

TEACHER INITIATIVE IN CURRICULUM DEVELOPMENT: A
COMPARATIVE STUDY OF THE ATTITUDES OF NEWFOUNDLAND
TEACHERS INVOLVED IN PROJECT ATLANTIC CANADA AND
NEWFOUNDLAND TEACHERS NOT INVOLVED IN
PROJECT ATLANTIC CANADA

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STUDY OF THE ATTITUDES OF NEWFOUNDLAND TEACHERS INVOLVED
IN PROJECT ATLANTIC CANADA AND NEWFOUNDLAND TEACHERS
NOT INVOLVED IN PROJECT ATLANTIC CANADA

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The undersigned certify that they have read, and do recommend for acceptance, a thesis entitled "Teacher Initiative in Curriculum Development: A Comparative Study of the Attitudes of Newfoundland Teachers Involved in Project Atlantic Canada and Newfoundland Teachers Not Involved in Project Atlantic Canada" submitted by Melvin Hubert Grandy B.A. (Ed.), B.A., in partial fulfillment of the requirements for the degree of Master of Education.

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ABSTRACT

The purpose of this study was to provide empirical data about Newfoundland teachers who volunteered to work on curriculum development projects for Project Atlantic Canada (PAC). These teachers have been actively involved with Project Atlantic Canada (PAC) since September 1972. Specifically, comparisons were made between the Project Atlantic Canada (PAC) teachers and teachers who were not involved in Project Atlantic Canada (PAC). These comparisons focused on three sections in a questionnaire (see Appendix B). Section A contained data related to certain personal and professional characteristics; Section B consisted of the Rokeach Dogmatism Scale, Form E, which measured the openness and closedness of the belief-disbelief systems of respondents; and Section C which consisted of the Curriculum Inventory. This instrument measured respondents in terms of their attitudes toward curriculum use and planning.

The data in the study were obtained from a mailed questionnaire. The respondents were the twenty-five Project Atlantic Canada teachers and one hundred and twelve respondents in the control group, the non-PAC teachers.

The non-PAC teachers were provided with information about Project Atlantic Canada (PAC) and asked if they would like to become involved at some future date. Some of the teachers in the control group volunteered (26%). They became the X_2 group in the study. Other teachers in the control group refused to become involved (42%). They became the X_3 group in the study. For comparative purposes thirty-five teachers were randomly

selected from the control group. They received no information about Project Atlantic Canada (PAC). Nor were they asked to make a decision about becoming involved. Twenty-eight (80%) of that group returned questionnaires and became the X_4 group in the study. The PAC teachers were the X_1 group in the study.

The findings indicated that there was very little relationship between open and closed belief-disbelief systems and the decision to become involved in curriculum development projects.

It appeared that teachers who have been involved in curriculum development projects, such as Project Atlantic Canada, and teachers who would like to become involved have more positive attitudes toward curriculum use and planning than teachers who refuse to become involved.

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Chapter 1

The Problem

This research study was focused on a situation created in Newfoundland during the early 1970's, by Project Atlantic Canada. That situation occurred when the creation of Project Atlantic Canada (PAC) encouraged teachers to become involved in curriculum development projects. The teachers who volunteered and have been involved since September 1972 assumed a maximum responsibility for the development of curriculum projects based on local topics.

The study made comparisons between Newfoundland teachers involved with Project Atlantic Canada (PAC) and Newfoundland teachers not involved with Project Atlantic Canada.

The problems investigated were guided by the following questions:

1. (a) Do teachers who have been involved with Project Atlantic Canada (PAC) have more open belief-disbelief systems than those who have not been involved?
(b) Do teachers who have been involved with Project Atlantic Canada (PAC) have more positive attitudes toward curriculum use and planning than those who have not been involved?
2. Do teachers who have been involved with Project Atlantic Canada (PAC) display changes in attitudes toward curriculum use and planning as a result of involvement in Project Atlantic Canada (PAC)?

Purpose of the Study

The purpose of the study was to gather empirical data related to the attitudes of Newfoundland teachers involved in Project Atlantic Canada. Specifically, the study was designed to compare the attitudes of Newfoundland teachers involved with PAC to the attitudes of teachers not involved with PAC. The data gathered for the study was used to answer the questions in the problem statement, page 1.

Background of the Problem

Project Atlantic Canada (PAC) is now completing its second year of operation in Newfoundland. Project Atlantic Canada is sponsored by the Canada Studies Foundation (CSF), a privately financed, non-profit organization. One of the aims of the Foundation, which has been achieved by PAC in Newfoundland, is the involvement of teachers, students and interested citizens in curriculum development projects.

The Newfoundland teachers who volunteered for PAC projects, their behaviours and attitudes; what they are and how they change, formed the basis for this study. In particular the study investigated whether or not PAC teachers have more open belief-disbelief systems than non PAC teachers. The writer assumed that the teachers who volunteered for PAC projects were more receptive to deal with new ideas and accept change than teachers who refused to become involved with PAC. On the basis of that assumption, the decision was made to use the Loeach Dogmatism Scale, Form E in order to determine whether or not PAC teachers had more open belief-disbelief systems than teachers who refused to become involved in PAC.

The study further investigated the attitudes of PAC teachers

and teachers who were not involved with PAC, towards curriculum use and planning. The writer assumed that PAC teachers would show more positive attitudes towards curriculum use and planning than teachers who were not involved with PAC. That assumption was the basis for using the Curriculum Attitude Inventory in order to classify PAC teachers and non-PAC teachers according to their attitudes toward curriculum use and planning.

The final question which guided the investigation of the problem is related to changes in professional skills and how these changes may influence personal attitudes. Taba (1962) pointed out that professional skills and personal attitudes "go hand in hand, each affecting the other, and changes in one both require changes in the other and produce possibilities for further change (p. 462)." With this in mind the writer set out to determine whether or not the development of curriculum skills on the part of PAC teachers brought about changes in their attitudes toward curriculum use and planning. It appears that attitudes of Newfoundland teachers toward becoming involved in PAC projects were related to a number of obstacles.

Teachers who became involved in the above PAC projects found many obstacles in their path. One of the more common obstacles was convincing administrators and other teachers that it was possible for classroom teachers to develop teachable curriculum. Miller (1973) noted that "curriculum development in the past has been directed mainly by educational consultants and by specialists in the disciplines (p. 78)." Consequently, curriculum development is not usually recognized as part of the teacher's function.

In addition to the preceding there are other obstacles to teachers who are interested in expanding their skills to involve curriculum development. Shane (1973, p. 508) outlined some of the obstacles common to all teachers involved in curriculum development projects. Many of those obstacles are pertinent to Newfoundland projects. The time factor was common to all Newfoundland teams; time to gather material, time to write, time to meet with other team members and make plans for the future of the project. Many teachers felt insecure because they lacked the background knowledge in the areas of curriculum development and curriculum evaluation.

In many cases teachers were prevented from taking part in curriculum development because they lacked the necessary funds to support their efforts. There were other teachers who watched the failure of similar attempts to change educational practice; as a result they were reluctant to become involved.

In the case of the Newfoundland teachers who volunteered for PAC projects, funds were provided for gathering and producing materials, as well as for travel and purchasing release time. Through the PAC workshops teachers were given an opportunity to broaden their knowledge in needed areas such as curriculum development and evaluation.

Significance of the Study

The significance of the study must ultimately be its contribution of empirical data to the field of teacher initiated curriculum development. The involvement of teachers as major developers of curricula is not a new

idea. It has been recommended by such people as John Dewey (1928), Alice Meil (1946), Hilda Taba (1963), John R. Joyce (1971) and Philip J. Warren (1973). In spite of this a review of research in Newfoundland education has revealed that very little research has been done in the area of teacher initiated curriculum development.

The Newfoundland teachers who became involved with Project Atlantic Canada were one of the first groups in the province to venture into co-operative curriculum development with students, university professors, and lay people. Consequently, the findings of the study are related to basic questions. Such questions as: (1) whether or not teachers who became involved with Project Atlantic Canada have more open belief-disbelief systems than teachers who were not involved, (2) whether or not teachers involved with Project Atlantic Canada (PAC) have more positive attitudes toward curriculum use and planning than teachers who were not involved, (3) whether or not attitudes toward curriculum use and planning changed as a result of teacher involvement with Project Atlantic Canada.

The findings of this study should provide valuable information both for future researchers and for people genuinely interested in a co-operative curriculum development program.

Definition of Terms

The following terms are defined as they apply to this study.

Belief system -- is conceived to represent all the beliefs, sets, expectancies, or hypotheses, conscious and unconscious, that a person at a given time accepts as true of the world in which he lives (Rokeach, 1960, p. 33).

Curriculum -- is a structured series of intended learning outcomes

(Johnson, 1971, p. 45).

Curriculum change -- is conceived as a favorable change in the curriculum, following from the curriculum planning and development process.

Curriculum planning and curriculum development -- is the involvement of teachers, pupils and consultants in the process of organizing and constructing the substance of the curriculum.

Curriculum use -- is the willingness on the part of the teacher to pilot new curricula or to use existing textbooks coupled with new content ideas.

Disbelief system -- is comprised of a series of subsystems rather than one single unit and contains all the beliefs, conscious and unconscious, that a person at a given time rejects as false (Rokeach, 1960, p. 33).

Open and closed belief-disbelief systems -- is a numerical rating as measured by the Rokeach Dogmatism Scale, Form E. A high score indicates a closed belief-disbelief system and a low score indicates an open belief-disbelief system.

Project Atlantic Canada (PAC) -- is a regional curriculum development project sponsored by the Canada Studies Foundation. Project Atlantic Canada in turn supports teacher initiated curriculum development projects throughout the Atlantic provinces.

Limitations of the Study

The following limitations of the study should be noted:

1. This study was limited to an investigation of those teachers who had volunteered to work on curriculum development projects sponsored by Project Atlantic Canada (PAC). Thus the results of this study

may be generalized to teachers who volunteer.

2. The small size of the sample had an effect on the decisions made in this study. When comparing respondents statistically, in some instances there were less than two respondents in a cell. Because of this fact, results were possibly not as reliable nor as conclusive as they could have been with a larger sample.
3. The results of the study should be generalized only to teachers similar to those involved in Project Atlantic Canada (PAC), and who are teaching in situations similar to PAC teachers.

Summary

The first chapter was an introduction to the study; consequently, the problem, purpose, background to the problem, significance of the study, definition of terms, and limitations of the study were set down. In Chapter 2, research relevant to the study is reviewed. The procedure, questionnaire returns, instrumentation, design of the study, hypotheses, and methods of data analysis are set down in Chapter 3. In Chapter 4, the data obtained from the questionnaire are analyzed and the findings reported. These findings are interpreted and conclusions are drawn in Chapter 5. Lastly, the investigation is summarized, implications are drawn, and recommendations for further study are suggested in Chapter 6.

Chapter 2

Review of Literature

The present study is focused on the attitudes of classroom teachers involved in curriculum development and change. With that in mind the writer set out to review the literature pertinent to the following areas:

(1) the role of the change-agent in the light of present social and educational change; (2) the major approaches to curriculum development and change; and (3) the role of the teacher in the framework of curriculum change.

The Change-Agent in Social and Educational Change

There is no doubt that in present day society change is a common everyday occurrence. Moore (1963) pointed out that:

By any crude measurement, the contemporary world appears to be changing more rapidly than at any other time in human history, particularly if we accept an arbitrary division and define the contemporary period as the twentieth century (p. 2).

Ryan (1968) stated that "the whole weight of knowledge in modern social science pushes toward the conclusion that social change is one thing that is here to stay (p. 13)." Ryan further noted that "social change arises when the relationships among persons or groups are modified (p. 3)." The technologies of science, communication and travel have created a rapidity of social change that is unique to this century.

From the above then it appears that change itself is one of the greatest problems facing society today and a major obstacle to this problem

is the inadequacy of our social systems for dealing with change (Reckinger, 1973, p. 513). In the case of our educational systems we have added all the new techniques and accessories; yet it appears that the schools lack the ability to make rapid and adequate adaptations to our fast changing times (Carlson, 1969, pp. 3-7).

One reason suggested by Carlson for the delay of change in educational systems is the absence of a change-agent. He said:

Part of the explanation of the slow rate of change in public schools, according to many students of organizational change, lies with the absence of an institutionalized change agent position in public education. A change agent is a professional who has as his major function the advocacy and introduction of innovations into practice.

However, Bennis (1966) made a strong case for "planned change," a process that appears to off-set what Carlson has said.

Bennis saw planned change as follows: "A conscious, deliberate, and collaborative effort to improve the operations of a system, whether it be self-system, social system, or cultural system, through the utilization of scientific knowledge (p. 2)." In his paradigm Bennis viewed planned change as being superior to all other types of change. It has a change-agent-client relationship that is beneficial to both sides.

Any person who aides the change process in any way is usually referred to as the change-agent. The group, organization, individual, etc. being helped is called the client system. In recent years the agent of change has emerged as a professional person whose tasks are those of helping communities, educational systems and other groups to plan development or reform objectives, to focus on problem situations, to see possible solutions and to evaluate the results of planned effort.

