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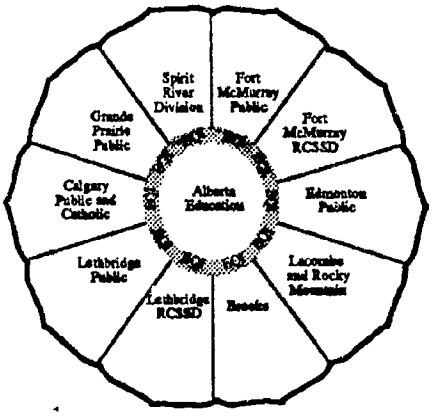
ABSTRACT

A 3-year action research study was conducted by the Spirit River School Division in northwestern Alberta to develop and validate a set of indicators to assess teacher effectiveness in a formative process. Focusing on professional development and staff inservice, the Educational Quality Indicators Project (EQI) sought to determine if the 26 teaching behaviors identified had an impact on student outcomes in both the cognitive and affective domains. In order to gain the acceptance, involvement, and positive initiative of staff, the project focused on professional development and staff inservice. A collegial, nonthreatening model for more effective teaching and benefit to students using formative supervision and observation was developed and implemented over 3 years. It focused the attention of the system on the wider range of student educational outcomes, affective and beharioral as well as cognitive. Among the findings were that active involvement of professional staff in action research was the most positive aspect of the EQI project, and that direct faculty input into the development and validation of the indicators for assessment of teacher effectiveness provided a sense of ownership and enhanced the likelihood of subsequent participation. Appendixes provide working documents for year one; parent and student surveys; staff survey; teacher performance tally sheet; classroom environment scale; student's perception of ability scale; teacher performance baseline: behaviors addressed during year three; and parent/student survey results. (Contains 48 references.) (LL)

A Collaborative Teacher Evaluation Model: Teachers Do Make a Difference

Spirit River School Division No. 47

Educational Quality Indicators:
Collaboration in Action



A Collaborative Teacher Evaluation Model: Teachers Do Make A Difference

Spirit River School Division No. 47

Under Contract to Alberta Education
Edmonton, Alberta

Please Note

The views and recommendations expressed in this report are those of the researchers and not necessarily those of the Department of Education.

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We wish to thank our former superintendent, Richard Welch, for all the preliminary work he did to make our involvement possible, as well as our former deputy superintendent, James Brandon, for compiling a comprehensive review of the literature related to the project. Also, our thanks to C.J. (Chris.) Rochon our former superintendent, and Roger Rymhs, our deputy superintendent, who were instrumental in the completion of this project.

Thank you also to the original committee of eight teachers who acted as key subject coordinators during the early stages of the project. Amongst numerous other things, this committee was given the responsibility of finalizing the criteria and establishing the process and terms of reference for the project within the established guidelines.

The composition of our EQI committee has changed over the years. The contribution of all teachers who have served on this committee is valued and appreciated.

The overall response of our entire teaching staff has been most heartening and positive. The vast majority of our teachers and administrators have, in one form or another, contributed to the success of our project and are to be commended for this. Without the interest expressed since its inception, the project would not have been the success it was.

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Abstract

The Spirit River School Division Educational Quality Indicators Project involved the development and validation of a set of indicators to be used to assess teacher effectiveness in a formative process. We believe that teachers do make a difference, for as Broudy (1975) stated: "The teacher is still the key to schooling: with good teaching, almost any curriculum, school organization, and administrative invention seems to succeed" (p. 64). Experience and the literature clearly suggest that teacher and administrator involvement in the selection of educational indicators was critical to the success of a project of this magnitude. For any project involving key components of action research, it was necessary to gain acceptance, involvement and the positive initiative of staff. The project focused on professional development and staff inservice. A collegial, non-threatening model for more effective teaching and benefit to students using formative supervision and observation was developed and implemented over three years. It focused the attention of the system on the wider range of student educational outcomes, affective and behavioral as well as cognitive.

Table of Contents

Chapter		Page
I.	**INTRODUCTION**	1
	Background	1
	Context	1
	Rationale	2
	Purpose	2
	Assumptions	2
	Definition	3
	Design	3
	Delimitations	5
	Limitations	5
	Overview	5
II.	**REVIEW OF THE LITERATURE**	6
	Teacher Effectiveness and Evaluation	6
	Influences on Teacher Evaluation Criteria	7
	Educational Goals	7
	Direct Instruction – Content Oriented Curriculum	7
	Inductive Teaching – Person and Process-Oriented Curriculum	8
	Models For the Study of Teaching	8
	Mitzel's 1957 Model	8
	Dunkin and Biddle's 1974 Model	9
	Centra and Potter's 1980 Model	9
	Medley's 1982 Model	10
	Teacher Evaluation Criteria	11
	Defining Criteria	11
	Categories of Criteria	12
	Presage Criteria	13
	Process Criteria	13
	Product Criteria	15
	Selecting Teacher Evaluation Criteria	15
	Formative Evaluation	16
	Summative Evaluation	17
	Assessment of Teacher Performance	18
	Other Factors Related to Criteria	18
III.	**METHODOLOGY**	20
	Year One: Development	20
	Year Two: Implementation	24
	Year Three: Refinement	25

Chapter		Page
IV.	**FINDINGS**	28
	Teacher Participation	28
	Teacher Performance	33
	Parental and Student Attitudes	36
	Student Outcomes	37
	Cognitive Outcomes	37
	Provincial Diploma Examinations	37
	Provincial Achievement Tests	39
	Affective Outcomes	40
	Discipline	42
	Summary of Results	42
V.	**SUMMARY AND DISCUSSION**	43
	Purpose	43
	Findings	43
	Conclusions	45
	Implications and Recommendations	45
	Project Follow-up	46
	Concluding Statement	47
REFERENCES		48
APPENDICES		51
A	**Working Documents For Year One**	51
B	**Parent and Student Surveys**	54
C	**Staff Survey**	62
D	**Teacher Performance Tally Sheet**	63
E	**Classroom Environment Scale**	65
F	**Student's Perception of Ability Scale**	67
G	**Teacher Performance Baseline: Behaviors Addressed During Year Three**	68
H	**Parent/Student Survey Results**	70

List of Tables

Table		Page
1	Indicators of Quality Instruction	21
2	Data Collection 1990 to 1992	26
3	Composition of Teaching Staff in Years of Experience (Percent)	29
4	Number and Percent of Teacher Classroom Visitations by Years of Teaching Experience	29
5	Purpose of Visitations	30
6	Types of EQI Visitations (Percent)	31
7	Staff Survey Results	32
8	1991 Teacher Performance Baseline	34
9	1992 Teacher Performance	35
10	Percentage of Grade 12 Students Achieving the Acceptable Standard or Higher on the Diploma Exams (Final Blended Mark)	38
11	Percentage of Grade 3, 6 and 9 Students Achieving the Acceptable Standard or Higher on the Total Provincial Achievement Tests	39
12	Student's Perception of Ability Scale Results	40
13	Classroom Environment Scale Results for Language Arts Classes	41
14	Classroom Environment Scale Results for Mathematics Classes	41
15	Discipline Outcomes	42

Chapter I

INTRODUCTION

Background

In December 1988, the Spirit River School Division put forward a proposal of a pilot project to identify educational quality indicators. From the beginning, this jurisdiction concentrated on isolating and verifying established criteria for policies on teacher/staff/school and subject evaluations. It was hoped that in the context of this rural jurisdiction, criteria and processes could be refined so the practical results could be shared with jurisdictions of similar type, and the whole province, if applicable.

The project focused on identifying criteria for teacher effectiveness. Experience and an initial literature review indicated that for any project involving our key components to succeed, it was essential to gain the acceptance and involvement of teaching staff. The response from staff was heartening and positive. A local committee of eight teachers and two central office administrators reviewed pertinent research and literature. They developed four grouped sets of indicators of effective teaching, formulated key variables which could impact on the effectiveness of implementation and articulated clear explanations of each objective. Data gathering instruments and an action plan were developed which addressed consequent logistics and time lines for voluntary implementation in all division schools.

Context

Spirit River School Division No. 47 is located in northwestern Alberta. Its western boundary is the British Columbia border and on the east side it is confined by the Smoky River, a total span of approximately 180 kilometers. It is a relatively sparsely populated area of approximately 10,000 square kilometres with agriculture as the main economic activity. The Board operates eight schools with a total enrolment of approximately 1,250 students. Grade configurations within schools vary, ranging from one elementary school to two K-12 schools. Three of the schools offer senior high school programs.

Rationale

We believe that teachers do make a difference, for as Broudy (1975) stated: "The teacher is still the key to schooling: with good teaching, almost any curriculum, school organization, and administrative invention seems to succeed" (p. 64). Experience and the literature clearly suggest that teacher and administrator involvement in the selection of educational indicators was critical to the success of a project of this magnitude. For any project involving key components of action research, it was necessary to gain acceptance, involvement and the positive initiative of staff. The project focused on professional development and staff inservice. A collegial, nonthreatening model for more effective teaching and benefit to students using formative supervision and observation was developed and implemented over three years. It focused the attention of the system on the wider range of student educational outcomes, affective and behavioral as well as cognitive.

Purpose

A wealth of information on effective teaching behaviors, substantiated by practical research, has emerged over the last few decades. The Spirit River School Division Indicators Project involved identification and validation of a set of indicators that can be used to assess teacher effectiveness. The criteria by which to measure teacher effectiveness are of central importance to the concept of teacher evaluation and effectiveness. Normed measures of teacher behaviors have been established, and student affective and cognitive outcomes as they relate to those behaviors are being measured.

