-large, then fundamental structural changes in the economies of the western world are slowly attacking the basis of the secondary school's stability as an institution (See Rosow, 1971).

Our credentialing system is predicated on society's demand for manpower with highly developed, specific skills. What happens to the credentialing system — and hence the institution based on the system — when the need for socially defined skills seems to decline, as present trends would indicate?

As the essential work in the agricultural, mining, and manufacturing sectors of the economy shrinks — with productivity increasing, nonetheless — what kinds of trends might we expect to set relative in particular to youth and employment? Charles Reich (1970:368) gives us one answer when he writes that "what is beginning to evolve is the concept of a 'noncareer' or 'vocation.'" He writes about "vocations" this way (1970:368):

The old way of choosing a career was to find what one was 'best fitted for,... Finding a noncareer requires a better knowledge of self to start off with; a decision, necessarily tentative, about what one would find most satisfying and fulfilling...

So the individual must define his own career and his own terms. He must continually remake his definition as he learns more about himself and about his world.

Many of you will dismiss Reich's views as impractical romanticism. For my part, I subscribe to Reich's views both as a philosophical statement of what would contribute to making this a better and more human world, and also as a shrewd interpretation of some modern realities. The most important of these realities is that a modern, industrial society finds it very difficult to employ its young people.1

But what does all this have to do with the community school? My contention would be that the elusive spirit of the community school resides in efforts by schools to help students define their vocations. This means, in specific terms, that the community school: (1) encourages and facilitates a wide range of community experience for students: in places of work, social and community service activities, with artists and artisans, with political parties, and so on; (2) helps students to learn more about themselves; and, (3) is willing to let students make mistakes and to help them back on course without recrimination.

A program which leads inevitably to disaster? Hopelessly idealistic? Yes, I suppose it is idealistic, but it is also a program of survival for the secondary school as an institution. Barring economic reversals which no economist now anticipates, the rough outline of the future is clear. As students increasingly strive to develop vocations, the usefulness of credentials will decline until they are recognized by all as the useless

---

1 The first major indicator of this fact in Canada is the controversial "Opportunities for Youth" program which I consider to be a commendable effort at providing young people with opportunities to create their own vocations.
appendages they are. Where then will the secondary school be unless it begins now to respond to the spirit of the community school?

The Community School and Administrative Style

My final comments relate the spirit of the community school, as discussed in the preceding two sections, to administrative style. The analysis deals with only one aspect of administration, but it is the one I consider most important to the successful operation of community schools—namely, communication.

I assume that public schools and public school systems are organized essentially according to bureaucratic principles. (The term “bureaucratic” is used here not in the sense which implies red tape, buck-passing, and inefficiency, but rather in the technical sense—division of labor based on functional specialization, hierarchy of authority, impersonality of interpersonal relations, and so on).

One of the most interesting and disturbing features of bureaucratic organizations has to do with what happens to information, particularly the information held by organizational members at the lower levels of the hierarchy. We know that “lower level” organizational members—students and teachers, say—are very selective about the information they send up through the formal channels of communication. They tend to suppress unpleasant information, for example, and to emphasize the positive aspects of organizational operations. (The unpleasant information eventually finds its way to the top, of course, but often through informal channels and under circumstances such that the issue may have grown to near-crisis proportions.)

Nothing could be more inimical to implementing the spirit of the community school—through building a sense of community and helping young people create vocations—than these distortions to information flow in an organization.

Similarly, nothing is more essential to the success of a community school than for the administrator to be able to talk to students, parents, and teachers and hear what they really have on their minds, rather than what they think you want to hear.

How is this to be achieved, you ask?

We have to concede, first of all, that in part the ability to communicate is a personal gift. We have all met people who have this ability to infuse a relationship with warmth and to inspire trust and confidence. In some measure, however, it’s likely that all of us can develop trusting relationships—if we are committed to the importance of open communication.

Partly, it’s a matter of creating the times, places, and means by which the administrator can divest himself of his administrator’s role and listen as another person to the concerns of teachers, parents, and students. The community education council discussed earlier would be an example of this kind of communication forum. (Note that I have referred to the council as a communication, rather than a decision-making, forum. A council may well evolve into a decision-making body but, in my view, this is well down the path. I would counsel that one well-placed step be taken at a time.)