Lippitt, Watson & Westley (1958) proposed a definition of planned

change similar to the one presented by Bennis, with one exception. As they see it the change-agent is from outside the client system, a person or team brought into the system to help. This appears to be a narrow view when one looks at the large number of well-educated administrators, specialists and classroom teachers employed in any one school district. In fact there should be no lack of change-agents. School boards should encourage those people who are open to change to become involved in the planning of change. In this way the educational system will build into itself a vigorous change-agent function which will enable it to adapt to a continually changing environment (Bennis, Benne & Chin, 1961, p. 16).

In the opinion of the writer the change-agents in education are the superintendents, consultants, supervisors, principals and teachers. In recent years it appears that the process of curriculum development has taken on the characteristics of a change-agent. In the case of Project Atlantic Canada the university professors and teachers of the regional steering committee were the original change-agents. The role was later assumed by classroom teachers who volunteered to become involved in the development of local curriculum units. At the present time it appears that these local curriculum projects will become the catalyst of change in that the high level of work in each unit will inspire the development of further attempts to change the curriculum.

Approaches to Curriculum Development and Change

Curriculum development as an agent of change is not a new idea. Sequel (1966), Caswell (1966) and Kliebard (1968) agreed that the 1920's saw the emergence of curriculum as a field for professional activity. It was during this period that Bobbitt (1924) demonstrated how scientific

principles might be applied to the practical problems of development. In the same decade the title "activity curriculum" came into general use. John Dewey had used the expression as early as 1897, in reference to his laboratory school at the University of Chicago (Smith, Stanley & Shores, 1957, p. 264).

The curriculum of the Dewey school "was designed to utilize in the education of young people those basic impulses toward saying, making, finding out, and creating (Dewey, 1963, pp. 30-33)." John Dewey, as an agent of change during the 1920's and 1930's, was to become one of the major contributors to twentieth-century progressive educational theory and practice (Ragan, 1966, pp. 20-21). The Progressive Education Movement, another agent of change during the same period, was not created by Dewey although he played an important role in its growth. Cremin (1964) noted that "the progressive movement was a many sided effort to use the schools to improve the lives of individuals (p. 21)."

From the 1920's until the mid 1950's the Progressive Movement brought the work of curriculum development and curriculum change to the point where it became a significant part of most major school systems. The movement advocated a comprehensive approach to curriculum development, so that all levels of child growth would receive equal attention. It was considered important to have teachers participate as change-agents in the work of curriculum development so that total acceptance of new changes would occur, at the classroom level (Verduin, 1967, pp. 22-23).

It was during the late 1920's and through the 1930's that the reconstruction of the curricula became popular. Bagley (1934) pointed out that "by 1933 there were no fewer than 35,000 different curricula on file in the curriculum laboratory of Teachers' College, Columbia University

(p. 140)." Underneath this canopy of curriculum reconstruction lay a dispute centered around the responsibilities of teachers as change-agents in curriculum development. Whipple (1930) and Bagley (1934) both felt that the work of teachers in this field was amateurish and a waste of time. On the other hand Caswell & Campbell (1935) and Bauernfeind (1930) believed that since teachers were closer to the classroom than the specialists they should have a say in curriculum development.

In spite of the controversy over the teacher's role in curriculum development, the movement to develop curricula thrived. More and more school systems accepted it as essential to have system-wide, organized curriculum programs; schools of education began to include courses on curriculum in their programs, in addition large numbers of books, articles and studies were written around the topic (Caswell, 1966, p. 2).

The curriculum movement which began in the 1920's and included teachers, university professors, specialists and curriculum development as change-agents, has now persisted for over fifty years. Gwynn & Chase (1969) reported that over that period of time there have been six stages of change and growth in the curriculum field. They are:

1. The aims-and-objectives stages;
2. The survey movement;
3. The development of the unit technique;
4. System-wide-curriculum revision;
5. The core curriculum and large-unit procedures, including the fusion movement;
6. Subject-matter curriculum revision by college disciplines and research psychologists, with some help from high school teachers (p. 143).

The preceding periods of growth and change in the curriculum field

appear to have come about as a result of four major approaches to curriculum change. Three of these approaches are discussed in depth by Smith, Stanley & Shores (1956, pp. 426-449). They are:

1. The administrative approach;
2. The grass-roots approach;
3. The demonstration approach.

The committee approach receives such wide support (Taba, 1962; Oliver, 1965; and Doll, 1970) that the present writer will treat it as the fourth approach.

The administrative approach. In this approach the administrator decides when the curriculum needs revision, what revision is needed and how it shall be done. There are cases where the administrative approach appears to be democratic, because of the appointment of teacher committees. However in most cases the administrators direct every move of the committees (Miel, 1946, p. 151). Courses of study produced by this type of curriculum development, where teachers had very little impact, were often used ineffectively or not at all (Taba, 1962, p. 447).

The administrative approach to curriculum development was popular during the 1920's. Although the approach has resulted in some curricula improvements, it has now been abandoned in theory and in most places in practice, largely because of its undemocratic approach (Smith, Stanley & Shores, 1957, p. 428).

The "grass-roots" approach. The big weakness of the administrative approach appears to be in its failure to involve those teachers who are open to and interested in changing the curriculum. The "grass-roots" approach involves teachers, administrators, consultants and lay people in

the process of curriculum development and change. In this approach the role of the district administrator is to provide leadership, release time and whatever else may be needed. The approach has been used primarily as a catalyst to have individual schools improve their programs. Goodlad (1971) suggested that the "key unit for educational change is the individual school, with its principal, teachers, students, parents and community setting (p. 160)."

Saylor & Alexander (1966) pointed out "that the real "grass-roots" level of curriculum planning is the pupil himself (p. 23)." After teachers, administrators and other members of a planning group have had their say, then finally it is the individual pupil and his present level of learning that will modify the curriculum.

There are many techniques that might be employed to introduce the grass-roots approach. However Stratemeyer, Forkner, McKim and Passow (1963) reported that "workshops and similar procedures can have particular value for groups of teachers working toward the development of curricula (p. 688)." Whatever techniques are used, the important thing in the "grass-roots" approach is to have teachers, administrators, lay people, students and consultants working together as change-agents; in an effort to solve curriculum problems, for the betterment of all levels of society.

The demonstration approach. This approach is primarily interested in having teachers become involved in curriculum development and change on a small scale, before making changes in a whole district or school system.

The approach has two basic methods. The first involves setting up an experimental unit within the school. This unit usually consists of administrators and teachers and is responsible for developing and evaluating

a curriculum project within the school.

The second method in this approach involves identifying teachers within a school who are dissatisfied with the regular program and interested in bringing about curriculum change. These people are given release time and encouragement by the administration in order to develop new programs at the level of classroom practice.

Provided the teachers in either of the above methods are successful, then they are given an opportunity to demonstrate their success to other teachers in their districts.

The demonstration approach dictates that a good system of communication be set up between those teachers who are involved in the curriculum development projects and those who are not involved; in an attempt to avoid negative feelings and confrontation between the two groups. The approach avoids the open conflict that may result from total staff involvement. The approach avoids conflict between teachers and administration in that the support of administrators is available when teachers are ready and willing to use it. The demonstration approach serves as a catalyst to gradually involve teachers who will not change or get involved in any investigating activity.

The committee approach. The committee approach resembles the "grass-roots" and the demonstration approaches. However because of its consistent appearance in the literature, the writer has considered it as a separate approach to curriculum development and change.

Newton (1966) noted that "dissatisfaction is often repressed with the first three approaches (p. 11)." The administrative approach does not involve classroom teachers; consequently, programs produced are usually

not employed effectively by teachers. The "grass-roots" approach involves the personnel of each school in a district and usually results in too much diversity (Taba, 1962, pp. 447-448).

The demonstration approach usually results in negative attitudes toward the new programs and toward teachers involved in their development. These negative attitudes are often displayed by teachers not involved in the program (Smith, Stanley & Shores, 1957, p. 436).

One of the most popular and richest natural resources available to the education community is the curriculum development committee (O'Hanlon & Wood, 1972, p. 157). As change-agents these committees may be used to provide a general framework for the curriculum of a province or district, and on another scale to plan a course of study for a particular subject area. It appears that the basic idea behind the committee approach is to provide people who are interested in changing the curriculum with an opportunity to come together and cement their ideas into a plan of action.

These committees of interested teachers, administrators, professors and lay people provide each other with clear, meaningful objectives, along with a sense of cohesiveness and belongingness which encourages exploration of new ways; in short a climate friendly to the testing of ideas and procedures (McNally & Passow, 1960, pp. 44-45). McNally & Passow further suggested that in "such a group it is possible to create an atmosphere which stimulates growth towards mutually accepted goals (p. 45)."

The kind of curriculum development implied above does not happen simply by bringing together people of like interests. Fish (1968) pointed out that "it has to be planned by professional educators who understand the importance of such involvement (p. 330)." These professional educators are to be found at the classroom level, the district level and the univer-

sity level all across the country. These are the change-agents previously mentioned in this chapter. When these change-agents plan and work with interested people at the committee level the results are often gratifying.

Sand (1971) has said that "more general participation in curriculum decisions has been one of the most significant movements in education (p. 22)."

The number and types of committees vary with each school district.

However McNally & Passow (1960) outlined the more common types of committees that exist from the school level up to the provincial level.

They are:

1. Grade level committees: organized for single grades either within a single school or from single schools.
2. Unit level committees: organized by primary, intermediate, junior high or senior high school units.
3. Departmental committees: organized by subject areas in either a single school or from several schools.
4. System-wide committees: organized by representatives from various levels and areas in the school system (for example, kindergarten - Grade 12 committee on mathematics; or junior - senior high school committees on articulation; or committee on cumulative records).
5. Geographical area or regional committees: organized by geographical sections in large school systems.
6. Special committees: organized for special purposes with personnel who have appropriate competencies or status positions.
7. Teachers and other professional workers may participate in the improvement projects of other organizations. These may include provincial (state), regional or national professional bodies; university- or college-sponsored school study councils; state departments of education curriculum studies; educational foundation projects; and nonprofessional organizations at the local, state, regional and national level (pp. 46-47).

The committee approach on the surface appears to be the thread to

bind the fabric of curriculum development from the classroom teacher to the department official, including students and lay people along the way. Doll (1970) stated that "planning by equals seems to have the greatest long-term and desirable effect (p. 167)."

It may appear from the above that working committees are guaranteed to be successful change-agents. However, it is also true that committee work may become isolated from the real problems of the curriculum and unrelated to curriculum improvement. The committee system may be unproductive unless it is accompanied by an adequate methodology of work and is able to generate the dynamics of involvement within the group (Taba, 1962, p. 452). McNally & Passow (1960) suggested six positive directives which, if formulated at the outset, may help a committee reach its goals. They are:

1. Define sharply the task or purpose.
2. Select the committee membership so that participants represent a balance of competencies, interests and viewpoints.
3. Indicate the life span of the committee.
4. Establish the relationship of the committee's work to the total curriculum program.
5. Clear the avenues of communication.
6. Allot time and resources so that members can mesh committee functions with other responsibilities (p. 47).

When the kinds of assistance and commitment described above are provided to curriculum committees, the chances for successful completion of their tasks is greatly increased.

O'Hanlon & Wood (1972) suggested that the payoff from the committee approach for the school and school system will include such outcomes as the following:

1. Curriculum committees which have the support of other staff members in the school community, especially those most directly affected by their final product.
2. Curriculum committees which complete their tasks, determine steps necessary to implement their products, and take actions on these steps.
3. Curriculum committees whose members believe the efforts involved in curriculum planning are worthwhile and of value to their professional growth.
4. Curriculum committees whose members are skilled in curriculum development and in working as teams (p. 159).

If these outcomes are possible then the curriculum committee approach is indeed one of the richest resources of the educational community. This resource could be the catalyst for teachers interested in initiating curriculum development.

The success or failure of ~~any of the~~ approaches to curriculum development and change mentioned above appears to depend on the role which the classroom teacher accepts in the process of change.

This range of teacher differences toward becoming involved in change activities is one of the stumbling blocks in many attempts to bring about positive changes in the curriculum, with the help of classroom teachers. In the light of the preceding it is interesting to see that research reveals evidence to support the fact that when teachers do become involved in curriculum development projects they display more positive attitudes towards all levels of education, as a result of their involvement.

The next section of this chapter will examine the role of the classroom teacher as change-agent and attempt to support the generalizations made above.

The Role of the Teacher in Curriculum Change

By the nature of their work, teachers are change-agents. In the

specific atmosphere of their own classrooms the curriculum becomes what they want it to be. Connelly (1973) noted that:

teachers, willy-nilly, already interpret and modify materials. For the most part, it can be assumed that these interpretations are in response to situational characteristics, such as the teacher's own capabilities (p. 171).