The question posed was: Do the 26 teaching behaviors we have identified as being critical to effective teaching have an impact on student outcomes in both the cognitive and affective domains?

Assumptions

The nature of this project was such that there was considerable reliance upon subjective data. Student attitude surveys, parent surveys and teacher performance ratings all yielded subjective data. It was assumed that the survey instruments yielded information which was an accurate reflection of the perceptions of students and parents. The establishment of a teacher performance

baseline required an assessment of teachers' performance. To increase the consistency of teacher observations and to define different levels of teacher effectiveness, "teacher observers" participated in a three hour training process.

Definition

The EQI committee adopted Oakes' definition of an *educational indicator*:

> A statistic about the educational system, that reveals something about its performance or health. An indicator has a reference point. The reference point may be a previous value, the value of a comparison group, or some socially determined standard. An indicator should provide at least one of the following:
>
> - information about the education system's performance
> - features of the system known to be linked to desired outcomes
> - central features of the system
> - potential or existing problem area
> - information that is policy relevant (1986, pp. 1-2)

Design

This project concentrated on isolating and verifying established criteria for the various policies on teacher, school and subject evaluations which were already in place. Ultimately, the project involved developing and validating a set of indicators which could be used to assess teacher effectiveness in a formative process.

Voluntary support through acceptance and involvement was received from staff. A survey of all staff, which asked them to indicate the criteria each felt were critical to improving teacher effectiveness, received a response in excess of 80 percent. Eight experienced and respected teachers expressed a keen interest in serving on the local committee whose purpose was to finalize the indicators and establish the process and terms of reference for the project within the established guidelines.

This committee reviewed all pertinent research and literature and developed a set of 26 criteria of effective teaching and formulated key variables which could impact the effectiveness of implementation in all division schools on a voluntary basis. The committee reviewed the input from staff and finalized the working project documents. Table 1 presents the 26 criteria in four categories.

During the first year, on a voluntary basis and in a formative process, all staff had the opportunity to meet and discuss the previously developed indicators of effective teaching or visit each other's classrooms to observe one or more of these specific, established areas. Data were collected on staff participation, specific objectives related to each type of indicator, local or out of school contacts and years of teaching experience. Information was also gathered on geographic distance, use of extra time provided in staffing, staff attitudes, and extended professional development activities. Two survey instruments were developed and validated using Good's (1963) validation criteria and parents and students were subsequently surveyed to gain their perspectives of indicators of quality teaching. Surveys were distributed to all students in grades 9, 10, 11 and 12 and to parents of students in grades 2, 5, 8 and 11. The intent of these representative surveys was to gain parent and student input into the process and criteria, while obtaining their perception on validity and/or development of new criteria. A teacher survey on satisfaction and professional development involvement was also conducted. The data gathered at the conclusion of the first year of the project were collated and presented on a system level, thereby assuring the anonymity of participants.

In the second year of the project, data collection was expanded. A decision was made to enhance the credibility of the project as a research endeavor through the establishment of a teacher performance baseline to which comparisons could be made at a later point in time. Teaching behaviors with the lowest ratings were addressed at the system level through a variety of professional development activities.

A need was also recognized for additional student outcome measures relevant to the intent of the indicator system. The *Educational Quality Indicators: Inventory of Assessment Instruments* (Alberta Education, 1990) was consulted. Sample copies of a number of assessment instruments were reviewed and the *Classroom Environment Scale* (Moos & Trickett, 1987) was selected for grades 5, 8, and 11 and the *Student's Perception of Ability Scale* (Boersma & Chapman, 1977) was selected for grade 2 to measure student outcomes in the affective domain. The former served

to supplement data gained on cognitive outcomes measured by provincial diploma exams and achievement tests. The data collected in the third year was identical to that of the second year of the project.

Delimitations

This study was concerned with perceptions in one rural school jurisdiction, unique in many respects, including a large geographical area and a relatively low student population. The findings may not apply to other districts in the province whose characteristics and circumstances may be considerably different.

Only aggregate data for teachers are reported. All findings apply to the system as a whole and not to any one school or any one identifiable group of teachers.

Limitations

A limitation of the project is the accuracy with which respondents interpreted the survey questions. Although every effort was made to eliminate item ambiguity, potential for misinterpretation remained.

Since random sampling was not employed in the selection of survey candidates, the results are not necessarily generalizable to other jurisdictions.

Overview

Chapter I provides the introduction to the project, identifies its purpose, and briefly outlines the context within which it took place. The assumptions, definitions, design, delimitations, and limitations serve to clarify the terms of this study and its findings. Chapter II reviews some of the literature and research addressing evaluation of teacher performance. Data sources, collection techniques, and research procedures are outlined in Chapter III. Chapter IV describes what was done during the project and discusses the results. Chapter V provides a summary of the study with implications for practice and further research.

Chapter II

REVIEW OF THE LITERATURE

Prior to submitting the pilot project proposal, all teaching staff were surveyed to determine perceived indicators of good teaching. Immediately following this initial survey, central office personnel reviewed literature related to good teaching.

Teacher Effectiveness and Evaluation

The teacher is the key to good schooling. Being an effective teacher in the times of Socrates and Aristotle was as Travers (1981) pointed out "to be a good person who attracted students" (p. 14). The prospect of relating good teaching to a single indicator in today's educational context is considerably more difficult, if not impossible. As King (1981) summed it up, "the more research on teaching that is done, the more it is becoming evident that there is no single way to be a good teacher" (p. 179). Questions concerning the indicators by which the elusive entity of teacher effectiveness are measured are of central importance in the realm of teacher evaluation. Darling-Hammond, Wise, and Pease (1983) defined the evaluation process as "collecting and using information to judge worth" (p. 290). Mitzel (1960) underlined the significance of "teacher effectiveness as a concept has no meaning apart from the criterion measures or operational definitions of success as a teacher" (p. 1482).

The analysis which follows is divided into five major sections. The first sections review some of the educational literature regarding the nature of teaching work, educational goals and models of teaching. The objective is to explore how these affect or are affected by the indicators included in an evaluation system. This is followed by a discussion of the concept of indicators in terms of literature related to teaching effectiveness and teacher evaluation.

Influences on Teacher Evaluation Criteria

Educational Goals

Teacher assessment criteria should vary according to the learning outcomes considered most appropriate. According to Grimmett (1982), the normative end of the teaching spectrum is characterized "as consisting of a definable repertoire of knowledge, skills, and attitudes ... that research has demonstrated are effective in leading to student gains" (p. 48). The view from the professional end sees "teaching more as a clinical process ... involving reflection and informed choices about which behaviors and strategies are deemed most appropriate in specific teaching-learning situations" (ibid, p. 48). Though Grimmett (like Darling-Hammond, Wise, & Pease, 1983) made a strong case for thinking of teaching tasks along a continuous line of increasing complexity, he conceded that a polarized dichotomy has been prevalent in the past: at the normative pole are those with an academic skills mission and at the other are those who are inclined towards a social and personal development mission.

Direct Instruction - Content-Oriented Curriculum

Those espousing the content-oriented curriculum and a concern for productive use of time associated with the normative view, generally advocate direct instruction methods. Grimmett and others (Centra & Potter, 1980; Darling-Hammond, Wise & Pease, 1983; Knapp, 1982) indicated that the majority of teacher effectiveness research studies have been of the direct instruction sort. What one makes of this research is determined to a great extent by the views one holds about the desired learning outcomes of schooling. One's assumptions about the degree of impact that teachers have on student learning also enter the picture. Those who put their faith in this line of research seek "context-free generalizations about what leads to or constitutes effective teaching" (Darling-Hammond, Wise, & Pease, 1983, p. 293). Grimmett (1982) summarized some generalizable criteria from several research studies and accepted these as being useful to teachers. Additional support in the literature consulted was found in the works of Borich (1979), Gage (1963), Medley (1982), MacKay and Osoba (1978), and Mireau (1985). In reporting "process-product correlations" in five major studies, Borich (1979) focused on practical implications and derived a list of 13 competency statements, which were seen as being useful to teachers by both Grimmett and Mireau. They saw similarly productive benefits to be derived from the seven "teacher should" statements enumerated by Gage (1963). Grimmett (1982) contended that such correlational findings are also useful to those who favor the indirect approach.

Inductive Teaching - Person and Process-Oriented Curriculum

The correlational research evidence mentioned above "provides the base upon which teachers can conduct professional deliberations" (Grimmett, 1982, p. 47). Less direct, more inductive approaches with a person and process curriculum orientation are generally advocated by those espousing the professional view. Instead of being rooted solely in process-product research, exploratory research using ethnomethodological, phenomenological and cognitive information processing methods are consulted to describe "classroom phenomena with a view to increasing understanding rather than producing generalizable statements about process-product correlations" (Grimmett, 1982, p. 66). Teachers accept research findings tentatively, "taking into account the complexities and dynamic uncertainties of teaching-learning situations" (ibid, p. 67). Centra and Potter (1980), Knapp (1982), and Darling-Hammond, Wise, and Pease (1983) reflected a similarly complex view of the teaching environment, as well as a parallel view of the lessons to be derived from research.