Finally, the matter of open communication is dependent, in part, on how administrators and others see the role of an administrator in the school organization. At this point, I am afraid that I am rather harsh on the profession of educational administration.

It is my contention that one of the principal impediments to communication in schools is the elitist concept of the school administrator to which I venture to say, most school people subscribe. By elitist I mean the concept of the administrator as a person whose status is greater than that of the teacher.

A closely related aspect of the elitist concept has to do with the view that the administrator bears alone the responsibility for the school, a crushing burden which no man can bear and which often drives those who attempt to do so into remoteness and withdrawal. Combs (1970:205) relates this to communication as follows:

This is where many an administrator makes a very serious mistake. Instead of making himself visible, he often makes people guess who he is, what he is, where he is, what he thinks, and what he wants. You cannot carry on a human interaction on that basis.

In thinking about the administration of the community school, I find it absolutely necessary to separate the role of administrator (which connotes hierarchy, social distance, and differential status) from the concept of administration (which denotes an essential range of organizational functions which facilitate the main work of an organization).

My point is a simple one. For a community school, or any other organization, to function successfully, a range of administrative functions must be performed and for some of these, task
specialists may be necessary. Unlike many other organizations, however, a community school defined as we have defined it demands a kind of open communication which hierarchy and status tends to impede.

The basic question, then, is: Can we have administration without hierarchy? And, if so, how? These are questions which the next decade will see us asking with increasing frequency. And, if we believe in community schools new practices in school administration will be introduced and tested: the idea of the principal teacher, collegial administration, faculty councils (with student membership), and others.

This will be a difficult decade for both education and administration. We're moving into a new age. For those convinced that this may be an Age of Aquarius, the community school may take us part of the way to a time and place where harmony and understanding, sympathy and love really do abound.

REFERENCES


A "LEARNING" SYSTEM OF EDUCATION

LOWELL WILLIAMS

INTRODUCTION
Our present system has developed in the context of past constraints and needs. It is basically a teaching system. Students are directed and controlled by the teacher — not as individuals, but as "groups." It is difficult for the teacher to adjust the process to the needs of the individual except at the expense of the group. The group (class) is handled as an individual. The "ideal" group would be made up of individuals who were duplicates of each other. The recognition of this problem gave rise to "homogenous grouping" practices.

Every macro-system (school, college, technical school, university) is a multiple of the same teacher controlled micro-system (the "class" or the "group" or the "level"). The teacher is the controlling factor in the educational process — the key to success or failure. Our educational systems are teaching oriented and "the system" is committed to maintaining the teacher's position on his micro-system. The teacher controls his micro-system by establishing the daily pace, the daily goals, the daily workload and the standards. The macro-systems (school-based administration, central office administration, school boards, and departments of education) control their micro-systems by establishing for the teacher (and thus for the students) the yearly pace, workload, and standards.

The system is about as Procrustean for the students as it is for the teachers and as it is for itself.

These statements are not an indictment of our present educational system. No other system, let alone a more effective one, could have developed under the circumstances provided by history. It has served well and still does an effective job. Its viability, however, is fading. A new system is now possible and a new "system" is needed in order to promote the development of a new type of individual.

SELF-INSTRUCTIONAL SYSTEMS
Society wants the products of its educational system to be responsible, mature, self-reliant, adaptable and creative (Williams, 1970). The educational system must provide an environment in which optimum learning can take place but the system must place on the student a large measure of the responsibility for learning. By shouldering that responsibility he will mature, become self-reliant and confident of his abilities. To shift learning responsibility from the teacher, where it now rests (with serious consequences for the student), to the student is impossible until "groups" (led by teachers), and time interval advances are abolished in favor of individualized instruction by means of self-instructional materials and through continuous progress in ungraded schools. The positions of students and teachers in the educational process need to be reversed, more or less, so that the student will do the "driving" (and thus make the decisions) while the teacher counsels and helps in improving the learning environment and the "learning materials." In so doing, both parties would be benefited. Teachers' desires to have more part in the "professional" aspects of education could be satisfied if they were freed from making the week by week, day by day, minute by minute classroom decisions which students more and more are claiming they want to make.