In many cases the changes engineered by teachers are unplanned and come on the spur of the moment. However there is little doubt that changes in education, like other types of social change, must be planned if the greatest benefits are to be realized (Bennis, Benne & Chin, 1961, p. 31).

The involvement of teachers as change-agents in a planned program of change appears to be possible through the committee approach more so than any of the other approaches. In this method the initial leadership is provided by administrators, specialists or university professors, while classroom teachers have the opportunity to apply their knowledge of the learning situation within the classroom. Sabey (1973) pointed out that: "in this manner the teachers become fully functioning professionals; diagnosing, prescribing and treating their clients in a manner designed to meet both social and individual goals (p. 13)."

The involvement of classroom teachers, university professors and others on curriculum committees will require a particular kind of field work, since many teachers are not aware of the theories or the practical application of the theories surrounding curriculum development and evolution. Anderson & Roald (1973), in citing the Canada Studies Foundation example, stated that:

This field work, if it is to be successful, should be of a longitudinal nature rather than of the single experience variety. . . . The teacher-initiated curriculum development work sponsored by the Canada Studies Foundation has involved education professors as advisors and consultants over a long period of time. In many instances, an individual education professor is

involved as a consultant throughout the life of a particular project. This type of longitudinal field work is beneficial to all concerned. It enables a positive rapport to be developed between the consultant and the teachers in the field (p. 5).

With this type of co-operative effort the classroom teacher is soon able to couple his knowledge of the classroom situation with the theories of curriculum development. These factors then become the tools of curriculum development.

Teacher differences. Teachers who volunteer for curriculum development projects such as PAC appear to display differences in their opinions and actions from their colleagues who refuse to become involved. The type of teacher involved in the PAC projects refuses to be bound by the existing curriculum. Miller (1972), in his analysis of teachers in the Project Canada West projects, pointed out that "the teachers who participated in Project Canada West were highly motivated toward involvement in curriculum development (p. 186)." This is not to say that teachers who do not become involved in curriculum development have no complaints about existing programs. However in their eyes the obstacles and the risks of trying to bring about change are overpowering. One of the big obstacles according to Duncan (1973) is that "generally a teacher is not expected to develop curriculum. Nor does teacher preparation sufficiently involve the novice in curriculum development (p. 5)." In the words of Taba (1962), "teachers have to consider the risks of making mistakes, discovering deficiencies, of not succeeding or of proceeding without sufficient skill (p. 463)."

From the above it seems that teacher initiated curriculum development will come about as a result of the efforts of "Self Reviewing" teachers. Horton (1973) describes that person as follows: "He will cope successfully with change and uncertainty, welcome it and seek it out as

means for adding zest to his teaching and his life. He will feel no need for closure (p. 25)." Rogers (1963) mentioned similar types of teachers; he called them "innovators." "They are the first members of a social system to adopt new ideas (p. 252)."

The type of teacher described above is sharpened by contrast to what Rogers (1963) calls the "laggard." "Their point of reference is the past, and they interact primarily with those peers who have traditional values like theirs (p. 253)." Hough & Duncan (1970) further defined this type of teacher as follows: "They are so bound by the suggested content and time schedule of their school system's course of study that they do not make the responsible professional decisions that they as teachers should make (p. 30)."

Apart from these traditional risks and obstacles there are other factors which tend to influence teacher involvement in projects seeking to change the curriculum. Hough & Duncan (1970) suggested that "teachers make decisions about existing programs according to the values they hold (p. 33)." Hough & Duncan further stated that:

A teacher's concept of self and others represents an extremely important set of internal forces that determine in part what curriculum decisions he will make and how others will influence him in the decision making process (p. 33).

Rokeach (1960) pointed out, that closely related to the idea that attitudes and values are difficult to change, is the tendency to label attitudes that resist change as rigid, authoritarian, and closed-minded; while attitudes that accept change may be labelled as progressive, mature and open-minded (pp. 335-338). Loweke (1966), adopting the work of H. H. Anderson (1961), noted that:

The open system is a system of relationships which accepts uniqueness in perception and thinking; it permits originality,

experimentation, initiative, and invention. A closed system encourages conformity and resistance to change. The development of creativity is clearly related to learning and contributing, which take place within an open system (p. 27).

It appears possible to hypothesize from the above that teachers with open belief-disbelief systems would be receptive to new ideas and willing to accept change such as involvement in curriculum development projects. The teachers with closed belief-disbelief systems would be reluctant to accept change and try new ideas.

In spite of the many factors working against them there are teachers and administrators who will volunteer to become involved in curriculum development projects. Wood (1973), reporting on the findings of Gross (1965, Halpin (1967), and Stern (1950), noted that the teachers and administrators who do become involved have some or all of the following factors working in their favor.

1. They believe that they can create new programs and strategies which will improve the quality of education in their schools.
2. They and the board of education have a feeling of mutual trust and understanding.
3. They believe that they will receive psychological and financial support for their efforts to develop, implement, and evaluate innovative programs.
4. They believe that it is more important to seek better ways of educating young people than to be absolutely sure that what they try will be successful.
5. They have a commitment to and an understanding of the long range goals of their school.
6. They feel free to communicate openly with each other about their concerns, beliefs and ideas (p. 518).

It appears from the research that the factors mentioned above could be used as guidelines for teachers who are interested in initiating curriculum development. Reichart (1971) pointed out that such an "approach

could result in teachers becoming leaders as they rightly should be by using change as something to create upon rather than having change control them through external pressures (p. 15)."

Teacher changes. Although the barriers to teacher involvement in curriculum development are varied and complex, it appears that once teachers become involved there is a positive change in their attitudes towards educational problems. McKim (1957, p. 31) reported that one of the earliest major attempts to involve teachers in curriculum development was made by the Southern Association of Secondary Schools and Colleges. Miller (1972), reporting the findings of Jenkins (1946a, 1946b), noted that the Southern Association study began in 1938 and continued until 1945. The project was designed by educators in the United States to encourage participating school staff members to develop their own local curricula. An analysis of the project revealed that the classroom teachers who were involved were successful in conducting curriculum development at the building level. The analysis also revealed an awareness on the part of the teacher participants of positive changes in attitudes toward education.

Teacher initiated curriculum development and the involvement of classroom teachers in co-operative curriculum development projects boomed in the United States from 1955 to 1968. Such groups as the School Mathematics Study Group, The Biological Sciences Curriculum Study Group, The High School Geography Project and many others involved classroom teachers as curriculum developers. In almost all cases the final reports from these national projects revealed how teachers benefited from their involvement. In many cases new skills were developed for classroom use. In other cases teachers were exposed to the process of curriculum research

for the first time. But most important of all, appears to be the exchange of ideas between classroom teachers and experts in the field of curriculum development (Wooton, 1965; Patton, 1970).

In addition to the national projects there were regional projects in the United States and Canada. One such effort was the teacher initiated projects in Sonoma County, California. Loweke (1966), in her analysis of these projects, stated the following:

The chief value of participation as perceived by the teachers were intellectual stimulation, a sense of achievement, the pride of accomplishment, the experience of leadership and heightened professional self-respect and self-confidence (p. 78).

Verduin (1967) reported that teachers involved with the Cassopolis Co-operative Curriculum Study in Michigan "showed a substantial increase in interest towards all phases of education as a result of involvement in curriculum development (p. 115)."

Miller & Dhand (1973), in their analysis of teacher involvement with Project Canada West, found that the vast majority of teachers perceived an increase in their knowledge of educational skills and classroom techniques. As a result of their involvement, the same group reported greater interests in reading educational literature, the acquisition of a new understanding of curriculum and instructional design, the realization of the benefits of greater exposure to the ideas of curriculum consultants and the gaining of a greater awareness of the needs of students (p. 29).

These findings are supported in the writings of many leading curriculum theorists. Smith, Stanley & Shores (1957) stated that "the competence of teachers will be improved only as the teachers become involved personally in the problems of curriculum revision (p. 428)." Doll (1970) reported that "classroom teachers behave more insightfully and effectively

as a consequence of their experiences in curriculum improvement activities (p. 399)." Table (1962) noted that teachers who become involved in curriculum development projects usually "changed in the ways of thinking about and tackling educational problems, as well as in skills that make possible an experimental approach to curriculum and teaching (p. 492)." Saylor & Alexander (1966) wrote that the fundamental values which accrue to the teacher participant in curriculum planning are those of changes in knowledge, insights and self-perceptions (p. 439).

A review of literature has revealed that although the results of teacher involvement in curriculum projects may be fragmentary, there is enough empirical evidence and opinion to support the claim that there are distinct differences between teachers who volunteer for curriculum projects and those who refuse to become involved. Research also supports the claim that teachers who become involved display positive changes in their attitudes towards education as a result of their involvement.

Summary

Throughout this chapter the writer has attempted to show that the role of change and change-agents is not something new for education. In fact curriculum development has been a consistent change-agent since the 1920's. But most important of all the success of curriculum development as a change-agent depends on whether or not classroom teachers are involved.

The chapter also supplied evidence to support the hypothesis that teachers who volunteered for curriculum development projects have more open belief-disbelief systems than those who do not, and that teachers who do become involved in curriculum development projects have more positive attitudes towards educational practices than teachers who have not been

involved.

The chapter further supported the hypothesis that positive changes occurred in teacher attitudes as a result of involvement in such efforts as curriculum development projects.

Chapter 3

Method of Investigation of the Problem

Presented in this chapter is a description of the methods used to collect data and the instrumentation. The design of the study and the hypotheses are explained and the methods of data analysis are outlined.

Methodology

The experimental group consisted of twenty-five teachers who have been working on Project Atlantic Canada projects in Newfoundland since September 1972, and are still actively involved. The control group consisted of one hundred and sixty teachers who were randomly selected from specific school districts in Newfoundland.

The non-Project Atlantic Canada teachers were selected from school districts which were matched with the districts in which PAC projects were being conducted. The matching was carried out on the basis of general economic and social conditions in the districts. The PAC area of North West River, Labrador was matched with the South West coast of Newfoundland, including the islands of Ramea and Burgeo. The PAC area, which includes parts of the Exploits Valley, was matched with Wabush and Labrador City in Labrador. The Bay St. George PAC area was matched with the area around Port aux Basques. The PAC area on the Burin Peninsula was matched with the Bonavista Peninsula. St. John's as a PAC district was matched with Corner Brook.

In all non-PAC districts each school was assigned a number and seven schools were selected at random from each district. The total number

of schools selected from all non-PAC areas was thirty-five, with an average of four questionnaires going to each principal. In all cases the principal received a covering letter (see Appendix A).

Teachers in the experimental group, all of whom were involved in PAC, received a questionnaire which included the Rokeach Logmatism Scale, Form B and the Curriculum Attitude Inventory.

The teachers in the non-PAC districts were divided into two groups. The first group was made up of one hundred and twenty-five teachers in twenty-five schools selected at random from the original thirty-five non-PAC schools. These teachers received the logmatism Scale and the Curriculum Attitude Inventory plus a letter from Mr. F. M. Anderson, Newfoundland Co-ordinator of PAC, outlining the aims of PAC and its accomplishments to date. These people were asked to indicate whether or not they would like to volunteer to work on PAC projects (see Appendix A). Responses to this letter provided the basis for forming the two main control groups in the study. The teachers who responded "yes" became control group one and those who responded "no" became control group two.

The other group was made up of thirty-five teachers in the remaining ten schools of the original thirty-five non-PAC schools. These teachers received the logmatism Scale and the Curriculum Attitude Inventory. They had no indication that the study was connected with PAC. These teachers are referred to as the no-program group.

Questionnaire returns. Questionnaires were mailed to teachers in the experimental group (PAC teachers) and the control group (non-PAC teachers) in late February 1974.

The data in Table 1 show that the above procedure resulted in the

return of 112 questionnaires (70%) from the control group (non-PAC teachers) and the return of twenty-five questionnaires (100%) from the experimental group (PAC teachers).

Table 1
Tabulation of Questionnaire Returns

Questionnaires	PAC Teachers		Non-PAC Teachers	
	No.	% Total	No.	% Total
Returned by respondents	25	100	112	70
Unaccounted for	0	0	48	30
Total Mailed	25	100	160	100

The data in Table 2 show the distribution of questionnaires for those respondents who volunteered to become involved in future curriculum development projects (control group one) and those respondents who refused to become involved (control group two). These groups combined received 125 questionnaires and thirty-three replied "yes" (26%) while fifty-one responded "no" (42%). Forty-one questionnaires (32%) were unaccounted for.

It can be seen from Table 3 that the no program group received thirty-five questionnaires and twenty-eight responded (80%). Seven questionnaires (20%) were unaccounted for.

It appears that the bulk of non-returns were in the X_2 group (those who volunteered) and the X_3 group (those who refused involvement). Those groups had 12% more non-returns than the X_4 group (no program group).

This may be due to the fact that the X_2 group and the X_3 group had to make a decision about PAC involvement.