Criteria appropriate to judge teacher effectiveness at one end of the direct/indirect continuum may not be very appropriate at the other. Travers (1981) noted that advocates of direct instruction attempt "to break down teaching into a set of ... component competencies" (p. 20). He concluded, "If this can be done then the evaluation of teacher effectiveness can be reduced to the simple process of determining whether the teacher does or does not manifest the component skills in the classroom" (ibid, p. 20). In the opinion of Travers (1981), those employing more indirect methods "should probably be evaluated in terms of different criteria" (p. 23).

Models For the Study of Teaching

To this point teacher effectiveness has not been classified, nor has it been defined. Before taking a definitive step in this direction, brief consideration was given to four models of teaching to assist in this process. Early teacher effectiveness research yielded little of benefit. It was not until Mitzel developed his model of teaching which categorized criteria into four groups to guide the study of the relationships between them that major advances were made (MacKay and Osoba, 1978; Medley, 1982). In addition to looking at this prototypical paradigm, models by Dunkin and Biddle, Centra and Potter, and Medley will also be explored.

Mitzel's 1957 Model

This model served as the conceptual framework for most of the process-product studies conducted in the 1960s and 1970s. Medley (1982) provided a concise description of this model:

> Mitzel defined four newly recognized classes of variables related to teacher

effectiveness. Using the terminology prevalent at the time, he referred to three of them as presage, process, and product criteria of teacher effectiveness. Presage criteria included existing teacher characteristics and teacher competencies, process criteria corresponded to teacher performance variables, and product criteria corresponded to teacher effectiveness. What he called "context variables", included a variety of situational factors that affect pupil learning but are not controlled by the teacher (p. 1483).

Dunkin and Biddle's 1974 Model

According to Grimmett (1982), the significance of Dunkin and Biddle's (1974) *The Study of Teaching* is twofold. First, it is a comprehensive "review of research on teaching up to 1974; its further significance lies in the thoroughness and clarity with which the authors organized the field and conceptualized teaching as an area of study" (1982, p. 31). Grimmett (1982) described the model thus:

> The model presumes a causative link between four clusters of variables: presage, context, process, and product. Presage variables consist of the formative experience, training, and personal properties that a teacher brings to the classroom. Context variables pertain to those aspects of the school community, physical classroom set-up and pupil formative experiences and properties that impinge on the teaching-learning situation. Process variables apply specifically to what goes on inside the classroom, notably teacher and pupil behavior and the changes in behavior that occur in pupils as a result of interaction with the teacher focused on the curriculum. Product variables are the immediate and long-term effects of such interaction that presumably contribute to student development of skills, knowledge, and attitudes (p. 31).

Centra and Potter's 1980 Model

This conceptual framework depicts the relationships among many of the variables which Centra and Potter (1980) believed contribute to variance in student learning. Each of the seven types of variables is grouped into three broader classifications. Student variables include student characteristics, student behavior, and student learning outcomes. There are two sets of teacher variables: teacher characteristics and teaching performance. Within school conditions and school or school district conditions are the other sets of variables.

The only variables that have a direct effect on student learning outcomes, in their view, are student characteristics and student behavior. "Learning is something children do . . . not something which schools or teachers do to them" (Centra & Potter, 1980, p. 287). Teacher performance and within

school conditions act directly on student behavior and have the closest indirect effect on outcomes. The influences of the more indirect variables are described by Centra and Potter (1980) as:

> Teacher characteristics influence student behavior and learning only as they affect teaching performance. And school or school district conditions . . . can be expected to influence students largely through teacher or teaching factors, or through within school conditions (pp. 275-276).

Medley's 1982 Model

Medley (1982) updated the Mitzel paradigm. He included "five types of variables, each of which have been used at one time or another as a criterion for evaluating teachers" (p. 1899). This conceptual framework includes pre-existing teacher characteristics, teacher competencies, teacher performance, pupil learning experiences, and pupil learning outcomes. Acting upon these are four "on-line" variables which are not controlled by the teacher: teacher training, external context (school characteristics), internal context (class characteristics), and individual pupil characteristics. These groupings break Mitzel's four categories into finer categories. The most significant departure is his definition of effective teacher performance in terms of "a larger unit called a teaching strategy or model" (Medley, 1982, p. 1899) rather than in terms of single behaviors.

All the other cells shown affect pupil learning outcomes directly or indirectly. The effectiveness of a teacher depends, then, upon at least eight variables that can be distinguished clearly from one another.

Studying these four models and their supporting literature reveals at least three major similarities that are valuable in classifying and thinking about effective teaching criteria.

1. Each set of variables in the other models can be placed within one of Mitzel's four broad categories.
2. Causative relationships between the sets of variables are assumed, but not proven in each case.
3. The importance of other variables is seen in relation to their perceived impact upon student outcomes.

Considering the major differences among the models is useful as well. An increasing emphasis on contextual variables is evident as we move closer to the present. The more recent models conceive of teaching performance as a multidimensional process and suggest that patterns, rather than individual behaviors, are of the greatest concern. A picture of teaching as a more complex and unpredictable process appears to be emerging - one that places teaching toward the professional

end of the continuum referred to earlier. The model that one uses to conceptualize teaching has an important impact upon the criteria employed to evaluate it.

Having looked into some of the concepts related to the nature of teaching, the focus now shifts to the second part of Darling-Hammond, Wise, and Pease's definition, from which we departed at the onset of this review. We have seen how one's assumptions about the nature of teaching work, the goals that one holds to be central to education, and the paradigm by which one conceptualizes teaching all contribute to one's judgement of teaching quality. The discussion now shifts to the concept of teacher evaluation criteria itself.

Teacher Evaluation Criteria

In this section, the concept of criteria is examined in a general way. Subsequent to a short consideration of some definitions of criteria, a scheme for categorization is suggested. The matter of criterion selection concludes the discussion.

Defining Criteria

A sampling of the educational literature dealing with effectiveness and evaluation reveals that terms such as variables, measures, indicators, competencies, and criteria are often used interchangeably. Nevertheless, there appears to be some agreement on a more precise definition. Mitzel (1960) clarified the way in which the term is most often used with reference to teacher effectiveness:

> The term criterion is commonly attached to any set of observations that may be used as standards for evaluative purposes. In this sense a criterion measure cannot be merely any dependent variable which happens to be at hand. Calling a particular measure a criterion lends to it connotations of worth and value. Criteria cannot be trivial; otherwise evaluations are made against trivial standards (pp. 1481-1482).

Rath (1982) distinguished between standards and criteria from a teacher evaluation perspective and provided an illustration to assist in making this point:

> A criterion is a statement that describes or designates a variable of interest or an attribute of a person that is to be considered. A standard denotes the amount of the variable or attribute required to receive a specific grade. Thus, if height were a criterion for becoming a policeman, a standard might be 60 inches. If a candidate for the police force met the height criterion at a standard of 60 inches or more, he

would be graded "eligible" ... Ideally, evaluators would like to be able to specify both the criteria and the standards as clearly as was done in this example (p. 614).

The relationship between standards and criteria was also expressed by Lawton, Hickcox, Leithwood, and Musella (1986):

> Criteria . . . refer to indicators that measure some quality or behavior; some might be quite complex, such as the style of classroom management, while others might be straightforward, such as punctuality. Standards refer to the level of expectations regarding criteria (p. 4).

Criteria, then, must be distinguished from standards. Not only must a criterion be an indicator, or a variable, it must be a meaningful indicator. As criteria can be quite specifically defined, so too, can they be thought of as broad categories.

Categories of Criteria

Each of the four models of teaching mentioned above categorizes effectiveness variables in accordance with its own particular conceptual frame. Differences in this regard appear to be fewer than similarities. From our perspective, Mitzel's three non-contextual descriptors - presage, process, and product, are useful criteria grouping mechanisms for two main reasons. First, their almost thirty years of use would lead one toward the assumption that they are relatively widely understood in the education community. Second, the categorizing labels used in the other three paradigms can all be placed within one of the Mitzel domains. In fact, Dunkin and Biddle used the exact same terms. Centra and Potter used the heading teacher characteristics for presage, student learning outcomes for product, and the two categories, teaching performance and student behavior for process. As to how the groupings from the third model are related, Medley (1982) made this quite clear.

> This model derives directly from Mitzel's; his presage criteria included pre-existing teacher characteristics, teacher training variables, and teacher competencies; his process criteria included teacher performance and pupil learning experiences;his product criteria were based on pupil learning outcomes (p. 1899).

The position taken here, then, is that virtually every criterion by which the quality of teaching can be judged fits into of the three groups: presage, process and product. Mitzel has given us a very useful method of considering the wide array of variables related to teacher effectiveness.

Presage Criteria

In current teacher evaluation presage criteria are widely used. Duhamel, Cyze, Lamacraft, and Larocque (1979) found that these criteria were being used in 86 percent of the Ontario systems surveyed in their study (p. 29). In the past, they enjoyed even wider application. "Adaptability, considerateness, enthusiasm, good judgement, honesty, and magnetism were identified by Charters and Waplies in the *1929 Commonwealth Teacher Training Study* as traits associated with the best teachers" (Medley, 1982, p. 1895). Medley indicated that many of the presage rating scales still in use today derive from a 1930 system developed by Barr, who compiled a list of characteristics from studies of this sort. Many students of teacher evaluation look less favorably upon the extensive use of presage criteria. Detractors find two main faults. One is the claim "that there is no persuasive evidence that there is any relationship between the presage criteria mentioned and the teacher's effectiveness" (Duhamel et al., 1979, p. 29). The other is expressed by Ryan and Hickcox (1980): "The rating forms themselves include a good proportion of categories having to do with personality, dress, appearance, which have little relation to instructional improvement" (p. 21). Mitzel (1960) put presage criteria into this perspective: "precedent forces their consideration as criteria . . . they are pseudo criteria, for their relevance depends upon an assumed or conjectured relationship on process or product" (p. 1484).