ASSUMPTION UNDERLYING A "TEACHING" SYSTEM
The assumption has been made that if teaching was "going on" then learning was also "going on." Further, it has been assumed that if the teacher were "improved," if there were improved support for the teacher, if the teaching environment were made more pleasant and the non-teaching tasks of teachers were reduced — that is, if teaching were improved — learning would automatically be increased.

This has proven to be only partly true. A teaching system works best in an "authoritarian" environment. In this atmosphere good teaching includes "pressuring" the learner to learn. It is not unlike leading a horse to water and then making him drink — difficult, but possible with a large percentage of horses and of people.

However, there is a growing repugnance for
using any kind of force on individuals and there is an increasing awareness that some students cannot learn as fast as others. Our society is often characterized as being permissive, and in this climate authoritarian practices become less desirable. A recent catchword which has gained some popularity is "humanizing" education.

Also, teachers got sidetracked into believing that they had the best of educational systems because they were doing an excellent job of "teaching." It was thus easy to lack awareness of student's preferences and his perception of his "teaching." It was thus easy to lack awareness of required results – learning on the part of the student.

AN INDIVIDUALIZED "LEARNING" SYSTEM

The basic change needed is to make the system an "learning facilitator" system, focused on increasing the knowledge and skills (and changing the attitudes*) of students.

Much work is already underway on the individualization of instruction and some schools have implemented many aspects of a "learning" system and thus have moved far toward the goal suggested here.

Characteristics

The basic characteristics of a self-instructional system are: (1) specific learning objectives; (2) the use of all human and media resources to support developed "programs" (or several varieties of programs to be made available to each student). A program would probably be equivalent to what is now called a course or a unit of study. These "programs" provide for interaction between pupil and "educator," or between a pupil, an "educator" and media (print and non-print), or between the pupil, other pupils and an educator in a seminar situation, or between the pupil and other pupils. Which is used will depend on the student's preferences and his perception of his needs. He may consult with an "educator" and/or his peers to determine which is the most appropriate learning material, what to do, and how to do it. Student induction personnel would be of assistance to him.

Programs

The "programs" will include:

(a) an outline of the goals of the "program" (what the student should learn; the concepts to be developed);
(b) suggestions as to where to find and how to get at additional resource material;
(c) review questions on the content with complete answers (or possible answers, or usual answers, or answers which have been postulated in the past by various "authorities," or answers which would be considered by the evaluators as being "satisfactory," "above average," and "excellent");
(d) simple "tests" ("Test" is becoming such a derogatory word that a new one may have to be coined. However, it is patently impossible to get away from or avoid assessing students so that is not an avenue of escape. Perhaps "marks" could be called "progress awards."); and,
(e) suggestions which would make it easier (more efficient, more rewarding and, within bounds, more "fun") to reach the goal.

These "programs" will NOT usually take the form which is usually associated with programmed instruction. Programmed instruction is only one form of self-instructional materials. Tightly programmed material is useful to, appropriate for, and successful with some students. It is not, however, impossible that many courses will be programmed tightly in this way and thus form one route from point A to point B on the learning continuum. It should not be the only form of self-instructional materials to which a student can turn for guidance and learning support in getting from point A to point B. Other, much less highly structured and much less supportive (and thus prescriptive) programs should be available. At the opposite extreme, programs would probably give only the objectives, a list of resource materials (print, non-print and human), where and how to obtain the resource materials, and a few sample tests. It would leave how to get from point A (what the student knows already) to point B (what he is to learn) almost entirely to the student and his own initiative. Other "programs," leading also from A to B, could be developed which would have less structure than "programmed" material, but more than "independent study" for those students who prefer some measure of learning support (structure) but do not like the minute steps of the programmed learning materials.

The "discovery" method could be used in one "program," the "lecture" method in another and a combination in another. Some people like to learn by advancing in small steps with confirmation at each step. Others like to be given a principle and then have questions and problems posed to see if they can apply the principle. Still others like to be given a series of clues and happenings and then be asked to deduce the principle or the concept or to

* It is not yet clear that society really wants the school to do this.
draw the logical conclusion.