Table 2

Questionnaire Returns for Control
Groups 1 and 2

	No. Returned	% Total
Yes (X_2)	33	26
No (X_3)	51	42
Unaccounted for	41	32
Total Mailed	125	100

Table 3

Questionnaire Returns for Control
Group 3

	No. Returned	% Total
No program (X_4)	28	80
Unaccounted for	7	20
Total Mailed	35	100

Instrumentation. The data for this study have been gathered by questionnaire. Although it is one of the most widely used instruments in educational research, the questionnaire has been subject to more criticism than any other research instrument (Mouly, 1970, pp. 241-242). Some of the more common faults of questionnaires were outlined by Turney and Robb (1971, p. 130). These include the possibility that the returns on mailed questionnaires may be small. Another limitation is that the respondents may not answer all of the questions asked; or if they do, they may not answer them completely. Furthermore, there can be little assurance that

all the responses will be truthful.

The present writer agrees that the questionnaire does have limitations; however the limitations are overcome by advantages as outlined by Sellitz, Johoda, Deutsch & Cook (1962). These advantages are as follows:

1. The impersonal nature of a questionnaire -- its standardized wording, its standardized order of questions, its standardized instruction for wording responses -- insures some uniformity from one measurement situation to another.
2. The questionnaire as opposed to an interview may place less pressure on the subject for immediate response which in some cases is lacking in careful consideration.
3. Respondents may have greater confidence in their anonymity and thus feel freer to present unbiased information.
4. With a given amount of funds, it is usually possible to cover a wider area and to obtain information from more people (pp. 238-241).

The questionnaire in this study offers a relatively easy, economical way to gather information from a large number of people over a wide geographical area.

The questionnaire for the present study is divided into three sections (see Appendix B). Part A has questions that are related to the personal and professional characteristics of the respondents. Part B is made up of the Rokeach Dogmatism Scale, Form E. This instrument was used to identify differences between PAC teachers and non-PAC teachers in terms of the openness or closedness of their belief systems. This questionnaire has forty items and has been revised on five different occasions. A high score on the questionnaire indicates a person with an open belief-disbelief system; a person who is willing to accept the experimental situation and new systems of thought. A low score indicates a person with a closed belief-disbelief system; one who will reject the experimental situation.

Rokeach reported reliabilities of 0.68 - 0.93 for the Dogmatism

Scale. In a test-retest situation with five to six months between tests a reliability of 0.71 was recorded (Bkeach, 1960, p. 90). Johnson (1969) and Greene (1972) support these findings.

The other major instrument to be used in the study is the Curriculum Attitude Inventory (CAI) developed by Langenbach (1972). The CAI was used to classify the subjects of this study into two groups -- those who have positive attitudes towards curriculum use and planning and those with negative attitudes towards curriculum use and planning.

The CAI consists of fifty items and reveals a reliability coefficient of .54. Hoyt's analysis of variance technique was used to obtain the reliability coefficient and standard error of measurement. The Langenbach (1972) study was an empirical test for the validity of the CAI. Langenbach (1972) reported that it was evident from the analysis that teachers with curriculum planning experience had more positive attitudes toward curriculum use and planning as measured by the CAI, than teachers without such experience (p. 38).

Langenbach (1972) has concluded from his study "that teachers can be differentiated on the basis of their attitudes toward curriculum use and planning by means of the CAI (p. 38)."

Design of the Study

The design of the study and the various groups used in the investigation can be seen in Table 4.

In Table 4, X_0 represents the PAC teachers prior to involvement in PAC projects. X_1 represents the PAC teachers after involvement with curriculum development. X_2 represents those teachers in the control group

who volunteered to work on curriculum development projects at some time in the future. X_3 represents those teachers who refused to become involved in curriculum development projects. X_4 represents the no program group; they received no information about PAC.

Comparisons were made between all groups, based on the mean response to the Rokeach Dogmatism Scale, Form E. These comparisons were used to determine whether or not teachers who have been involved with PAC projects X_1 and teachers who volunteered to become involved X_2 had more open belief-disbelief systems than those teachers who refused to become involved X_3 . The teachers in the X_1 , X_2 , X_3 groups were compared with teachers in the no program group X_4 . That comparison was made to determine whether or not teachers in favor of curriculum development projects and teachers not in favor of these projects differed from a randomly selected group of teachers.

All groups were further compared on the basis of responses to the Curriculum Attitude Inventory. That instrument measured attitudes toward curriculum use and planning. The teachers in the PAC group X_1 were compared to teachers in the "yes" group X_2 . That comparison revealed changes in attitudes toward curriculum use and planning. The "yes" group X_2 have volunteered but lack the experience of being involved with PAC projects. Their attitudes toward curriculum use and planning are theoretically similar to the attitudes of PAC teachers at X_0 when they agreed to become involved with PAC. Consequently, changes in attitudes revealed the influence of PAC involvement on attitudes toward curriculum use and planning.

The teachers in the X_3 group, those who refused to become involved, were compared with teachers in both the X_1 and X_2 groups. These comparisons

were made in order to determine if differences in attitudes existed between teachers who refused to become involved, teachers who have been involved, and those who lack involvement but are willing to become involved. All groups were again compared to the no program group X_4 .

Table 4
Design of the Study

Experimental group X_0	PAC involvement	X_1
Control group 1	Those who volunteer - Yes	X_2
Control group 2	Those who refuse - No	X_3
Control group 3	No program	X_4

Table 5 represents a general linear description of the study.

The linear table provides a basis for the examination of data gathered in the study. Differences that occur between experimental X_1 and control group 1 may be attributed to treatment effect plus the interaction between treatment and positive motivation. X_1 may be compared with control group 2 where the effect of negative motivation is measured against positive motivation and treatment. A comparison of control group 1 and control group 2 reveals the effect of positive motivation against negative motivation. Teachers who volunteered and became involved in curriculum projects are positively motivated. Those who refused are negatively motivated. Control group 3 will provide additional information about randomly selected teachers and their attitudes toward curriculum use and planning. This group will also be compared to the other groups in the study in terms of their responses on the Logmatism Scale and the Curriculum Attitude Inventory.

Table 5

Linear Description of the Study

Exp. X_1	orienta- tion	+	history maturation	+	treatment	+	positive motivation	+	error
c. 1 X_2	orientation	+	history maturation	+	positive motivation	+	error		
c. 2 X_3	orientation	+	history maturation	+	negative motivation	+	error		
c. 3 X_4	history maturation	+	error						

Hypotheses

The investigator assumed that PAC teachers differ from non-PAC teachers. Teachers who have been involved in PAC projects (X_1) will display more open belief-disbelief systems than teachers who refused to become involved (X_3).

The investigator also assumed that PAC teachers will display changes in their attitudes toward curriculum use and planning as a result of their involvement in PAC. The PAC teachers will display more positive attitudes toward curriculum use and planning than teachers who volunteer to become involved (X_2), but lack the experience.

The investigator further assumed that teachers who volunteer (X_2) will display more open belief-disbelief systems than teachers who refuse to become involved (X_3). The teachers who volunteer (X_2) will also display more positive attitudes toward curriculum use and planning than teachers who refuse to become involved (X_3).

The above assumptions generated the following null hypotheses.

1. There will be no significant difference between PAC teachers (X_1) and teachers who refuse to become involved in future PAC curriculum

- projects (X_3) on the Rokeach Dogmatism Scale, Form E.
2. There will be no significant difference between PAC teachers (X_1) and teachers who volunteered for future PAC projects (X_2) on the Curriculum Attitude Inventory.
 3. There will be no significant difference between teachers who volunteered for PAC projects (X_2) and teachers who refused to become involved in PAC (X_3) on the Rokeach Dogmatism Scale, Form E.
 4. There will be no significant difference between teachers who volunteered for PAC projects (X_2) and teachers who refused to become involved in PAC (X_3) on the Curriculum Attitude Inventory.

Methods of Data Analysis

The ANOV15 Computer program was used to test for the significance of difference between and among the PAC teachers and teachers in the three control groups. That program tested for the significance of difference on scores obtained from the Rokeach Dogmatism Scale, Form E and the Curriculum Attitude Inventory. The ANOV15 program supplied the following information.

1. Means, variance, standard deviations for each group and total.
2. Homogeneity of variance, Chi-Square and probability level.
3. Standard analysis of variance table.
4. Newman-Keul comparisons between ordered means (program documentation 360/67, 1969, pp. 1-3).

The Chi-Square test of independence was used to test for differences in the data obtained from Part A of the questionnaire (personal and professional characteristics). All Chi-Squares were calculated by hand.

Throughout the study, the null hypotheses were rejected at the .05 level of confidence.

Chapter 4

Analysis of Data

The purpose of this chapter is to present an analysis of the data. The chapter is divided into four major sections: (1) an analysis of the data related to the personal and professional characteristics in Part A of the questionnaire; (2) an analysis of the data related to null hypotheses one and three; (3) an analysis of the data related to null hypotheses two and four; and (4) a brief summary of the chapter.

Personal and Professional Characteristics

In the treatment of the data related to personal and professional characteristics, the Chi-Square (χ^2) test for independence was used to test for significant relationships between the four groups in the study. The specific characteristics treated were years teaching experience, teaching certificate, age of respondent, grade level taught. As well the respondents were classified according to sex. In all cases the frequencies and percentages for each group were presented in tabular form. In all tables throughout the chapter, X_1 denoted PAC teachers; X_2 , teachers who volunteered to become involved in curriculum development projects; X_3 , teachers who refused to become involved in curriculum development projects; and X_4 , no program group; those teachers were not given information about PAC. They had no decision to make regarding involvement.

Years teaching experience. A study of the data in Table-6 revealed that there were no significant relationships between the groups. It can

also be seen from the table that the X_1 group (PAC teachers) were almost evenly divided between the three to ten year category (44%) and the more than ten year category (48%). The teachers in the X_2 group (those who volunteered) were clustered at the three to ten year category (58%). The same was true for teachers in the X_3 group (those who refused), 48% of which are in the three to ten year category. The X_4 group (the no program group) revealed 50% of their respondents in the three to ten year category and 36% with more than ten years experience.

Table 6

Distribution of Respondents by
Teaching Experience^a

Experience	X_1		X_2		X_3		X_4	
	F	%	F	%	F	%	F	%
3 yrs.	2	8	7	21	14	27	4	14
3-10 yrs.	12	48	19	58	24	48	14	50
10 yrs.	11	44	7	21	13	25	10	36
Total	25	100	33	100	51	100	28	100

^aThe above categories were used for their simplistic and succinct method of displaying data.

$$*\chi^2 = 7.41, df = 6, P > 0.05$$

Teaching certificate. The Chi-Square analysis of the data presented in Table 7 revealed that there were significant relationships between the groups. A study of the table showed that more of the PAC teachers (X_1 group) were clustered at the certificate six level (44%) as compared to 27% of the X_2 group (teachers who volunteered). The X_3 group (teachers who refused involvement) revealed 15% in the same category, while

the X_4 group (no program) had 18% at the certificate six level. A study of the table further showed that 42% of the X_3 group (teachers who refused) were at the certificate five level, while the X_1 group (PAC teachers) reported 28% at the same level. The X_2 group (those who volunteered) had 30% and the X_4 group (no program group) showed 36% also at the certificate five level.

Table 7

Distribution of Respondents by
Teaching Certificate^a

Certificate	X_1		X_2		X_3		X_4	
	F	%	F	%	F	%	F	%
1	0	0	0	0	0	0	3	11
2	1	4	2	7	2	4	4	14
3	1	4	1	3	5	10	2	7
4	3	12	10	30	14	27	2	7
5	7	28	10	30	21	42	10	36
6	11	44	9	27	8	15	5	18
7	2	28	1	3	1	2	2	7
Total	25	100	33	100	51	100	28	100

^aTeaching certificates are defined by the Department of Education for Newfoundland and Labrador. They are similar to University training.

$$*\chi^2 = 30.73, df = 18, p < 0.05$$

Age. The data presented in Table 8 revealed no significant relationships between the groups. However, a closer examination of the data revealed that the X_1 group (PAC teachers) were mainly clustered in the thirty to thirty-nine age category (56%). The respondents in the other

groups were for the most part in the twenty to twenty-nine age category. That category contained 60% of the X_2 group (those who volunteered), 63% of the X_3 group (those who refused), and 50% of the X_4 group (the no program group).

Table 8

Distribution of Respondents by Age^a

Age	X_1		X_2		X_3		X_4	
	F	%	F	%	F	%	F	%
20	0	0	0	0	0	0	0	0
20-29	10	40	20	60	32	63	14	50
30-39	14	56	10	30	16	31	12	43
40-49	1	4	3	10	3	6	2	7
50-59	0	0	0	0	0	0	0	0
60	0	0	0	0	0	0	0	0
Total	25	100	33	100	51	100	28	100

^aThe above age categories were used to determine as close as possible the age level of respondents.

$$* \chi^2 = 8.01, df = 6, P > 0.05$$

Grade taught. A study of the data presented in Table 9 revealed that significant relationships existed between the four groups in the study. A further study of the table showed that more of the X_1 group (PAC teachers) were located at the high school level (56%) than any other level. The high school level also contained 52% of the X_2 group (those who volunteered). The elementary level contained the majority of teachers in the X_3 group (teachers who refused) 52%. The teachers in the X_4 group (no

program) were almost evenly distributed between the elementary level (47%) and the high school level (50%). The X_1 group had 32% of its total at the elementary level.