Advocates for the inclusion of these criteria in teacher evaluation systems see the situation somewhat differently. Sweeney (1980) felt that it is important to assess teachers on their humanistic qualities and spoke of the teacher as "an institutional representative (who) must carry the flag for his school and profession in a manner which enhances the public image and status of both" (p. 12). A slightly different statement along this line of thought, was expressed by King (1981):

> Whether they are used in personnel decisions or in self-evaluation for professional growth, indirect measures suggest an appropriately multidimensional model for teacher evaluation. Because they can provide valuable information unavailable from more direct sources, indirect measures may prove invaluable (p. 179).

Process Criteria

An overwhelming mass of research on teaching has sought to identify teacher and student behaviors that influence learning. "It is not surprising, therefore, that process indicators are the most frequently used criteria in present evaluation practices" (Duhamel et. al., 1979, p. 28). The significant assumption upon which the use of these criteria is based is "that congruence with these behavioral norms produces effective teaching" (ibid, p. 27). Many of the consulted scholars feel that several behaviors have shown a consistently high correlation with learning outcomes and should,

therefore, be included as criteria to determine teacher quality. Still others believe that patterns of teacher behavior may be more significant (Centra and Potter, 1980; Medley, 1982). Efforts continue to refine observation techniques, establish validity and reliability, and make the process yet more objective. Evertson and Holley (1981) thus described the status of classroom observation:

> Classroom research has recently made progress in identifying process variables that are good indicators of effective teaching as measured by achievement. A picture of what effective teaching looks like in the classroom is beginning to emerge, and the assessment of teachers by means of observation can now be regarded as a meaningful activity (p. 107).

Apprehensions over the teacher evaluation applications of performance criteria generally have to do with their overuse or misuse. Hickcox (1982), among others, cautioned against exclusive reliance on observations: "We know for certain that a principal sitting in the back of the room with a notebook and a rating sheet once a year or once every three years is not going to produce a rating that has any reliability or validity (p. 7). "Observer bias, insufficient sampling of performance, and poor measurement instruments can threaten the reliability and validity of results, " warned Darling-Hammond, Wise, and Pease (1983, p. 306).

Some of those viewing teaching at the professional end of the spectrum have additional reservations. Rath (1982) questioned the usefulness of "low inference" data. Eisner (1977) used this example to illustrate the limitations of relying too heavily upon objective data:

> A behavioral description of an eyelid closing on the left eye at a rate of two closures per second could be described in just that way. But a thick description of such behaviors within the context of a cultural subsystem could be described as a wink (p. 353).

This example is perhaps overstating the case. Others who perceive teaching in a similar professional sense would see possibilities for growth in the use of low-inference information. Teachers would draw their own conclusion from such data, in this view.

Product Criteria

In contrast to the other two groupings, the use of product variables is not very widespread. Varieties of this approach assume that at least a portion of student learning can reasonably be attributed to the efforts of teachers. Haefele (1980) and Darling-Hammond, Wise, and Pease (1983) identified a number of results-oriented approaches. Among these methods are three variations which assess teacher effectiveness on the basis of standardized tests. On such approaches, the latter article commented, "Studies of the reliability of student test scores as a measure of teaching effectiveness consistently indicate that reliability is quite low, that is, that the same teacher produces markedly different results in different situations" (Darling-Hammond, et al., 1983, p. 307). The final outcome method discussed and advocated by Haefele is a negotiated approach, "The teacher, together with the principal and/or curriculum supervisor, establishes mutually agreed upon (negotiated) instructional goals for the year" (1980, p. 352).

The difficulty in linking student outcomes to teaching performance was also recognized by Centra and Potter (1980), who noted that "student achievement is affected by a considerable number of variables, of which teacher behavior is but one" (pp. 286-287). Several studies indicate a general teacher opposition to the inclusion of these criteria in evaluation processes (Knapp, 1982; Lawton et al., 1986; Ryan & Hickcox, 1980).

Very intentionally there has been an effort to steer away from an encyclopedic listing of the myriad of criteria which could, in some way, be utilized to assess one aspect of teacher quality or another. Rather, the decision is to touch upon the three broad categories in a more general manner. Limiting or selecting the appropriate number of criteria which can legitimately be applied to the assessment of teacher quality in any given situation is a matter addressed next.

Selecting Teacher Evaluation Criteria

Judicious selection of criteria, in our view, should be undertaken only after the following questions have been carefully considered. What are the purposes of evaluation? Who decides which criteria will be used? Do the criteria apply to all teachers or is their appropriateness based more specifically on the unique nature of individual teaching assignments? Answers to the final two questions are dependent, to a great extent, upon the stated purposes of assessment.

Duncan (1984) listed the eight purposes for teacher evaluation delineated in Alberta Education's *Program Policy Manual*:

1. To promote, achieve, and maintain an acceptable quality of instruction.
2. To help improve performance of teachers in securing desirable instruction outcomes.
3. To provide information which will be useful when considering placement of staff, transfer, retention, promotion, tenure, and permanent certification.
4. To provide specific feedback concerning teacher performance.
5. To provide professional assistance to teachers in the performance of teaching tasks.
6. To provide a basis for planning inservice programs.
7. To provide written evaluation reports on teachers in public and private schools for purposes of documentation, as required.
8. To assist teachers in professional growth and development (pp. 4-5).

Teacher evaluation procedures are generally divided into two categories on the basis of purpose. The two broad purposes are generally labelled either summative (for administrative decisions) or formative (for improvement of teaching). The first, third and seventh of the Alberta provincial level purposes would appear to fit into the summative category, while the remainder would appear to fit better into the formative category.

Formative Evaluation

Keeler contended "The teacher must play a lead role - or at least a co-starring one - in formative evaluation," (1980, p. 30). He thought that evaluation "is on-going, should include self-evaluation, and should supply reports only to the teacher involved" (ibid, p. 30).

Townsend (1984) believed effective models of formative evaluation have six fundamental characteristics. They are:

1. Growth oriented as opposed to deficiency based.
2. Collegially developed and implemented as opposed to a unilateral, administratively developed program.
3. Data based as opposed to myth bound.
4. Peer group and total faculty appraisal as opposed to the unilateral assessment of a teacher by an individual evaluator.

5. A holistic and complex view of teachers and teaching as opposed to an atomistic and simplistic perspective that focuses on teachers' personal attributes, classroom appearance, or lessons plans.
6. A situational as opposed to a universal perspective (p. 27).

Summative Evaluation

It can be argued that a summative evaluation of teacher performance must be taken prior to embarking upon any meaningful program of improvement. Scriven (1981) stated this case:

> Summative evaluation is primary because:
> (1) human careers are at stake, not "mere" improvement;
> (2) if it is not possible to tell when teaching is bad (or good) overall, it is not possible to tell when it has improved;
> (3) if it is possible to tell when it is bad or good, personnel decisions can be made even though it is not known how to make improvements.
> In short, diagnosis is sometimes easier than healing, and an essential preliminary to it (p. 244).

The importance of criteria and standards appear to be central to the legal context of summative evaluation. Beckham (1982) wrote of the requirements of this status-related form of evaluation, listing fifteen guidelines to be followed. Five of these relate to criteria:

1. Written policies defining evaluation criteria that are reasonable, related to the teacher's job performance and the school system's goals and objectives.
2. Criteria for evaluating teacher performance should be developed from a thorough job analysis and shown to be job-related through content or empirical validation procedures.
3. Where possible, it is preferable that evaluation criteria be objective or, where not obviously objective, susceptible to objective assessment.
4. Subjective criteria ratings should be considered as but one component in an overall evaluation system.
5. Teachers should be fully informed of the criteria (pp. 11-12).

Duncan (1984) derived a similar list by soliciting the opinions of five identified experts in the field. The single criteria-related item on his list, which is not also found above, is the requirement that a "variety of objective data must be collected" (p. 79).

Assessment of Teacher Performance

Effective schools research has found strong correlations among principal expectations for teachers, teacher expectations of students, and student achievement. In effective schools the role of the principal is that of instructional leader rather than manager. As such, his/her role is to establish with staff specific learning expectations, deliver to teachers the necessary materials to carry out the instructional programs, and to continuously evaluate the level of mastery of students and staff (Brookover et. al, 1982; Brookover & Lezotte, 1979; Leithwood & Montgomery, 1982; Manasse, 1984).

Despite the importance of teacher appraisal, scholars and practitioners perceive it as ineffective in improving the quality of classroom instruction. One of the principal weaknesses identified in research is the inability to connect specific teacher behaviors with student outcomes (Acheson & Gall, 1987; Bartalo, 1988, Calabrese, 1986). A second weakness is the inability of the principal to distinguish between effective and ineffective instruction (DeRoche, 1981; Johnson & Snyder, 1986; Leithwood & Montgomery, 1982; O'Neill & Shoemaker, 1989). A third problem is the lack of consistency among appraisers as to what is effective. When variances in the interpretation of a teaching segment were noted, effective teaching seemed to be based on principal taste more so than on sound pedagogy (Calabrese, 1986; Furst, 1971; Soar, Medley & Coker, 1983) A fourth difficulty is the persistence of an adversarial relationship between the teacher and principal in the evaluation of classroom performance. Teacher appraisal was frequently perceived as a weapon for fault finding rather than a group process for problem-solving (Acheson & Gall, 1981; Bartalo, 1988; O'Neill & Shoemaker, 1989; Soar et al., 1983).