As the “programs” contain the basic procedural suggestions (instructions), each program would have to be validated to make sure it does what it is supposed to do. Obviously, the “programs” must change along with changing conditions, as new knowledge is developed and as media sources and capabilities develop. Curriculum specialists would be responsible for this continual updating and upgrading.

Description

A learning system would also have most of the following characteristics.

1. A “re-placed” teacher. Given the present state of technology, a human is no longer the “best” source of information and certainly he is not the most indefatigable, infallible, patient, or even logical. Media should do what it does best: store and present basic information, repeatedly if necessary. Humans should do what they do best: present over-views, give individual guidance, lead discussions, make policy decisions, establish goals, prepare the “programs” for media to present, assess student progress, and do research for more information and understandings.

2. The “re-placed” teacher (no longer the major disseminator of information), would have time to react more personally with students on a one-to-one basis.

3. The following educator roles would develop as specializations.

(a) A significant proportion of “re-placed” teachers, would be actively involved in “program” upgrading. This would be their major responsibility. They would prepare the “programs” complete with resource materials. Audio-visual media specialists would assist them (See Figure 1).

(b) Another group of educators would specialize in assessment of student progress (testing specialists). It would be their job to administer tests to students who felt they had mastered a portion (or all) of a “program,” mark the tests, insure the reliability and validity of the test instruments, insure the relevancy of the tests, insure that the ability of students to analyze and synthesize information in real world situations was being monitored and, insure that the tests reflected the program objectives. These specialists would also be engaged in research.

(c) Some educators would specialize as “learning centre” managers. They would be responsible for the control of students engaged in learning activities in the “learning centre” and the staff of specialists attached to the “learning centre.” This staff would include persons whose responsibility would be to maintain a quiet but pleasant learning environment, technicians to service equipment and to explain to learners how to obtain and use equipment, and others involved in extra curricular programs.

(d) Some educators would serve as group interaction and discussion leader specialists. These would give learners the opportunity to verbalize in a social milieu the concepts they had gained. Also, this would serve to tie the concepts of various “programs” together.

(e) Another role specialization would be that of the individual counsellor specialist or student progress comptroller. He would be available to the learners using the learning centre. He would monitor the progress of those students assigned to him and watch for “problems,” whether these be personal or learning related. The physical location of his “offices” would have to be close to, and preferably in, the learning centre.

(f) Guidance counsellors, specializing in the personal and motivational fields, would handle the more deep-rooted problems.

4. What are usually called “substitute teachers” (so vital to perform “baby sitting” duties in present educational systems and which cost a 4000 teacher system about $450,000 per year) would be required much less than at present, or not at all. A teacher away ill for a day or two, or at a conference, would not require a substitute as students would be able to continue on their own or consult other members of the educational “team.”

5. Staff could take holidays at any time of the year. Students would also be able to take holidays (and breaks) at their discretion subject only to being ahead of minimum progress requirements. Their “programs” would not go on without them while they were away.

6. Educators (or teams of educators) could present lectures, lead seminars or workshops, and announce to students “when,” “where” and “what” they were going to present. Those students who needed the information, were interested and had the time would (could) attend. Thus “team” presentations would develop when educators had something to say. They would have an audience of people who were interested in what the educators had to say and who could participate in the discussions.

7. Educators would not be required to correct thousands of exercises as the students would do
this themselves as they worked through the programs. Educators, as evaluation specialists, would have to correct only achievement exams and essays, evaluate oral language proficiency, and could be expected to reflect on how to do this more appropriately.

8. Educators and students would be on the same side and the caricature of the authoritarian teacher would fall away; the helpful, professional image of a resource adult would grow.

9. Students could take time out for "work" experience. This could even be required and organized for certain courses. Again, their "programs" would not go on without them.

10. Student "attendance" would be required only in the case of special or "problem" students: those students whose progress was far below their potential who needed special help or who were below minimum progress requirements for below-school-leaving age students. However, slow-learning students would not be frustrated by being forced into a learning pace too fast for them to be able to grasp the skills, understandings, and concepts. It is probable that many "discipline" problems, created by current "grouping" practices, would thus be avoided.