Table 9
Distribution of Respondents by
Grade Taught^a

	X_1		X_2		X_3		X_4	
	F	%	F	%	F	%	F	%
Primary - K-3	1	8	0	0	7	13	1	3
Elementary - 4-8	8	32	16	48	26	52	13	47
High School 9-11	16	56	17	52	18	35	14	50
Total	25	100	33	100	51	100	28	100

^aThe above grade divisions are common in Newfoundland schools.

$$* \chi^2 = 13.20, df = 6, P < 0.05$$

Sex. The Chi-Square analysis of the data contained in Table 10 showed that no significant relationships existed between the groups. A study of the table revealed that the majority of participants in each group were male. The X_1 group (PAC teachers) were 84% male. While the X_2 group (those who volunteered) were 64% male, the X_3 group (those who refused) were 71% and the X_4 group (the no program group) were 61% male.

Table 10

Distribution of Respondents by Sex

Sex	X ₁		X ₂		X ₃		X ₄	
	F	%	F	%	F	%	F	%
Female	4	16	12	36	15	29	11	39
Male	21	84	21	64	36	71	17	61
Total	25	100	33	100	51	100	28	100

$$*\chi^2 = 4.15, df = 3, P > 0.05$$

An Analysis of the Data Related to Scores
on the Rokeach Dogmatism Scale, Form E

In the treatment of the data related to null hypotheses one and three, means and standard deviations were calculated for each of the four groups, on the basis of scores obtained from the Rokeach Dogmatism Scale, Form E. The means and standard deviations are presented in Table 11.

Null hypothesis one -- there will be no significant difference between the teachers in the X₁ group (PAC teachers) and teachers in the X₃ group (those who refused to become involved), on the Rokeach Dogmatism Scale, Form E.

Null hypothesis three -- there will be no significant difference between teachers in the X₂ group (those who volunteered) and teachers in the X₃ group (those who refused), on the Rokeach Dogmatism Scale, Form E.

A study of Table 11 revealed that the X₁ group (those who volunteered) reported a more closed belief-disbelief system than any of the other groups, with a mean score of 146.3. That group also showed a larger standard deviation (31.9) than any of the other groups. A study of the

table further revealed that the X_3 group (those who refused involvement) reported the lowest mean score (131.8). The standard deviation for that group was 24.6. This score indicated a more open belief-disbelief system than that revealed by the X_2 group (teachers who volunteered). The X_1 group (PAC teachers) had the second highest mean score of 139.8 and the smallest standard deviation of 23.0. Thus, the X_1 group also revealed a more closed belief-disbelief system than the X_3 group. The X_4 group (no program group) reported a mean score of 135.4 and a standard deviation of 31.1.

The analysis of variance conducted, performed an homogeneity of variance test in order to test for normality of distribution. That test revealed a chi-square value of 3.76 and a probability of 0.29.

Table 11
Means and Standard Deviations for Scores Obtained from
the Rokeach Logmatism Scale, Form E

Groups	Means	Sd
X_1	139.8	23.0
X_2	146.3	31.9
X_3	131.8	24.7
X_4	135.4	31.1
Total	138.3	27.9

Presented in Table 12 are the results of the analysis of variance for the groups on the scores obtained from the Rokeach Logmatism Scale, Form E. The within group variance was large enough to result in a low "F" ratio, consequently, null hypotheses one and three were not rejected.

Table 12

Analysis of Variance for Scores Obtained from the
Rokeach Dogmatism Scale, Form E

Source of Variance	Sum of Squares	df	Mean Squares	F*
Between Groups	2907.00	3	969.0	1.24
Within Groups	75057.00	95	781.8	

*P > 0.05

An Analysis of the Data Related to Scores
on the Curriculum Attitude Inventory

In the treatment of the data related to null hypotheses two and four, means and standard deviations were calculated for each of the four groups, on the basis of scores obtained from the Curriculum Attitude Inventory. The means and standard deviations are presented in Table 13.

Null hypothesis two -- There will be no significant difference between the teachers in the X_1 group (PAC teachers) and teachers in the X_2 group (those who volunteered), on the Curriculum Attitude Inventory.

Null hypothesis four -- There will be no significant difference between teachers in the X_2 group (those who volunteered) and teachers in the X_3 group (those who refused), on the Curriculum Attitude Inventory.

A study of Table 13 revealed that the X_1 group (PAC teachers) had more positive attitudes toward curriculum use and planning than any of the other groups. That group revealed a mean score of 35.6 and a standard deviation of 3.0. The X_2 group (those who volunteered) reported only a slightly lower mean score of 32.4 with a standard deviation of 4.4. The X_3 group (teachers who refused to become involved) reported the lowest mean

score (26.2) and a standard deviation of 5.3. The X_4 group (the no program group) reported the second highest mean score (32.5) with a standard deviation of 3.9.

Table 13
Means and Standard Deviations for Scores Obtained
from the Curriculum Attitude Inventory

Groups	Means	Sd.
X_1	35.6	3.0
X_2	32.4	4.4
X_3	26.2	5.3
X_4	32.5	3.9
Total	31.7	5.4

The data were subjected to an analysis of variance in order to determine significant differences between the groups based on their attitudes toward curriculum use and planning. The findings are presented in Table 14. The "F" ratio of 21.87 was significant at the .05 level of confidence.

The analysis of variance performed an homogeneity of variance test which revealed a Chi-Square value of 7.13 and a probability value of 0.068.

The Newman-Keuls technique was applied to the data subsequent to finding a significant "F" ratio in the analysis of variance. It served to provide the difference between the largest and smallest means in the study (Winer, 1971, p. 77). These differences are presented in Table 15. The findings presented in Table 15 indicate that teachers in the X_1 group (PAC teachers) differed significantly from teachers in the X_2 group (those who volunteered) and teachers in the X_3 group (those who refused to become

Table 14

Analysis of Variance for Scores Obtained
from the Curriculum Attitude Inventory

Source of Variance	Sum of Squares	df	Mean Squares	F*
Between Groups	1176.500	3	392.17	21.87
Within Groups	1721.625	96	17.93	

*Significant at the .05 level of confidence.

involved). The findings further indicate that teachers in the X_2 group differed significantly from teachers in the X_3 group. The teachers in the X_4 group (no program) differed significantly from teachers in the X_3 group (those who refused). It appears that differences between the X_1 and X_2 groups may have been caused by involvement in PAC projects.

The differences indicated in Table 15 appear to support the premise that teachers who volunteer for curriculum development projects (the X_2 group) have more positive attitudes toward curriculum use and planning than teachers who refuse to become involved (the X_3 group). The teachers in both the X_2 group and the X_3 group lacked the experience of being involved with curriculum development projects. The differences indicated in Table 15 also supported the premise that teachers who have been involved in curriculum development projects (the X_1 group) have more positive attitudes toward curriculum use and planning, than teachers who are willing to become involved but lack the experience of having developed curricula.

The findings presented in Table 15 were the basis for rejecting null hypotheses one and four at the .05 level of confidence.

Table 15

Comparison of Mean Scores Obtained from the
Curriculum Attitude Inventory Using the
Newman-Keuls Technique

Groups	\bar{X}_1	\bar{X}_4	\bar{X}_2	\bar{X}_3
\bar{X}_1	-	3.04	3.20*	9.44*
\bar{X}_4		-	0.12	6.36*
\bar{X}_2			-	6.24*
\bar{X}_3				-
$Sf = 0.85$				
$df = .96$				
Ordered Means	\bar{X}_1	\bar{X}_4	\bar{X}_2	\bar{X}_3
	35.6	32.5	32.4	26.1

*Significant at the .05 level of confidence.

Summary

This chapter has presented the statistical analysis of the data gathered by the questionnaire in the study (see Appendix B). The final result was that null hypotheses one and three were not rejected at the .05 level of significance, while null hypotheses two and four were rejected at the .05 level of significance. The data related to hypotheses one and three were obtained from the Lockeach Logmatism Scale, Form E. The data related to hypotheses two and four were obtained from the Curriculum Attitude Inventory. The next chapter will present the interpretations and conclusions of the study.

Chapter 5

Interpretations and Conclusions

Interpretations

This study made comparisons between Newfoundland teachers who have been involved with curriculum projects sponsored by Project Atlantic Canada and other Newfoundland teachers who have not been involved with Project Atlantic Canada. The PAC participants and the teachers in the control groups were compared on the basis of their responses to a questionnaire. These responses were in three major areas. They are: (1) Personal and professional characteristics. (2) The Rokeach Dogmatism Scale, Form E. This instrument was used to determine the degree of openness or closedness in the belief-disbelief systems of the respondents. (3) The Curriculum Attitude Inventory was used to determine which group showed more positive attitudes toward curriculum use and planning.

Findings related to personal and professional characteristics. In the section dealing with personal and professional characteristics, the Chi-Square test of independence was used to analyze the data related to teaching experience, teaching certification, age, grade level taught and sex.

The data presented in Table 6, page 39, revealed that there were no significant relationships between the groups, based on data related to teaching experience. However a further study of the data presented in the table revealed that the X₁ group (PAC teachers) had more teachers (44%) of

the more than ten year category, than any of the control groups. The majority of teachers in all groups were clustered at the three to ten year category. Miller (1972) found that the majority of Project Canada West teachers (35.6%) had between six and ten years experience, while 20.3% had between eleven and fifteen years experience.

In the analysis of data related to teaching certification the Chi-Square analysis involved a significant relationship at the .05 level. The data presented in Table 7, page 40, showed that the majority of the X_1 group (PAC teachers) had more university education than teachers in any of the control groups. It can also be seen from the table that the teachers in the X_2 group (those who volunteered) had more university education than teachers in the X_3 group (those who refused to become involved) and teachers in the X_4 group (no program group). This appeared to indicate that teachers who have been involved and those who have volunteered to become involved had more university education than teachers who refused to become involved. Miller (1972) found that 64% of all Project Canada West teachers had baccalaureate degrees and more than 20% had post graduate degrees.

An analysis of the data in Table 8, page 41, revealed no significant relationship between the groups based on data related to the age of respondents. A further study of the data in the table revealed that a majority of the X_1 group (PAC teachers) were older than teachers in the control groups. This finding is also supported by Miller. He found that 33.9% of the Project Canada West teachers were in the thirty to thirty-nine group category and 25.4% were in the forty to forty-nine age category.

The analysis of data in Table 9, page 42, revealed significant relationships between the groups, based on data related to grade taught. The data in the table revealed that the majority of the teachers in the X_1

group (PAC teachers) were clustered at the high school level. The teachers in the X_2 group (those who volunteered) were almost evenly divided between the high school and elementary levels, while the majority of teachers in the X_3 group (those who refused to become involved) were at elementary level. Teachers in the X_4 group were almost evenly divided between the high school level and the elementary level. This indicates that teachers who have been involved, and those who volunteered to become involved, are for the most part teaching at the high school level. Miller found that 64.4% of all Project Canada West teachers were located at the high school level.

Table 10, page 43, presented a distribution of respondents by sex. The Chi-Square analysis of that data revealed no significant difference between the groups. It can be seen from the table that the majority of respondents for all groups were male.

The analysis of data related to the personal and professional characteristics, did not reveal significant relationships between the groups on all the characteristics. However a study of the data appears to suggest that the teachers who were most likely to volunteer and become involved in curriculum development projects were male between the ages of thirty and thirty-nine and working at the high school level. These teachers also appear to have more teaching experience than teachers who refuse to become involved. Teachers who appeared most likely to refuse involvement in curriculum development projects were also male between the ages of twenty and twenty-nine with less than ten years experience and working at the certificate five level or below. These teachers in most cases, were teaching at the elementary level.

Findings related to the Rokeach Dogmatism Scale. The analysis of variance (ANOVA) was used to analyze the data related to the Rokeach Dogmatism Scale, Form E.

The analysis of variance presented in Table 12, page 45, revealed a non-significant "F" ratio at the .05 level. As a result, there was no need to explore the Newman-Keuls procedure for multiple comparison means.

Findings related to the Curriculum Attitude Inventory. The analysis of variance (ANOVA) was also used to analyze the data related to the Curriculum Attitude Inventory. A study of Table 13, page 46, revealed that the teachers in the X_1 group (PAC teachers) and the teachers in the X_2 group (those who volunteered) had higher mean scores than teachers in the X_3 group (those who refused to become involved). This indicated a more positive attitude toward curriculum use and planning on the part of teachers who were involved in curriculum development and those who wished to become involved, compared to teachers who refused involvement.