Numerous researchers have attributed the weaknesses to the lack of appropriate training. A program that involves principals and lead teachers in a collaborative effort to assess instructional programs and to recommend reform would address the concerns expressed above. Such a program requires adequate time to be understood, provision for the application of skills, and the establishment of effective collegial relationships (Hunter, 1988; Klitgaard, 1987; Manatt, 1988).

Other Factors Related to Criteria

A number of additional matters and considerations enter into the discussion. Though a number of voices call for our jurisdiction to establish one set of criteria, the wisdom of so doing is doubted by many others, as expressed by Hickcox (1982): "The difference between teaching kindergarten

in an inner city school and high school physics in a affluent suburb must be considerable" (p. 9). Knapp (1982) and Darling-Hammond, Wise, & Pease (1983) felt that using the same criteria for both formative and summative purposes is a problem. Knapp (1982) stated "Those who write about resistance to evaluation ... (argue) that summative evaluation of teachers tends to work against the efforts to alter their behavior by generating insecurity and defensive behavior" (p. 7). Common sense and a knowledge of organizational theory would strongly suggest that teachers should play a large part in helping to set the criteria by which their work is to be judged. Clear communication of exactly what is meant by each criterion used to judge the quality of teachers is another factor of the utmost importance to the eventual success of the whole process. The Spirit River Educational Quality Indicators Project involved teachers in establishing criteria by which they would be evaluated and clearly communicated these criteria to them.

Chapter III

METHODOLOGY

This chapter describes the specifics of the methodology employed in the project. It provides a detailed account of what was done during the three years of the project.

Year One: Development

A proposal of intent to participate in a pilot project in Alberta's Educational Quality Indicators (EQI) initiative was submitted to Alberta Education in December 1988. During the 15 months that followed, administrative staff spent many hours in discussion and debate attempting to refine and focus the project within the terms of reference and manageable limits for a small jurisdiction. The proposal focused on the development of criteria for teacher effectiveness in a formative process.

Experience and an initial literature review strongly indicated that for any project involving our key components of action research, development of criteria and formative evaluation, it was essential to gain the acceptance, involvement, and positive initiative of staff. In a demonstration of good faith, the Board supported the concept by adding a staffing component to all small schools in the 1989-90 budget and making the EQI project a priority in the Division's 1989-90 Three Year Plan. Early in June 1989, the superintendent sent a memo to all teaching staff outlining the proposed project, its intent, and asking for volunteers to take a leadership role. A survey a week later asked teachers to indicate the criteria each felt were critical to improving teacher effectiveness. The response from the staff was positive and encouraging. The teacher survey on criteria received over an 80% response. Eight experienced and respected teachers formed a local committee.

During the summer of 1989, central office administrators conducted a thorough search of the literature relevant to the components of the project. Key articles on action research, formative evaluation, and quality indicators were selected and distributed to the local committee. Responses to the June teacher survey on criteria were collated.

Table 1

Indicators of Quality Instruction

1. Sequentially Developed Planning and Preparation

1.1 The teacher maintains/develops short, unit and long term, flexible plans with an evaluation process.
1.2 The teacher adheres to Curriculum/Program of Studies documents.
1.3 The teacher provides a safe and organized environment with resources and equipment readily available.
1.4 The teacher provides for individual learning needs with consideration of student abilities, based on diagnostic information.
1.5 The teacher provides a variety of learning activities.
1.6 The teacher ensures that objectives are stated.
1.7 The teacher provides for motivation of students.
1.8 The teacher makes learning activities relevant.
1.9 The teacher plans for interdisciplinary activities.

2. Key Instructional Strategies

2.1 The teacher circulates during pupil activities.
2.2 The teacher presents clear assignments which are relevant to student experiences.
2.3 The teacher exhibits classroom management skills.
2.4 The teacher provides an environment whereby active learning takes place within a working and non-threatening atmosphere.
2.5 The teacher provides a physical classroom environment which is stimulating, enriched, relevant and has displays of student work.
2.6 The teacher exhibits a variety of questioning techniques.

3. Communication Skills

3.1 The teacher provides clear explanation of objectives, assignments and behavioral expectations.
3.2 The teacher exhibits a variety of positive reinforcement techniques.
3.3 The teacher is an active listener.
3.4 The teacher provides timely and relevant r iews.
3.5 The teacher uses language appropriate to the developmental level of students.
3.6 The teacher maintains regular parental information flow.

4. Pupil/Teacher Relationships

4.1 Mutual respect is exhibited between teacher and students.
4.2 Clear routines, expectations and rules are made known and followed.
4.3 The teacher provides for positive peer interaction and support.
4.4 The teacher uses a fair and meaningful evaluation process.
4.5 The teacher provides prompt feedback on student assignments.

In August 1989, the local committee and the superintendent met with the purpose of finalizing the criteria and establishing the process and terms of reference for the project within the established guidelines. This local committee reviewed pertinent research and literature, developed grouped sets of quality indicators of effective teaching (See Table 1), formulated key variables which could impact the effectiveness of implementation, articulated clear explanations of each indicator and gave suggestions on data gathering for each. They reached agreement on desired outcomes, developed data gathering sheets for indicators, variables, and outcomes, and held a mini-workshop on formative evaluation. They then finalized a draft document for presentation to all teaching staff, and developed an action plan and consequent logistics and timelines for implementation in all division schools on a voluntary basis.

The draft project documents were presented to the Administrative Council at its initial meeting in August 1989, and local committee members introduced the project to teaching staffs at the staff meeting in August 1989. Staff and school administrators were requested to give input on the draft documents to local committee members by September 1989.

The local committee met to review the input from staff and subsequently finalize the working project documents for use in the first year of the project. (See Appendix A).

Local committee members presented a half-day workshop to members of the Administrative Council and presented the keynote session to all staff during the Divisional Professional Development Day in October 1989. Formal presentations of the project documents were made by local committee members to all school staffs during the professional development component of the October regular staff meetings.

The finalized project for Year One was implemented in all schools on a voluntary basis effective October 11th, 1989.

The local committee of eight teachers and the superintendent met in late January 1990 to review, analyze, and collate the information received from staff who had been participating in the project for the first four months. During this initial period, all staff had the opportunity to meet voluntarily and discuss the previously developed indicators of effective teaching and/or to visit each other's classrooms to observe one or more of the specific criteria. Data were collected on staff participation, specific indicators that were discussed and observed, local or out-of-school contacts,

and years of experience of participants. Information was also gathered on geographic distance, use of extra time provided to each school, staff attitudes, and extended professional development activities.

To gain parents' and students' perspectives of indicators of quality teaching, two survey instruments were developed (see Appendix B). In the spring of 1990, these surveys were sent to all division students in grades 9, 10, 11 and 12, and to parents of students in grades 2, 5, 8 and 11. In the two subsequent years the student surveys were completed in scheduled classroom time. Parent surveys were sent to homes via students in school. A teacher survey on satisfaction and professional development involvement was also conducted each year (Appendix C). The data gathered at the conclusion of each year were collated and presented at the divisional level, thereby assuring the anonymity of respondents.

At the first annual meeting of the local committee, consensus was reached on a number of decisions which would become an integral part of the process for the second year of the project:

1. That the criteria remain the same during year one.
2. That board approval be sought to change the Evaluation Policy to allow the summative evaluation process to use the same criteria as the formative process, with the addition of the personal qualities as highlighted in the teacher handbook distributed at the introduction of the project.
3. That extra funding be provided by the division to be used for interschool EQI visitations with priority to specialist teachers and teachers with split grades.
4. That each school designate an EQI coordinator who will become part of the expanded local committee. These individuals will be given designated EQI time to gather data on staff usage.
5. That principals review methods of allocating EQI time to ensure maximum opportunity for use by all teachers.
6. That each principal make some component of the EQI project one of his/her school's objectives for 1990-91.
7. That a session on formative evaluation concepts and process be offered at the local teachers' professional development day in October 1990.

It was felt that the above recommendations would ensure the continuing importance of the EQI project to the division.

Year Two: Implementation

All seven recommendations for Year Two were acted upon early in the 1990-91 school year. With a change in superintendent in December 1990, the goals and intent of the project remained essentially the same, with the one significant change being an expansion of the data collection process.

A decision was made to enhance the credibility of our project as a research endeavor through the establishment of a teacher performance baseline to which comparisons could be made. This represented a significant shift in focus, from voluntary participation to compulsory participation in this one aspect of the project. The establishment of a teacher performance baseline required an assessment of teachers' current performance. To increase the consistency of teacher observations and to define different levels of teacher effectiveness, a "teacher observer" from each school participated in a three-hour training session to establish indicator standards. Using the tapes produced by Laurie Mireau (1985) in her doctoral program on teacher effectiveness, the teacher performances observed were rated on a five-point scale. An attempt was made to reach consensus about the meaning of each of the five scale points. The sample tapes then served as a set of indicator standards against which teacher performance was judged. During an assigned one-week period, "teacher observers" were released from their instructional/administrative duties to visit classrooms for a 40 minute period to rate teacher performance. The "Teacher Performance Tally Sheet" (Appendix D) was used to record their observations.