11. Students could move through the system at their own pace. Individual "streaming" would
become a fact and "grouping" would no longer be necessary although students could and would work in groups which would form and re-form to meet the students' own perceived needs.

12. Students could specialize (horizontally or vertically) at will — subject only to the "core" requirement and a prepared program.

13. Small group discussions could (and should) be organized for students who had just finished a diagnostic. The "programs" should suggest when each "aid" would be most useful to the student in the process of learning. These aids, the learning materials and the buildings in which they are housed could be made available twelve months a year and twenty-four hours a day. Learners could take much of the learning material away with them and study at home. Educators, aides, paraprofessionals, technicians, and supervisors, working in "shifts" of their choice, could be on hand to "assume the smooth operation of the system."

15. Assessment of learning would be "built into" the "programs." Tests would be located at "levels" in the learning progression. They would be prepared, administered, and marked by educators whose specialty was in the area of testing. However, the experience would not be as stressful for learners as it is in the present system due to the fact that students would sit for these when they were ready and they would already have seen, worked through and corrected at least one curriculum embedded test similar to the educator administered one. The curricula specialists would start revising programs, learning materials and motivational techniques if any significant number of students continued scoring less than 90 per cent on tests. The tests would be diagnostic.

16. Certificates and diplomas, such as junior and senior matriculation could still be used. Each would probably still have its own requirement of "core" knowledge and skills and some optional areas of knowledge. As the "output" of public educational institutions is "input" to some other system (particularly in the occupational sense) there must be some sort of "standardization" so that the accepting system can have some idea as to what knowledge and skills is "buying".

17. The whole learning system would be task oriented rather than time oriented (as the teaching system is at the present time).

18. "Programs" for adults could be available as part of the offering of the regular learning system. The same physical plant could offer, in the "open area" environment or in the "egg crate" environment, "programs" suitable to students from a pre-kindergarten classification to a "gallon-age" classification, and from a vocational to an academic type. It could thus be a "community centered" school, open to all who wanted to follow a "program" and who wanted to use the facilities. This orientation would help alleviate the problem of adolescent peer groups which are so effectively cut off from adult contact by our present "teaching" system, and which thus brings to bear on the school-attending adolescent such powerful peer-group pressures.

19. Motivational management practices on a planned and validated basis could be developed. The guidance or pupil personnel departments would then assume the importance and scope which they merit.

20. Entry into a "learning" system could be at any age and at any time of the year. A counseling and diagnostic service would be of paramount importance. Its purpose would be to help the individual decide what he had in the way of skills, knowledge, abilities, attitudes and values, and where he could most profitably "plug into" the learning materials. The service would also help the client determine which "programs" were best to lead him to his goal but also it would provide him with a knowledge of alternatives.

21. The "teaching" system of education has failed most noticeably with the student from the low socio-economic background or, more specifically, with the student who comes from a home environment which does not actively and continuously support the process of education. The "teaching" system requires support from the home in the form of parental commitment to education.

A "learning" system, with teachers replaced into pupil personnel roles, would be able to provide individual help to students whose home support was weak.

22. A "teaching" system of education is highly "labour intensive." A "learning" system, though still requiring considerable labour input, could, by the use of "programs" (and thus media and technology), significantly reduce the ratio and thus the unit cost while at the same time improving the quality of instruction.

23. Stimulation, as Ardrey (1966) has so copiously documented, is a "must" in the lives of animals and humans. Competition, in one of its
several forms, is man's answer to boredom. People need its stimulus through direct or vicarious participation. However, a competition in which the participant has no hope of succeeding is obviously destructive.

Humans vary widely in the competition they desire (need) for stimulation—duration of the competition, keenness of the competition, the size of the "stakes" involved, the kind and also the frequency of competition to stir the blood and fire the imagination. However, competition in current "teaching" systems prevents learners from "teaching their maximum potential." (Henry, 1963).