The Newman-Keuls procedure (Table 15, page 48) supported the above findings. That procedure revealed significant differences between the X_1 group (PAC teachers) and teachers in both the X_2 group (those who volunteered) and the X_3 group (those who refused).

The significant differences between the X_1 group (PAC teachers) and the X_2 group (teachers who volunteered) indicated a change in attitudes toward curriculum use and planning. This implied that once teachers have been involved in curriculum development projects, positive changes occurred in their attitudes toward curriculum use and

planning.

The attitudinal change mentioned above was revealed when the investigator compared the X_1 group and the X_2 group. In Table 4, page 35, the design of the study showed that the X_2 group represented the PAC teachers at the X_0 position. That was prior to involvement in PAC. Consequently, any differences between the X_1 group (PAC teachers after involvement) and the X_2 group (teachers who volunteered) indicated a change in attitudes toward curriculum use and planning. In this case, the changes were positive. It appeared that these changes occurred because of involvement in PAC.

The significant difference between the X_2 group and the X_3 group indicated that teachers who volunteered for curriculum development projects had more positive attitudes toward curriculum use and planning than teachers who refused to become involved. This implied that curriculum specialists should ask for volunteers from their teaching staffs, rather than try to involve all teachers in curriculum development projects. Taba's (1962) comments on this point are thought provoking. She pointed out the following:

Insisting on a 100% participation from the start is a strategical error which creates many problems. One of these is the inclusion of many "reluctant dragons," who by their resistance dampen the atmosphere and impede progress at a time when the participants are the best source and when resistance and doubt, therefore, have the greatest impact (p. 469).

These comments concur with the ideas of the present writer.

Although it was not hypothesized, significant differences were revealed (Table 15, page 48) between teachers in the X_3 group (those who refused) and teachers in the X_4 group (no program). This implied

that a randomly selected group of teachers are more positive in their attitudes toward curriculum use and planning than a group of teachers who refuse to become involved in curriculum development projects.

Conclusions

The analysis of data related to the personal and professional characteristics provided the investigator with the following conclusions:

1. The fact that some teachers have more open belief-disbelief systems than others has little or no bearing on the decision to become involved in curriculum development projects. There are many factors which may influence the teachers with a closed system to become involved, while a different set of factors may influence the teacher with an open system to refuse involvement. The factors, other than belief-disbelief systems, which might influence a teacher's decision to become involved in curriculum development projects were beyond the scope of this study.
2. Teachers who are involved in curriculum development projects and those who have not been involved, but would like to become involved, display more positive attitudes toward curriculum use and planning than teachers who refuse involvement. The administrator or curriculum specialists who would like to involve teachers for the first time in a curriculum development project, should ask for volunteers. This may insure success more so than trying to involve all teachers from the beginning.

Summary

The preceding chapter has presented an interpretation of the findings related to these areas: (1) personal and professional characteristics; (2) data related to the Rokeach Dogmatism Scale, Form E; and (3) data related to the Curriculum Attitude Inventory. The chapter revealed no significant differences between the groups on the Rokeach Dogmatism Scale, Form E, while there were significant differences on the Curriculum Attitude Inventory. It appeared to the writer that this difference may be related to the fact that teachers who have been involved with PAC and wish to become involved are positively motivated toward changing one aspect of education, the curriculum. This does not mean that they have to reveal complete open-mindedness on the Rokeach Dogmatism Scale, Form E.

It further appeared in this case, that teachers who had negative attitudes toward curriculum use and planning were open-minded according to the Rokeach Dogmatism Scale. Those teachers were not motivated toward curriculum development. On the other hand there is no reason why that should influence their open belief-disbelief systems as measured by the Rokeach Dogmatism Scale, Form E.

These findings indicated to the writer that in this study there was little or no positive relationship between open and closed belief-disbelief systems as measured by the Rokeach Dogmatism Scale, Form E and attitudes towards curriculum use and planning as measured by the Curriculum Attitude Inventory.

The final chapter will present a summary of the study, implications of the findings and recommendations for further research.

Chapter 6

Summary, Implications and Recommendations for Further Study

The purpose of this chapter is to present a summary of the problem investigated, the methodology, instrumentation and the methods of data analysis. The findings revealed by an analysis of the data are also presented. Finally, implications of the study are presented and recommendations for further study are discussed.

Summary

The problem. The major purpose of this study was to compare Newfoundland teachers who have been involved in curriculum development projects sponsored by PAC, with other Newfoundland teachers who have not been involved in PAC projects. The problem was guided by the following questions:

1. (a) Do teachers who have been involved with PAC have more open belief-disbelief systems than those who have not become involved?
- (b) Do PAC teachers have more positive attitudes toward curriculum use and planning than non-PAC teachers?
2. Do PAC teachers display changes in attitudes toward curriculum use and planning as a result of involvement in PAC?

Instrumentation. The major data gathering instrument of this study was a questionnaire. The questionnaire had three major sections. Section

A asked questions related to personal and professional characteristics.

Section B contained the Rokeach Dogmatism Scale, Form E. This section was intended to measure the belief-disbelief systems of all respondents.

Section C was made up of the Curriculum Attitude Inventory. That instrument measured the attitudes of respondents toward curriculum use and planning.

Methodology. The PAC participants consisted of twenty-five teachers who have been working on PAC projects since September, 1972, and were still actively involved in January, 1974. The control group, the non-PAC teachers who were randomly selected from specific school districts were matched on general social and economic conditions, with the districts in which PAC teachers have been working.

All PAC teachers, the X_1 group, received the questionnaire in its entirety. The non-PAC teachers received the questionnaire with a letter explaining PAC activities in Newfoundland, along with plans for the future. These teachers were asked if they would like to become involved with PAC projects at some future date. Some of those respondents (26%) replied positively and became the X_2 group (those who volunteered). Others responded negatively (42%) and became the X_3 group (teachers who refused involvement). The remaining teachers who received questionnaires (32%) failed to respond. The X_4 group (no program group) received no information about PAC. They were not asked to make a decision concerning involvement in future curriculum development projects.

Questionnaires were mailed in early March, 1974. A stamped self-addressed envelope was enclosed so that the completed questionnaires could be forwarded directly to the investigator. All prospective respondents received two follow-up letters (Appendix A). This effort resulted in a

return of one hundred and twelve questionnaires (70%) out of the one hundred and sixty mailed (Table 1, page 30).

Methods of data analysis. The Chi-Square test of Independence was used to determine whether or not there were significant relationships between the groups in terms of their responses to Part B of the questionnaire. A one way analysis of variance was used to test the null hypotheses related to the Rokeach Dogmatism Scale, Form E and the Curriculum Attitude Inventory. This involved the ANOV15 computer program supplied by Memorial University of Newfoundland.

Findings. The initial findings are related to responses in Part A of the questionnaire. These responses indicated that male high school teachers with a grade six teaching certificate and between the ages of thirty and thirty-nine are the people most likely to become involved in curriculum development projects. However it also appeared that male elementary teachers between the ages of twenty and twenty-nine with less than ten years experience and teaching with a grade five teaching certificate or below are the people most likely to refuse involvement in curriculum development projects.

The analysis of the data related to the Rokeach Dogmatism Scale, Form E appeared to indicate that when teachers decide to become involved in curriculum development projects, the fact that they may have open or closed belief-disbelief systems is of no importance.

The analysis of data related to the Curriculum Attitude Inventory appeared to indicate that teachers who have been involved in curriculum development projects and those who are willing to become involved have more positive attitudes toward curriculum use and planning than teachers who

refused to become involved. It was further indicated that if teachers become involved in curriculum development projects it is possible to bring about a positive change in their attitudes toward curriculum use and planning.

The findings of this study further suggested to the present writer that the Curriculum Attitude Inventory is a reliable instrument for the classification of teachers according to their attitudes toward curriculum use and planning.

Implications

Findings from this study suggested implications for educators interested in having teachers initiate changes in the curriculum.

~~It appeared to the writer that there were teachers at all~~
levels of education who were willing to become involved in curriculum development projects. However teachers at the high school level appeared to volunteer more often than teachers at either the elementary or primary levels (Table 9, page 42). These teachers should be identified and encouraged to set up curriculum development projects to include teachers from all levels.

The teachers who successfully initiate curriculum development projects could be used as examples for teachers who are reluctant to become involved. The findings implied that the reluctant teachers will experience positive changes in their attitudes as a result of involvement.

Recommendations for Further Study

1. In order to confirm or deny the findings of the present study, it is suggested that the study be replicated in the other Atlantic Provinces where PAC has been in operation.

2. A further study should be carried out to determine the factors that influence teacher decisions to become involved in curriculum development projects. These factors then should be compared to the factors that influence teachers not to become involved.
3. An attempt should be made to identify the processes involved in the growth and development of one PAC team. These processes should then be a point for the comparison of all PAC teams. This could become the basis for the establishment of further curriculum development projects.
4. An attempt should be made to identify similarities and differences between PAC teachers in Newfoundland and PAC teachers in the other parts of Canada.
- ~~5. This study was essentially a comparison of attitudes between PAC teachers and non-PAC teachers. It is suggested that a further study be undertaken to determine whether or not PAC teachers perceive their teaching role as being different from that of non-PAC teachers.~~
6. It is suggested that a study be undertaken to determine if there is a relationship between the attitudes toward change expressed by superintendents, supervisors and principals in PAC districts and the attitudes toward change of PAC teachers in these districts.
7. A further study should be undertaken in order to determine the influence of PAC involvement on the classroom duties and professional growth of teachers.
8. In a short time many of the PAC teams will have piloted their units. A study should be undertaken to compare student attitudes toward PAC materials with their attitudes toward the regular

programs.

9. A study should be carried out to observe and compare the teaching practices of PAC teachers and non-PAC teachers.

BIBLIOGRAPHY

BIBLIOGRAPHY

- Anderson, H. H. (Ed.). Creativity and its cultivation. New York: Harper and Row, 1959.
- Anderson, H. H. Creativity and education. College and University Bulletin of the Association for Higher Education, NEA, 1961, 13 (14), 4-8.
- Anderson, R. M. & Roald, J. B. Teacher initiative in curriculum development: implications for teacher education. Paper presented to the Canadian Association of Professors of Education, Kingston, Ontario, May 1973.
- Bagley, W. C. Education and emergent man. New York: Thomas Nelson, 1934.
- Bauernfeind, H. K. "What value curriculum making?" School and Society, 1930, 31, 710-712.
- Beauchamp, G. A. Curriculum organization and development in historical perspective. Review of Educational Research, 1957, 27, 241-249.
- Bennis, W. G. Changing organizations. New York: McGraw-Hill, 1966.
- Bennis, W. G., Benne, K. D., & Chin, R. The planning of change. New York: Holt, Rinehart and Winston, 1961.
- Burns, R. W., & Brooks, G. D. Processes, problem solving and curriculum reform. In R. W. Burns & G. D. Brooks (Ed.), Curriculum design in a changing society. Englewood Cliffs, N. J.: Educational Technology, 1970, pp. 50-62.
- Carlson, R. O. Barriers to change in public schools. In Change process in the public schools. Eugene, Oregon: The Center for the Advanced Study of Educational Administration, 1969, pp. 3-8.
- Caswell, H. L. Emergence of the curriculum as a field of professional work and study. In E. C. Short & G. D. Marconnit (Ed.), Contemporary thought in public school curriculum. Dubuque, Iowa: Brown, 1968; pp. 26-31.
- Caswell, H. L., & Campbell, D. S. Curriculum development. New York: American, 1935.
- Coffey, H. S., & Golden, W. J. Psychology of change within an institution. In Service education. The Fifty-Sixth Yearbook of the National Society for the Study of Education, Part I. Chicago: University of Chicago, 1957, pp. 67-102.

Connelly, F. M. The function of curriculum development, Interchange, 1972, 3 (2), 161-177.

Cook, R. C., & Doll, R. C. The elementary school curriculum. Boston: Allyn and Bacon, 1973.

Dewey, J. The sources of a science of education. New York: Horance Liverright, 1929.

Dewey, J. The child and the curriculum and The school and society. Chicago: The University of Chicago, 1963.

Doll, R. C. Curriculum improvement: decision-making and process. (2nd ed.) Boston: Allyn and Bacon, 1970.

Duncan, G. L. Teachers, too, initiate curriculum change. The Alberta Teachers' Association Magazine, 1973, 54 (1), 5-6.

Emans, R. A proposed conceptual framework for curriculum development. The Journal of Educational Research, 1966, 59, 327-332.

Fantini, M. D. The reform of urban schools. Washington, D. C.: National Education Association, 1970.

Fish, L. D. Curricular change involves people. In E. C. Short & G. D. Marconnit (Ed.), Contemporary thought in public school curriculum. Dubuque, Iowa: Wm. C. Brown, 1968, pp. 328-330.

Friesen, D. Who decides what in curriculum? Perspectives, 1972, 1, 33-40.

Friesen, D., & Holdaway, E. A. The curriculum debate in Canadian education. Education Canada, 1973, 13 (1), 31-33.