All teachers and administrators involved in the observation of teacher and student behavior were given inservices on what to look for when observing, and how to record the observation. Lectures as well as videotapes were used to show a variety of situations and strategies to be examined. Group discussion and strategies were put into place to do the observations. This information was taken back to the schools and shared with the staffs in order to validate the procedure.

A need was also recognized for additional student outcome measures relevant to the intent of the indicator system. Consideration was given to the development of our own instrument but we agreed we lacked the resources and expertise to tackle such a complex activity. The alternative was to consult the *Educational Quality Indicators Inventory of Assessment Instruments* (Alberta Education, 1990). Sample copies of a number of assessment instruments were accessed. The local committee established guidelines for the selection of suitable instruments:

1. Will the instrument give us student outcome measures relevant to the intent of the indicator systems?
2. Can the instrument be administered with relative ease?
3. Are norms provided to which comparisons can be made?

The *Classroom Environment Scale* (Moos & Trickett, 1987) was selected for grades 5, 8 and 11 and the *Student's Perception of Ability Scale* (Boersma & Chapman, 1977) was selected for grade 2 as the instruments most closely meeting the criteria set (Appendices E and F). Both instruments measured student outcomes in the affective domain, supplementing data gathered on cognitive outcomes.

Table 2 summarizes the data collected during the last two years of the project.

Year Three: Refinement

At the second annual meeting of the local committee, the following recommendations were made for the final year of the project:

1. That the criteria remain the same as the previous year, with the exception of some minor changes in wording.
2. That the division's summative evaluation process continue to use the same criteria as EQI's formative criteria.
3. That extra funding continue to be provided by the division to be used for out-of-school EQI visitations subject to the principal's and superintendent's approval.
4. That each school designate an EQI coordinator who will be responsible for data collection and EQI promotion.
5. That the school administrator and EQI coordinator provide to the deputy superintendent a plan for the utilization of the four periods a week of EQI time.
6. That the EQI project be one of the school's objectives for 1991-92 (May be one or more of the seven identified indicators from the Teacher Performance Baseline.)
7. That the Steering Committee continue to refine the teacher effectiveness indicators as required.

Table 2
Data Collection 1990 to 1992

Type	Indicators	Measures	Sources
Staff	participation	number of visitations made to other teachers' classrooms	teachers
	professional development	number of teachers attending out-of-division PD activities	teachers
	teacher effectiveness	aggregate rating on each of the 26 teaching behaviors	evaluator
Parents	perceptions	survey of parents of students in grades 2, 5, 8, 11	parents
Students	perceptions	survey of students in grades 9, 10, 11, 12	students
	attitudes	*Student's Perception of Ability Scale* (grade 2) *Classroom Environment Scale* (grades 5, 8, 11)	students
	achievement	grades 3, 6 and 9 achievement tests grade 12 diploma examinations	students
	discipline	suspensions, expulsions, referrals to office, dropouts	administrators

8. That we address the seven identified indicators in the Teacher Performance Baseline through a variety of professional development activities. (1.6, 1.9, 2.1, 2.5, 2.6, 3.2, 3.4)
9. That the data collected during Year Three be the same as that of Year Two.
10. That a designated contribution be made available to the local Professional Development Committee to support EQI related workshops/speaker during the fall Professional Development Day and other appropriate times.

The focus of the Spirit River Educational Quality Indicators Project was on teaching behaviors and their impact on student outcomes. Through this project a myriad of professional growth opportunities not normally available have been provided. This, in turn, has resulted in the potential for modification of teaching behaviors.

We believed that modification of specific teaching behaviors would have a positive impact upon desirable student outcomes. It was, therefore, deemed appropriate to compare data gathered on the various variables to determine the extent to which there appears to have been a conscientious effort to modify teaching behaviors and the subsequent impact this has had on student outcomes. Conclusions in the form of findings were then derived from the comparisons of the data collected.

Chapter IV

FINDINGS

This chapter contains four major sections - teacher participation, teacher performance, perceived importance of the criteria (parent and student perceptions) and student outcomes.

Teacher Participation

Critical to the success of this project was the acceptance, involvement and positive initiative of the teaching staff. Table 3 is a list of teaching experience of the teachers in the division. A record of EQI visits was maintained at each school and submitted to the EQI coordinator biannually (see Appendix A, "Educational Quality Indicators Record Sheet"). Table 4 presents the number and percent distribution of teacher visitations during each of the three years. The number of classroom visitations made each year is indicative of the support the project enjoyed.

The concept of collegial classroom visitations may have been approached with some caution initially, but was enthusiastically embraced during the second year when visitations more than tripled, waning slightly in the third year. The board's commitment to the EQI project, evident in the funding it provided to cover the cost of substitute teachers, the addition of a staffing component to all small schools, and the priority given the project in the district's Three Year Plan all contributed to the high level of voluntary participation in the last two years.

In the first two years, EQI contacts suggested a direct correlation to years of experience, with the highest participation rate being that of our most and least experienced teachers. This suggested that visitations may, in fact, have been between these two groups. During all three years it was the most experienced teachers who made most extensive use of the provision made for visitations with colleagues(see Table 4). This was to be expected as it is this group of teachers that constitute approximately half of the total teaching staff (see Table 3).

Table 3

Composition of Teaching Staff In Years of Experience (Percent)

Years of Experience	1989-90	1990-91	1991-92
0-2	22	20	14
3-5	8	14	18
6-8	19	12	9
9-10	5	10	7
11+	46	45	53
Total	**100**	**101**	**101**

Table 4

Number and Percent of Teacher Classroom Visitations by Years of Teaching Experience[1]

Years of Experience	1989-90 School Yr. Visitations	Percent	1990-91 School Yr. Visitations	Percent	1991-92 School Yr. Visitations	Percent
0-2	43	19.7	82	15.1	56	9.1
3-5	12	5.5	31	5.7	131	21.2
6-8	41	18.8	87	16.1	30	4.9
9-10	23	10.6	80	14.8	31	5.0
11+	99	45.4	262	48.3	371	59.9
Total	**218**	**100.0**	**542**	**100.0**	**619**	**100.1**

1 There were 82 teachers in 1989-90, 87 teachers in 1990-91 and 86 teachers in 1991-92.

The participation rate of teachers with 0-2 years of experience dropped substantially in the last year. This may be partially accounted for by the fact that this group comprised a significantly smaller proportion of the total teaching staff than it formerly did. Whereas 22 percent of teachers were in the 0-2 year experience range in 1989-90, this declined to 14 percent in 1991-92.

The group with 3 to 5 years of experience is the second largest comprising 18 percent of the total teacher population. It is this group that also accounted for the second highest portion of visitations in Year Three.

Participation in terms of the four categories of indicators more than doubled in Year Two (Table 5), and increased marginally again in the last year. Whereas planning and preparation have consistently been the focus of close to half of the visitations, the pupil-teacher relationships area has been receiving ever-increasing attention, nearly doubling in the three year period. This may be due in part to heightened awareness of the importance of pupil-teacher relationships to the teaching-learning process.

Table 5

Purpose of Visitations

Indicators	Number of Contacts			Percent of Contacts		
	1989-90	1990-91	1991-92	1989-90	1990-91	1991-92
Planning & Preparation	95	237	276	43.6	43.7	44.6
Instructional Strategies	68	142	134	31.2	26.2	21.6
Communication Skills	34	86	96	15.6	15.9	15.5
Pupil-Teacher Relationships	21	77	113	9.6	14.2	18.3
Total	**218**	**542**	**619**	**100.0**	**100.0**	**100.0**

The focus on instructional strategies has consistently declined since the first year. The teacher performance baseline data, elaborated upon in a subsequent section in this report, identified three specific behaviors related to instruction which were given some of the lowest ratings. It is not surprising, however, that these behaviors have not been the subject of interclassroom visitation. An entire professional development day was devoted to familiarizing teachers with strategies to address the specific concerns expressed in this area.

The majority of the visitations were between colleagues in the same school. Table 6 indicates that interschool visits accounted for approximately 10 percent of the total. The majority of the visitations and contacts teachers engaged in were outside of allotted EQI time. This may have resulted from a number of reasons including the unavailability of substitute teachers, discomfort with using substitute teachers or preparing for them, scheduling conflicts, a desire not to spend time away from the classroom, or lack of knowledge regarding how to access this time. More frequently teachers used their personal preparation time to conduct visits.

An interesting observation on some of the out-of-school visitations was that several teachers were permitted to visit schools in other school jurisdictions considerable distances away. Though not part of the original intent of the extra funding, this flexibility was gratefully appreciated by the teachers involved.

Table 6

Types of EQI Visitations (Percent)

Year	In School	Out of School	Allotted Time	Outside Allotted Time
1989-90	86.6	13.4	41.8	58.2
1990-91	88.3	11.7	33.2	66.8
1991-92	90.4	9.6	38.4	61.6

In School - Visitations in the same school during school time.
Out of School - Collegial discussion in the same school outside of school time.
Allotted Time - Visitations or discussion using time allotted by the board.
Outside Allotted Time - Visitations or discussion outside of time allotted by the board.

Modification of teaching behaviors is, at least in part, the result of knowledge and/or skills gained through experience, through research conducted by others, and through inservice. Professional development activities such as teachers' conventions, formal inservice sessions, and this EQI project provided opportunities for professional growth.