A "learning" system responds to the needs of the learner. He will be engaged in competition at intervals which could be of his own choosing (as well as that of his along with that of educators and others in the "system"), at intensity levels of his own choosing, with his own past performance (as well as with others), in places and in an environment of his own choosing, and in "areas" more responsive to his perceived needs, interests, and abilities.*

24. In a "teaching" system in which humans filter significant portions of total information input through their own value systems in an unmonitored situation, there is considerable resistance by parents to allowing human teachers to move into the area of "values." About as far as the public allows teachers to go in this respect is to teach about values. Teachers, of course, can and do reinforce the very general values of a society in which they function.

A "learning" system would have advantages over the "teaching" system. "Programs" are concrete things which could be inspected by the public prior to "consumption" by their child. A variety of "programs" could be prepared. Each could stress or openly espouse a particular system of values and behaviors. Parents (and/or their child) could decide which "programs" the child should follow.

Problems

A number of problems must be faced in order to make possible the introduction of a "learning" system as an alternative.

1. Convincing people that "self-instructional programs" imply putting on tape, in writing, or in any other form possible, everything which the "best" teacher in the world does when he is teaching to the best of his ability. Self-instructional programs can provide the student with the same approaches (inductive, deductive, discovery, problem solving, cognitive, etc.) as do the "best" of modern teachers. "Programs" could suggest to the student that he use all the communications media forms available. "Programs" could require students to fill in blanks or complete sentences (as teachers do), write paragraphs, solve problems, study charts, go to the library to look for information, visit a bookstore for a week, make a field trip, or even fly to France to work in a bookstore for a week.

2. Getting the time, skill, and personnel to prepare the "programs." Transitions "programs" to bridge the gap, could be adaptations of existing texts, films, filmstrips, and tapes.

3. Developing an acceptable set of goals for each "course" as well as for "education" which are stated in measurable terms, and developing evaluation instruments which test "learning" or the change in "behavior." To say that we cannot evaluate and measure concepts, opinions, understandings, feelings, etc., is to say that we need to do some work in this area. The task is far from impossible. In fact, recent political pressures suggest that there may be no alternative.


5. Getting teacher organizations to accept that replacing the "teacher" by "educators" in educator roles is a step toward an improved professional position.

6. Allaying the usual fears roused in people faced with significant change.

Summary of "Learning" System Concepts

A self-instructional learning system would make it possible for each student to follow the "programs" he needs and at his own speed. Those in education (and in the community at large) would be there to help him learn.

The amount of "structure" is made responsive to the student's perceptions of his needs. Those who are timid, slow at learning, in need of frequent reinforcement or upset by large tasks, can opt for programmed learning materials; those who are "bright," self-confident and eager, can opt for independent study. Students would be able to build, from available components, an environment with enough structure to support their learning but not so much that it hampered their own growth toward a "realization of their full potential."

* If he is a "duck," he won't be compelled to compete with the "rabbit" in a foot race; if he is a "rabbit," he will not be compelled to vie with the "duck" in a contest of swimming ability.
Significant decisions would be made by the student day after day. He would not be a mere passenger in the "educational bus."

In distinct contrast to the present "teaching" system, no student would be afflicted with a "poor" teacher, an absent teacher, an unprepared teacher or an overworked teacher. On the other hand, the replaced teacher would no longer be an over-and-over disseminator of information, a marker of papers, a disciplinarian, a checker of homework. Individual contact between students and educators would be meaningful and the "good" educator will be freed to do a more "human" job.

"Programs" could be "improved" any day of the year. That is dubious with regards to human teachers.

Finally, a "learning" system which provides more freedom to the individual and more opportunities for decision making, would tend to develop more creative and self-reliant individuals. A "learning" system would provide healthy stimulation through competition (mostly the learner with himself). Thus there would be much less repression and frustration during the years when, as in the present teaching system, the student has been treated almost literally as a "nigger."

The Hall-Dennis report recognized the individual's need for self-realization. This paper has outlined how this could be done without sacrificing the ability of society to fulfill the needs of all men: those needs which are called "public needs" (an educated population) but which are in reality, the long-range needs vital to every individual's self-realization (an "educated" man).

The key is in self-instructional learning materials which make self-instructional learning systems possible.

REFERENCES