Frymier, J. R., & Hawn, H. C. Curriculum improvement for better schools. Worthington, Ohio: Wadsworth, 1970.

Glass, G. V., & Stanley, J. C. Statistical methods in education and psychology. Englewood Cliffs, N. J.: Prentice-Hall, 1970.

Goodlad, J. I. Educational change: A strategy for study and action. Journal of Secondary Education, 1971, 46 (4), 157-166.

Gould, S. B. The teacher's impact on the curriculum. In E. C. Short & G. D. Marconnit (Ed.), Contemporary thought in public school curriculum. Dubuque, Iowa: Wm. C. Brown, 1968.

Goulet, R. R. (Ed.). Educational change: The reality and the promise. New York: Citation, 1968.

Gow, J. S., Burkart, H., & Pendleton, W. C. Economic, social and political forces. The changing American school. The Sixty-Fifth Yearbook of the National Society for the Study of Education, Part II, Chicago: University of Chicago, 1966, pp. 159-199.

Greene, G. A comparison of attitudes, values, and dogmatism of college juniors and seniors, Journal of Teacher Education, Summer 1972, 23, 343-347.

Gross, N. Leadership in the public schools: a sociological inquiry. New York: John Wiley, 1965.

Gwynn, J. M., & Chase, J. B. Curriculum principles and social funds. New York: Macmillan, 1969.

Halpin, A. Theory and research in administration. New York: Macmillan, 1967.

Harnack, R. S. The teacher: decision maker and curriculum planner. Scranton, Pa.: International Textbook, 1968.

Havelock, R. G. The change agents' guide to innovation in education. Englewood Cliffs, N. J.: Educational Technology, 1973.

Heath, R. W. (Ed.). New curricula. New York: Harper and Row, 1964.

Hefferman, H., & Bishop, L. T. The supervisor and curriculum director at work. In R. R. Leeper (Ed.), Role of supervisor and curriculum director in a climate of change. Washington, D. C.: Association for Supervision and Curriculum Development, 1965, pp. 87-144.

Hersom, M. Are school administrators curriculum innovators? The Canadian Administrator, 1973, 12 (6), 25-28.

Hill, C. Teachers as change agents. Clearing House, 1971, 45 (3), 424-428.

Horton, L. The self-renewing teacher: priority for the seventies. Education Digest, 1973, 38 (16), 24-27.

Hough, J. B., & Duncan, J. K. Teaching: description and analysis. Don Mills, Ontario: Addison-Wesley, 1970.

Huberman, A. M. Understanding change in education: an introduction. Paris, France: United Nations Educational, Scientific and Cultural Organization, 1973.

Jackson, D. M. Administrative procedure in curriculum revision. Administrators Notebook, 1957, 5, (6), 1-4.

Jenkins, F. C. Cooperative study for the improvement of education. The Southern Association Quarterly, 1946(a), 10 (1), 9-132.

Jenkins, F. C. Cooperative study for the improvement of education. The Southern Association Quarterly, 1946(b), 10 (3), 373-488.

Jennings, R. E. Politics of curriculum change. Peabody Journal of Education, 1972, 49, 295-299.

Johnson, J. S. Changes in student teacher dogmatism. Journal of Educational Research, 1969, 62, 224-226.

Johnson, M. Definitions and models in curriculum theory. In E. C. Short & G. D. Marconit (Ed.), Contemporary thought in public school curriculum. Dubuque, Iowa: Brown, 1968, pp. 42-51.

Joyce, J. R. The curriculum worker of the future. The curriculum: Retrospect and prospect. Seventieth Yearbook of the National Society for the Study of Education, Part 1, Chicago: University of Chicago, 1971.

Kineaid, G. L. Curriculum for the 70s: Cooperation is the name of the game. The English Journal, 1971, 60 (7), 723-727.

Kirst, M. W., & Walker, D. F. An analysis of curriculum policy making. Review of Educational Research, 1971, 41 479-509.

Kliebard, H. The curriculum field in retrospect. In P. W. F. Witt (Ed.), Technology and the curriculum. New York: Teachers' College, 1968, pp. 69-84.

Klien, M. F., & Tyler, L. On alyzing curricula. Curriculum Theory Network, 1969, 3, 10-25.

LaDuca, A. Curriculum reform: Discovering the void. The Urban Review, 1972, 5 (5), 37-40.

Langenbach, M. Development of an instrument to measure teachers' attitudes toward curriculum use and planning. Journal of Educational Research, 1972, 66 (1), 35-38.

Lippit, R., Watson, J., & Westley, B. The dynamics of planned change. New York: Harcourt, Brace and World, 1958.

Loweke, E. W. A study of the establishment, expression and operation of a continuous program of independent projects and studies by teachers of Sonoma County. Unpublished Doctoral dissertation, University of California, Berkeley, 1966.

Mackenzie, G. N. Why a strategy for planned innovation? In M. R. Lawler (Ed.), Strategies for planned curricular innovation. New York: Teachers' College Press, 1970, pp. 1-12.

Martin, J. R. The disciplines and the curriculum. In J. R. Martin (Ed.), Readings in the philosophy of education: a study of curriculum. Boston: Allyn and Bacon, 1970, pp. 65-86.

Mason, B. B. A "participatory" curriculum. The Education Forum, 1973, 37 (3), 345-349.

McKim, M. G. Curriculum research in historical perspective. Research for curriculum improvement. Washington: Association for Supervision and Curriculum Improvement, 1957 Yearbook, pp. 14-40.

McNally, H. J., & Passow, H. A. Improving the quality of public school programs. New York: Teachers' College, 1960.

Meil, A. Changing the curriculum a social process. New York: Appleton-Century-Crofts, 1946.

Miles, M. B. (Ed.). Innovation in education. New York: Teachers' College, 1964.

Miller, T. W., & Dhand, H. The classroom teacher as curriculum developer for Project Canada West. Saskatoon: Saskatchewan Teachers' Federation, 1972.

Miller, T. W., & Dhand, H. An analysis of teacher participation in curriculum development for Project Canada West. Unpublished Doctoral dissertation, University of Saskatchewan, 1972.

Moore, W. E. Social change. Englewood Cliffs, N. J.: Prentice-Hall, 1963.

Morrissett, I., & Stevens, W. W. Jr. Curriculum analysis. Social Education, 1967, 31, 483-489.

Mouly, G. J. The science of educational research. (2nd ed.) New York: Van Nostrand Reinhold, 1970.

Newton, E. E. Teacher reaction to change. Unpublished Master's dissertation, University of Saskatchewan, 1966.

O'Hanlon, J., & Wood, F. H. Regenerating the curriculum committee. Educational Leadership, 1972, 30, 157-159.

Patton, D. J. From geographic discipline to inquiring student: Final report on the high school geography project. Washington: Association of American Geographers, 1970.

Program Documentation 360/67. Edmonton: University of Alberta, 1969.

Ragan, W. B. Modern elementary curriculum. New York: Holt, Rinehart and Winston, 1966.

Reckinger, N. R. Needed: a structure for perpetual renewal. Educational Leadership, 1973, 30 (6), 513-515.

Roald, J. B., & Anderson, R. M. Teacher initiative in curriculum development: Specific reference to Project Atlantic Canada. Paper presented to the Canadian Association of Professors of Education, Kingston, Ontario, May 1973.

Rogers, E. M. Diffusion of innovations. New York: Free Press, 1962.

Rogers, E. M. What are innovators like? Theory into Practice, 1963, 2, 252-256.

Rokeach, M. The open and closed mind. New York: Basic Books, 1960.

Roscoe, J. T. Fundamental research statistics for the behavioural sciences. Toronto: Holt, Rinehart and Winston, 1969.

Ryan, B. F. Social and cultural change. New York: Ronald Press, 1969.

Sabey, R. PCW: directions for the future. The Alberta Teachers' Association Magazine, 1973, 54 (1), 13-15.

Sand, O. Curriculum change. The curriculum: retrospect and prospect. The Seventieth Yearbook of the National Society for the Study of Education, Part I, Chicago: University of Chicago, 1971, pp. 219-244.

Saylor, J. G., & Alexander, W. M. Curriculum planning for modern schools. Toronto: Holt, Rinehart and Winston, 1966.

Selltiz, C., Deutsch, M., Johoda, M., & Cook, S. Research methods in social relations. (Rev. ed.) Toronto: Holt, Rinehart and Winston, 1962.

Sequel, M. L. The curriculum field: its formative years. New York: Teachers' College Press, 1966.

Shane, H. G. The "drop-out problem" in educational innovation. Educational Leadership, 1973, 60 (6), 507-509.

Smith, B. O., Stanley, W. O., & Shores, J. H. Fundamentals of curriculum development. (Rev. ed.) New York: Harcourt, Brace and World, 1957.

Stern, G. People in context. New York: John Wiley, 1950.

Stratmeyer, F. B., Forkner, H. L., McKim, M. G., & Passow, H. A. Developing a curriculum for modern living. (2nd ed.) New York: Teachers' College, 1963.

Taba, H. Curriculum development: theory and practice. New York: Harcourt, Brace and World, 1962.

Turney, B. L., & Robb, G. P. Research in education an introduction. Hinsdale, Illinois: Dryden, 1971.

Van Til, W. (Ed.). Curriculum: quest for relevance. New York: Houghton Mifflin, 1971.

Warren, P. M. Quality and equality in secondary education in Newfoundland. St. John's: Faculty of Education, Memorial University of Newfoundland, 1973.

Whipple, G. M. What price curriculum making? School and Society, 1930, 31, 367-372.

Wilhelms, F. T. Priorities in change efforts. Phi Delta Kappan, 1970, 51 (7), 368-371.

Winer, B. Statistical principles in experimental design. New York: McGraw-Hill, 1962.

Wood, F. H. A climate for innovation. Educational Leadership, 1973, 30 (6), 516-518.

Wooton, W. S. SMSG: The making of a curriculum. New Haven: Yale Press, 1965.

APPENDICES

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APPENDIX A

CORRESPONDENCE

COPY OF ORIGINAL LETTER

Dr. M. Langenbach
College of Education
The University of Oklahoma
820 Van-Vleet Oval
Norman, Oklahoma
U.S.A.

Dear Dr. Langenbach:

I am a graduate student in education at Memorial University, St. John's, Newfoundland. Presently, I intend to conduct research into the attitudes of Newfoundland teachers towards curriculum use and planning.

Consequently, I would like your permission to use the Curriculum Attitude Inventory as part of my data collecting instrument.

Yours truly,

M. H. Grandy

COPY OF ORIGINAL LETTER

Melvin H. Grandy
4 Weymouth St.
St. John's, Nfld.
Canada

Dear Mr. Grandy:

You have my permission to use the Curriculum Attitude Inventory
in your research as requested November 20, 1973.

Sincerely,

M. Langenbach
Associate Professor of
Curriculum and Research

COPY OF ORIGINAL LETTER

4 Weymouth Street,
St. John's,
Newfoundland.

January 15, 1974

Dear Principal:

As part of the requirements for the M.Ed. programme in Curriculum and Instruction, I am conducting a study of teacher attitudes towards curriculum use and planning. In this respect I would like to solicit your help.

Would you please take a few minutes from your busy schedule to distribute the enclosed questionnaires to any full time subject teachers on your staff. I further request you to collect the questionnaires when they have been completed and return them in the self-addressed envelopes.

You may wonder how you were selected for participation in this study. Your school was selected at random from all schools in Newfoundland.

No individual name or names of schools are required. The findings will be published in summary form so that no one school or person can be identified.

This study is being conducted with the approval of the Department of Curriculum and Instruction, Faculty of Education at Memorial University.

Your prompt reply is essential to this study.

I thank you in anticipation of your cooperation. Without it, this study will not be possible.

Yours truly,

Melvin H. Grandy

COPY OF ORIGINAL LETTER

Dear Teacher:

I would like to take this opportunity to tell you about Project Atlantic Canada (PAC) and its function in Newfoundland. Project Atlantic Canada is sponsored by the Canada Studies Foundation, a privately sponsored, non-profit organization. One of the aims of the Foundation, which has been achieved by PAC in Newfoundland is to involve Newfoundland teachers, students and interested citizens in curriculum development projects. These projects have been successful and are almost completed.

In the Burin-Marystown area teachers and students with the help of local people have developed a multi-media curriculum unit dealing with the resettlement of people from Port Elizabeth to the Burin Peninsula. Similar projects are under way in other parts of the province. Teachers in the Grand Falls area are developing a project about the Beothucks; in the Bay St. George area the project is centered on certain social and economic aspects of resettlement; in Labrador the topic is the North and Its People; in St. John's the project title is St. John's - A Port City.

In each project the leadership has been provided by classroom teachers. These teachers have willingly given up nights and week-ends to develop curriculum materials that result in suitable teaching units. All concerned believe the experience to have been a rewarding one.

Considering the above information, would you be interested in taking part in a similar curriculum project at some future date. Please indicate your decision by checking one of the boxes below. We expect that quite soon we will be able to initiate new projects. Unfortunately again we will not be able to reimburse you, nor will you be given time off from your present school duties.