Table 7 indicates a significant increase in the number of teachers who attended out of division professional development activities since the first year statistics were compiled. Similarly, voluntary participation in the EQI project has shown constant growth. The vast majority of respondents indicated this EQI project will assist them in their professional growth. Teacher awareness of the importance of professional development has been enhanced by their involvement in this project.

Table 7

Staff Survey Results[1]

Question	1989-90 (n=60)		1990-91 (n=56)		1991-92 (n=60)	
	Yes	No	Yes	No	Yes	No
Attended professional development out of division	24	36	35	21	31	29
Participated in EQI	46	14	49	7	52	8
Read materials to clarify evaluation indicators	34	26	35	21	32	28
Feel EQI will assist professional growth [2]	48	7	44	4	45	6

1 Results reported by number of respondents.
2 Not all teachers answered this question.

Teacher Performance

Teacher performance on each of the teaching behaviors was rated on a five point scale. Table 8 presents data on the 26 performance criteria which formed our baseline. The findings determined professional development activities. The seven areas with the lowest mean rating were the focus of a variety of professional development activities in the third year of the project (see Appendix G). The seven areas were:

- 1.6 The teacher assures that objectives are stated and understood.
- 1.9 The teacher plans for interdisciplinary activities.
- 2.1 The teacher circulates during pupil activities.
- 2.5 The teacher provides a physical environment which is stimulating, enriched, relevant and has displays of student work.
- 2.6 The teacher exhibits a variety of questioning techniques.
- 3.2 The teacher exhibits a variety of positive reinforcement techniques.
- 3.4 The teacher provides timely and relevant reviews.

Table 9 provides data for the second year of observation. Ratings changed, either as a result of professional development activities, or greater understanding of the indicators.

With one exception, mean ratings have either remained constant or have increased. More important, the most frequent rating on 19 of the 26 teaching behaviors was "5". This is a significant improvement upon that of the first year in which only seven received a modal rating of "5". Of the seven criteria that were the focus of specific professional development activities, the mean rating of three increased by approximately one-half point; no significant change in the mean rating was observed in the other four. Three modal scores increased from "4" to "5". A comparison of the ratings suggests that there has been considerable modification of teaching strategies. Teacher awareness of the criteria used in both the formative and summative evaluation processes has contributed to this.

Table 8

1991 Teacher Performance Baseline[1]

Criteria[2]	Performance Rating Scale[3]							
	1	2	3	4	5	Not Observed[4]	Mean	Mode
Sequentially Developed Planning and Preparation								
1.1 plans	0	2	5	43	29	3	4.3	4
1.2 curriculum	0	2	3	41	34	2	4.3	4
1.3 environment	0	0	10	38	31	3	4.3	4
1.4 individual needs	0	0	8	22	20	32	4.2	4
1.5 variety	0	3	13	38	20	8	4.0	4
1.6 objectives	0	4	18	32	25	3	4.0	4
1.7 motivation	0	1	18	34	26	3	4.0	4
1.8 relevance	0	1	14	38	20	9	4.1	4
1.9 interdisciplinary	0	5	11	21	14	31	3.9	4
Key Instructional Strategies								
2.1 circulation	6	6	15	24	26	5	3.8	5
2.2 clarity	0	1	15	34	26	6	4.1	4
2.3 management	0	4	11	32	35	0	4.2	5
2.4 atmosphere	3	3	8	34	37	0	4.3	5
2.5 environment	1	3	16	38	21	3	3.9	4
2.6 questioning	0	5	20	31	14	12	3.9	4
Communication Skills								
3.1 explanation	0	6	11	35	28	2	4.1	4
3.2 reinforcement	3	8	20	33	15	3	3.6	4
3.3 listening	0	1	15	36	30	0	4.2	4
3.4 review	0	1	13	33	11	24	3.9	4
3.5 language	0	0	15	36	31	0	4.2	4
3.6 parents	0	2	13	16	17	34	4.0	5
Pupil/Teacher Relationships								
4.1 respect	0	1	8	31	42	0	4.4	5
4.2 expectations	0	2	14	32	34	0	4.2	5
4.3 interaction	0	0	11	35	25	11	4.2	4
4.4 evaluation	0	3	16	22	24	17	4.0	5
4.5 feedback	0	1	9	24	18	30	4.1	4

1 Eighty-two of the 87 teachers (94%) in the Spirit River School Division were observed in May 1991. Five teachers were absent from their duties during the week the observations were conducted.

2 The criteria are presented in Appendix D.

3 Performance Rating Scale: 1 - very poorly addressed; 2 - poor; 3 - fair; 4 - good; 5 - excellent.

4 Behaviors that were not observed have been excluded in calculating the mean.

Table 9

1992 Teacher Performance[1]

Criteria[2]	Performance Rating Scale[3]							
	1	2	3	4	5	Not Observed[4]	Mean	Mode
Sequentially Developed Planning and Preparation								
1.1 plans	0	2	11	24	36	1	4.3	5
1.2 curriculum	0	0	2	11	60	1	4.8	5
1.3 environment	0	1	2	32	39	0	4.5	5
1.4 individual needs	0	4	12	27	28	3	4.1	5
1.5 variety	0	12	11	28	33	0	4.2	5
1.6 objectives	1	3	15	27	28	0	4.0	5
1.7 motivation	0	1	11	32	30	0	4.2	4
1.8 relevance	0	1	11	29	33	0	4.3	5
1.9 interdisciplinary	2	6	11	26	22	7	3.9	4
Key Instructional Strategies								
2.1 circulation	1	0	9	21	38	5	4.4	5
2.2 clarity	0	1	4	35	33	1	4.4	4
2.3 management	0	1	11	29	33	0	4.3	5
2.4 atmosphere	0	2	7	27	38	0	4.4	5
2.5 environment	2	3	15	23	29	2	4.0	5
2.6 questioning	1	1	15	34	17	6	4.0	4
Communication Skills								
3.1 explanation	1	2	13	27	31	0	4.1	5
3.2 reinforcement	0	4	12	32	26	0	4.1	4
3.3 listening	0	2	8	29	34	1	4.3	5
3.4 review	0	0	10	27	31	6	4.3	5
3.5 language	0	0	1	26	45	2	4.6	5
3.6 parents	0	3	17	29	24	1	4.0	4
Pupil/Teacher Relationships								
4.1 respect	1	0	8	29	36	0	4.3	5
4.2 expectations	1	3	9	28	33	0	4.2	5
4.3 interaction	0	2	9	25	35	3	4.3	5
4.4 evaluation	0	1	8	33	32	0	4.3	4
4.5 feedback	0	1	8	26	35	4	4.4	5

1 Seventy-four of the 86 teachers (86%) in the Spirit River School Division were observed in May 1992. Twelve teachers were absent from their duties during the week the observations were conducted.

2 The criteria are presented in Appendix D.

3 Performance Rating Scale: 1 - very poorly addressed; 2 - poor; 3 - fair; 4 - good; 5 - excellent.

4 Behaviors which were not observed have been excluded in calculating the mean.

Parental and Student Attitudes

All students in grades 9 through 12 as well as all parents of students in grades 2, 5, 8 and 11 were surveyed on their perception of the validity of the chosen criteria for the formative and summative evaluation of teachers (see Appendix H).

In all three years there was generally reasonable consistency in responses of parents and students. Not surprisingly the vast majority of parents agreed that:

- the teacher must be an active listener
- explanations of objectives, assignments, and behavior must be clear
- the language used must be appropriate to the developmental level of students
- a safe environment with necessary resources should be provided
- individual learning needs must be addressed
- classrooms must be appropriately managed
- there must be mutual respect, clear expectations
- there must be fair and meaningful evaluation of student progress.

Student opinion on any of the criteria was not as strong as that of parents. Without exception a significant proportion of students indicated "less important" as their rating of any particular criterion.

Overall, however, the only significant disagreement between parents and students was regarding the flow of information to the home and the importance of the teacher circulating in the classroom. Students attached much less importance to these than did parents.

In general, parents indicated a high level of support for the criteria being used to assess teacher performance. This may be interpreted as support for the view that it is these criteria which have an impact on student outcomes.

Student Outcomes

Cognitive Outcomes

Alberta Education issues three types of high school diplomas, and a certificate: the General High School Diploma, the Advanced High School Diploma, the High School Equivalency Diploma, and the Certificate of Achievement for students enrolled in the Integrated Occupational Program. The diplomas and certificate certify the holder has successfully completed a prescribed program of instruction. In the *Guide to Education, Senior High School Handbook,* published by Alberta Education, the requirements are outlined for the diplomas and certificate. All grade twelve students who are enrolled in diploma subjects write provincial departmental exams in January or June, depending on their timetables in their schools. Their final mark is a blend of what they have obtained from fifty percent of the school awarded mark and fifty percent from the diploma exam.

Provincial Diploma Examinations

Table 10 displays the comparisons between provincial and Spirit River School Division students' results on diploma exams in June 1990, 1991, and 1992 with respect to the percentage of students achieving "acceptable standards", that is, achieving 50% or higher on the final blended mark.

The one significant difference between jurisdiction and provincial results is in mathematics in 1991 and 1992. An analysis of the results in mathematics suggests our students are experiencing difficulty applying procedural skills. We will address concerns about these results in the coming year. The validity of comparisons, however, is questionable because of the low number of students involved.