YES _____

NO _____

Please return this letter with your completed questionnaire.

Yours truly,

R. M. Anderson, Ph.D.
Assistant Professor,
Newfoundland Co-ordinator,
Project Atlantic Canada

COPY OF ORIGINAL LETTER

Box 18,
Education Bldg.
March 11, 1974.

Dear Principal:

Three weeks ago I forwarded to you a number of questionnaires from which I hope to gather information for my study of teacher attitudes toward curriculum use and planning.

I am happy to say that during the past three weeks many principals have returned completed questionnaires. This is very encouraging, for as you know, the majority of questionnaires must be completed in order to continue the study. However, there are a number of principals and teachers who have not yet responded. In the event that you have not, would you please take a few minutes from your busy schedule to have the questionnaires completed, and return them to me as soon as you can? I need your support and cooperation in this study. If you have already taken care of this matter please accept my sincere thanks.

If you have not received the questionnaires, or if they have been misplaced, will you kindly advise me so that I can forward extra copies.

Yours truly,

Melvin H. Grandy

COPY OF ORIGINAL LETTER

Box 18,
Education Bldg.,
March 25, 1974

Dear Principal:

Two weeks ago I contacted you concerning my questionnaire survey into teacher attitudes toward curriculum use and planning.

I am pleased to say that during that period many teachers have returned these questionnaires completed in detail.

I am happy to say that during the past three weeks many principals have returned completed questionnaires. This is very encouraging, for as you know, the majority of questionnaires must be completed in order to continue the study. However, there are a number of principals and teachers who have not yet responded. In the event that you have not, would you please take a few minutes from your busy schedule to have the questionnaires completed, and return them to me as soon as you can? I need your support and cooperation in this study. If you have already taken care of this matter please accept my sincere thanks.

If you have not received the questionnaires, or if they have been misplaced, will you kindly advise me so that I can forward extra copies.

Yours truly,

Melvin H. Grandy

APPENDIX B

THE INSTRUMENT

A QUESTIONNAIRE CONCERNING
TEACHER PARTICIPATION
IN
CURRICULUM DEVELOPMENT

Melvin H. Grandy

1974

To the respondent:

Thank you for taking time from your busy schedule to complete this questionnaire. The general purpose of this instrument is to provide data about teacher participation in curriculum development.

Part A of the questionnaire will provide background information about teachers participating in the study. Part B is designed to provide information about important social questions. Part C is intended to gather information about matters relating to curriculum and curriculum development.

There is no need to sign any part of this questionnaire. Please respond to every item. There are no time limits, but do not spend a lot of time on any one item. Your first or immediate reaction is what is desired. A prompt reply is essential; without it this study will not be possible.

PART A

BACKGROUND DATA

Please check the appropriate spaces as they apply to you.

1. Sex:

☐ Male☐ Female

2. Age at last birthday:

☐ under 20☐ 20-29☐ 30-39☐ 40-49☐ 50-59☐ 60 or older

3. Grade level taught:

☐ K-3☐ 4-8☐ 9-11

4. Years teaching experience:

☐ less than 3 years☐ 3-10 years☐ more than 10 years

5. Teaching certificate:

☐ 1☐ 2☐ 3☐ 4☐ 5☐ 6☐ 7

6. How many university courses have you taken in the last two years?

☒ Undergraduate☐ Graduate

PART B

Mark each statement in the left margin according to how much you agree or disagree with it. Please mark every one.

Write +1, +2, +3, OR -1, -2, -3, depending on how you feel in each case.

+1: I AGREE A LITTLE

-1: I DISAGREE A LITTLE

+2: I AGREE ON THE WHOLE

-2: I DISAGREE ON THE WHOLE

+3: I AGREE VERY MUCH

-3: I DISAGREE VERY MUCH

- _____ (1) The United States and Russia have just about nothing in common.
- _____ (2) The highest form of government is a democracy and the highest form of democracy is a government run by those who are most intelligent.
- _____ (3) Even though freedom of speech for all groups is a worthwhile goal, it is unfortunately necessary to restrict the freedom of certain political groups.
- _____ (4) It is only natural that a person would have a much better acquaintance with ideas he believes in than with ideas he opposes.
- _____ (5) Man on his own is a helpless and miserable creature.
- _____ (6) Fundamentally, the world we live in is a pretty lonesome place.
- _____ (7) Most people just don't give a "damn" for others.
- _____ (8) I'd like it if I could find someone who would tell me how to solve my personal problems.
- _____ (9) It is only natural for a person to be rather fearful of the future.
- _____ (10) There is so much to be done and so little time to do it in.
- _____ (11) Once I get wound up in a heated discussion I just can't stop.

PART B

+1: I AGREE A LITTLE

-1: I DISAGREE A LITTLE

+2: I AGREE ON THE WHOLE

-2: I DISAGREE ON THE WHOLE

+3: I AGREE VERY MUCH

-3: I DISAGREE VERY MUCH

_____ (12) In a discussion I often find it necessary to repeat myself several times to make sure I am being understood.

_____ (13) In a heated discussion I generally become so absorbed in what I am going to say that I forget to listen to what the others are saying.

_____ (14) It is better to be a dead hero than to be a live coward.

_____ (15) While I don't like to admit this even to myself, my secret ambition is to become a great man, like Einstein, or Beethoven, or Shakespeare.

_____ (16) The main thing in life is for a person to want to do something important.

_____ (17) If given the chance I would do something of great benefit to the world.

_____ (18) In the history of mankind there have probably been just a handful of really great thinkers.

_____ (19) There are a number of people I have come to hate because of the things they stand for.

_____ (20) A man who does not believe in some great cause has not really lived.

_____ (21) It is only when a person devotes himself to an ideal or cause that life becomes meaningful.

_____ (22) Of all the different philosophies which exist in this world there is probably only one which is correct.

_____ (23) A person who gets enthusiastic about too many causes is likely to be pretty "wishy-washy" sort of person.

_____ (24) To compromise with our political opponents is dangerous because it usually leads to the betrayal of our own side.

_____ (25) When it comes to differences of opinion in religion we must be careful not to compromise with those who believe differently from the way we do.

PART B

+1: I AGREE A LITTLE

-1: I DISAGREE A LITTLE

+2: I AGREE ON THE WHOLE

-2: I DISAGREE ON THE WHOLE

+3: I AGREE VERY MUCH

-3: I DISAGREE VERY MUCH

- ____ (26) In times like these, a person must be pretty selfish if he considers primarily his own happiness.
- ____ (27) The worst crime a person could commit is to attack publicly the people who believe in the same thing he does.
- ____ (28) In times like these, it is often necessary to be more on guard against ideas put out by people or groups in one's own camp than by those in the opposing camp.
- ____ (29) A group which tolerates too much differences of opinion among its own members cannot exist for long.
- ____ (30) There are two kinds of people in this world: those who are for the truth and those who are against the truth.
- ____ (31) My blood boils whenever a person stubbornly refuses to admit he's wrong.
- ____ (32) A person who thinks primarily of his own happiness is beneath contempt.
- ____ (33) Most of the ideas which get printed nowadays aren't worth the paper they are printed on.
- ____ (34) In this complicated world of ours the only way we can know what's going on is to rely on leaders or experts who can be trusted.
- ____ (35) It is often desirable to reserve judgment about what's going on until one has had a chance to hear the opinions of those one respects.
- ____ (36) In the long run the best way to live is to pick friends and associates whose tastes and beliefs are the same as one's own.
- ____ (37) The present is all too often full of unhappiness. It is the future that counts.
- ____ (38) If a man is to accomplish his mission in life it is sometimes necessary to gamble "all or nothing at all."

PART B

+1: I AGREE A LITTLE

-1: I DISAGREE A LITTLE

+2: I AGREE ON THE WHOLE

-2: I DISAGREE ON THE WHOLE

+3: I AGREE VERY MUCH

-3: I DISAGREE VERY MUCH

_____ (39) Unfortunately, a good many people with whom I have discussed important social and moral problems don't really understand what's going on.

_____ (40) Most people just don't know what's good for them.

PART C

Below and on the following pages are statements concerning curriculum matters. Mark each statement in the left hand margin according to the following scale:

+1: I AGREE A LITTLE

-1: I DISAGREE A LITTLE

+2: I AGREE ON THE WHOLE

-2: I DISAGREE ON THE WHOLE

+3: I AGREE VERY MUCH

-3: I DISAGREE VERY MUCH

_____ (1) A curriculum should be a source of ideas for building units of work.

_____ (2) Most education professors don't appreciate the value of textbooks to teaching.

_____ (3) Parents of children in school have a right to be included in curriculum planning.

_____ (4) Female teachers are more likely to use a curriculum than male teachers are.

_____ (5) The teacher's copy of a textbook is far superior as an aid in planning lessons when compared with a curriculum.

_____ (6) A curriculum should be the principal point of departure for teacher lesson planning in a school.

PART C

+1: I AGREE A LITTLE

-1: I DISAGREE A LITTLE

+2: I AGREE ON THE WHOLE

-2: I DISAGREE ON THE WHOLE

+3: I AGREE VERY MUCH

-3: I DISAGREE VERY MUCH

_____ (7) If teachers were paid twice what they are now, then they could be expected to participate in curriculum planning.

_____ (8) Curriculum committee meetings are a bore.

_____ (9) Consultants and other outside "helpers" don't understand teachers' real problems.

_____ (10) All curriculum change ought to be based on experimental research findings.

_____ (11) Curriculum committees should be composed of younger teachers.

_____ (12) A stable curriculum is better than a changing one.

_____ (13) The trend seems to be more and more curriculum planning by teachers.

_____ (14) Most of the time teachers say one thing and practice something different.

_____ (15) Teachers will learn more about education when they participate in curriculum planning.

_____ (16) The lack of a curriculum in a school indicates a lack of concern in the teachers.

_____ (17) All this concern about curriculum will soon pass.

_____ (18) Teacher creativity is bound to be stifled if a curriculum is used as a point of departure for teaching.

_____ (19) Most curriculum end up hidden in a desk drawer.

_____ (20) It is almost fantasy to expect a group of teachers to agree on what a curriculum ought to be.

_____ (21) Most teachers have more important things to do than work on curriculum committees.

_____ (22) Parents of children in school ought to have something to say about the curriculum.

PART C

+1: I AGREE A LITTLE

-1: I DISAGREE A LITTLE

+2: I AGREE ON THE WHOLE

-2: I DISAGREE ON THE WHOLE

+3: I AGREE VERY MUCH

-3: I DISAGREE VERY MUCH

_____ (23) Every child ultimately ends up with an individualized curriculum.

_____ (24) It is important that all the teachers in a school use a curriculum.

_____ (25) A curriculum that is good enough for white people is good enough for black people.

_____ (26) Child psychologists ought to participate with teachers in curriculum planning.

_____ (27) Elementary teachers need to use a curriculum more than high school teachers.

_____ (28) A curriculum can be judged good or bad according to the scholarly respectability of its contents.

_____ (29) It is practically impossible to get a group of teachers to agree on some curriculum matters.

_____ (30) A good teacher is one who is willing to help in curriculum planning.

_____ (31) Curriculum committees ought to be formed whenever the principal of a school deems it necessary.

_____ (32) A curriculum is probably more of a help to teachers than the textbooks the children use.

_____ (33) After a curriculum is planned most teachers lose interest in it.

_____ (34) A curriculum ought to be referred to at least once a month for planning classroom activities.

_____ (35) If a curriculum is good, it will be indicated by the pupils' achievement.

_____ (36) A school can be judged by its curriculum.

PART C

+1: I AGREE A LITTLE

-1: I DISAGREE A LITTLE

+2: I AGREE ON THE WHOLE

-2: I DISAGREE ON THE WHOLE

+3: I AGREE VERY MUCH

-3: I DISAGREE VERY MUCH

- _____ (37) A curriculum and teachers' editions of textbooks are about equal in value in terms of helping teachers plan lessons.
- _____ (38) Teachers enjoy working on curriculum committees.
- _____ (39) An important aspect of curriculum planning is thinking of activities that will accomplish the objectives.
- _____ (40) If teachers do not aid in curriculum planning, they feel less compelled to follow it.
- _____ (41) Some parts of a curriculum can be written by the children of a school.
- _____ (42) Equal educational opportunity is assured when all teachers use the same curriculum.
- _____ (43) More in-service education is needed to help teachers learn to plan curriculums.
- _____ (44) The decision to use or ignore a planned curriculum should rest with the classroom teacher.
- _____ (45) Curriculum planning is one activity that contributes to teacher professionalism.
- _____ (46) A curriculum is a great deal more helpful to teachers than a set of textbooks.
- _____ (47) Not enough teachers take part in curriculum planning.
- _____ (48) Teachers are too busy with teaching problems to be concerned with curriculum problems.
- _____ (49) Subject-matter departments within schools ought to have their own curriculum committees.
- _____ (50) Every teacher on a curriculum committee ought to have a course in group dynamics.