Table 10

Percentage of Grade 12 Students Achieving the Acceptable Standard or Higher on the Diploma Exams (Final Blended Mark)

	June 1990		June 1991		June 1992	
	Division	Province	Division	Province	Division	Province
Social Studies 30	100.0 (n=8)	89.1	89.7 (n=58)	91.9	89.5 (n=19)	90.0
Mathematics 30	100.0 (n=18)	82.8	50.0 (n=8)	80.9	57.1 (n=21)	82.5
Biology 30	88.9 (n=25)	84.9	96.6 (n=25)	88.4	78.9 (n=38)	86.1
English 30	100.0 (n=18)	94.9	100.0 (n=15)	96.0	94.4 (n=18)	95.3
English 33	92.9 (n=14)	90.8	100.0 (n=18)	93.0	100.0 (n=12)	92.1
Physics 30	100.0 (n=10)	90.7	92.9 (n=14)	91.1	0.0 (n=1)	90.2
Chemistry 30	85.7 (n=35)	86.1	100.0 (n=4)	88.2	94.1 (n=34)	89.5

The acceptable standard is 50% or higher on the final blended mark.
Source: Alberta Education

Provincial Achievement Tests

Provincial achievement tests are given to students in grades 3, 6 and 9. Comparisons between provincial and jurisdiction results on achievement tests are displayed in Table 11. Generally, jurisdiction results are within the provincial range in all three years.

Table 11

Percentage of Grade 3, 6 and 9 Students Achieving the Acceptable Standard or Higher on the Total Provincial Achievement Tests

	1990	
	Division	**Province**
Mathematics 3	94.0 (n=100)	91.8
Science 6	76.2 (n=84)	82.5
Language Arts 9	81.6 (n=87)	82.9
	1991	
	Division	**Province**
Science 3	82.4 (n=88)	78.9
Mathematics 6	75.0 (n=100)	75.5
Social Studies 9	80.2 (n=91)	78.9
	1992	
	Division	**Province**
Social Studies 3	80.0 (n=90)	83.5
Language Arts 6	75.3 (n=93)	75.6
Mathematics 9	63.7 (n=80)	67.4

Source: Alberta Education

Affective Outcomes

The *Student's Perception of Ability Scale* was administered to all grade 2 students and the *Classroom Environment Scale* to all students in grades 5, 8 and 11 in the division. Both instruments are designed to yield information on student attitudes toward various aspects of the school environment.

Divisional mean scores for 1991 and 1992, as well as normed means for the *Student's Perception of Ability Scale* are presented in Table 12. Divisional mean scores on all dimensions are consistently above the normed mean in both years.

Similarly Table 13 and Table 14 illustrate the results for the *Classroom Environment Scale* administered in language arts (English) and mathematics classes respectively. With statistics having been compiled for only two years, it is premature to draw any conclusions at this point. Patterns may begin to emerge after five to six years.

Table 12

Student's Perception of Ability Scale Results

Scales	Normative Sample Mean (n=642)	SD[1]	Divisional Mean 1991 (n=105)	1992 (n=102)
Full Scale	46.24	11.71	50.45	50.91
General Ability	7.91	3.01	8.64	8.22
Arithmetic	9.17	3.01	10.15	9.77
School Satisfaction	7.99	2.78	8.45	8.77
Reading/Spelling	9.07	3.13	9.48	9.39
Penmanship/Neatness	7.89	3.00	8.78	9.18
Confidence	4.21	2.25	4.95	5.48

1 Standard Deviation

Table 13

Classroom Environment Scale Results for Language Arts Classes

Subscales[1]	Normative Sample Mean (n=92 classes)	SD[2]	Divisional Mean 1991 (n=21)[3]	1992 (n=21)[3]
Involvement	4.70	1.62	5.70	5.83
Affiliation	6.13	1.03	6.54	6.21
Teacher Support	6.70	1.60	6.08	5.99
Task Orientation	5.44	1.73	6.53	6.31
Competition	5.14	1.19	6.53	6.12
Order & Organization	5.44	1.79	5.40	5.57
Rule Clarity	5.42	1.32	6.51	6.19
Teacher Control	3.61	1.66	5.33	5.68
Innovation	5.17	1.81	5.20	5.05

1 Descriptions of dimensions are presented in Appendix E.
2 Standard deviation.
3 Number of classes.

Table 14

Classroom Environment Scale Results for Mathematics Classes

Subscales[1]	Normative Sample Mean (n=48 classes)	SD[2]	Divisional Mean 1991 (n=21)[3]	1992 (n=21)[3]
Involvement	4.37	1.26	5.48	5.67
Affiliation	6.07	1.09	6.74	6.15
Teacher Support	6.08	1.45	6.28	5.86
Task Orientation	7.32	1.58	7.38	6.99
Competition	5.38	0.88	6.60	6.51
Order & Organization	6.09	1.99	5.33	5.52
Rule Clarity	6.17	1.28	6.72	6.32
Teacher Control	4.34	1.72	6.20	6.58
Innovation	3.65	1.16	4.32	4.36

1 Descriptions of dimensions are presented in Appendix E.
2 Standard deviation.
3 Number of classes.

Discipline

Discipline outcomes, displayed in Table 15, are to an extent a reflection of student attitude toward school. The students' perception of the school environment is one factor which does have an impact on their behavior in school.

No discernible pattern is emerging in the statistics compiled to date. In Year Two, the numbers of disciplinary measures taken dropped considerably from the previous year. In the 1991-92 school year these numbers increased substantially. This may be attributable to changes in administration in three of our eight schools and/or changes in discipline procedures throughout the division. Dropouts are those students who register, but do not complete their full year of schooling. Dropouts though tabulated were not considered in this study.

At this time it is not possible, nor would it be appropriate, to attempt to assess the effectiveness of modifying instructional strategies and the impact of this modification on student outcomes.

Table 15

Discipline Outcomes

Year	Referrals	Suspensions	Expulsions	Dropouts
1989-90	835	110	0	14
1990-91	560	49	0	12
1991-92	1,080	112	1	16

Summary of Results

In general, our achievement and diploma exam results fall within the acceptable range, some being above the provincial mean, others below. No obvious patterns are emerging. Similarly, the information we have gathered on affective outcomes will only become of value when used for comparison over an extended period of time. In order that we can appropriately assess the results and establish correlations, additional years of data collection and documentation are required. To terminate the process at this point may in fact be counterproductive. It is, therefore, our intent to continue with the data collection.

Chapter V

SUMMARY AND DISCUSSION

This chapter briefly outlines the purpose of the study, the findings, and conclusions and implications for practice and further research. Recommendations and plans for the future of this project in the Spirit River School Division are also addressed.

Purpose

A wealth of information on effective teaching behaviors has emerged over the last few decades. This specific study involved identification and validation of a set of indicators that could be used to assess teacher effectiveness in formative and summative processes. The focus was on the development of criteria for teacher effectiveness. The question posed was: "Do the 26 teaching behaviors our professional staff identified as being critical to effective teaching have an impact on student outcomes in both the cognitive and affective domains?" We are currently establishing normed measures of teacher behaviors and measuring student cognitive and affective outcomes as they relate to those behaviors. The effectiveness of modifying instructional strategies will be monitored over a period of time. There will be a need to assess the results of the intervention as it applies to student outcomes, should the results support this.

Findings

The active involvement of professional staff in action research is the most positive aspect of our EQI project. Table 7 clearly illustrates the value teachers have attached to this project in terms of it assisting them with their professional growth. Only about 10 percent of all teacher responding to the survey felt otherwise and consequently would not have participated voluntarily.

Direct staff input into the development and validation of a set of indicators which can be used to assess teacher effectiveness in both formative and summative processes provided a sense of ownership and subsequently enhanced the likelihood of participation. The number of classroom visitations made each year is indicative of teachers' willingness to be active participants in this process.

There is considerable evidence to support the position that teachers should play a significant role in setting the criteria by which their performance is judged. Teachers in this jurisdiction did set the criteria to be used in the formative evaluation process, and subsequently supported adoption of these same criteria for the summative process. Ownership, once again, had a positive impact upon teacher willingness to accept these as legitimate criteria.

Teachers have shown a willingness to modify teaching behaviors. Tables 8 and 9 illustrate a change in the modal rating on a considerable number of criteria. The mean rating of a number of criteria has also improved. Clear descriptions of the meaning of each criterion results from discussions with colleagues and administrators and may have contributed to this change.

Teachers have actively participated in the review and major revisions of our student and school evaluation policies and processes to bring them "in line" with the indicators we have adopted.

The questionnaire completed by teachers included provisions for written comments regarding the EQI project. Strong support is evident particularly as it relates to professional growth. The following comments typify teacher perceptions:

- "A good project that promotes and facilitates teacher development."
- "I think the EQI project is very valuable to all teachers. It gives a good opportunity to observe others in action as well as to receive input to help enhance our classroom environment."

Our project is exemplary in its involvement of all professional staff. Such extensive involvement of all stakeholders, including students and parents, has the potential of paying dividends in terms of student academic and social outcomes.

1. With very few exceptions parents generally indicated a high level of support for the criteria currently being used to judge teacher performance.

2. A safe and productive environment, attention to individual learning needs, clarity of objectives, the teacher being an active listener and the entire group of pupil/teacher relationships are the highest priorities of parents. It is these factors which would have the greatest impact on student attitudes toward school and subsequently on performance.

Conclusions

At this point in time it is premature to speculate on the impact modification of instructional strategies is having upon student outcomes. As a result, only conclusions relating to strategies that have been successful in promoting the active involvement of professional staff in this process can be shared. Other jurisdictions may see potential value for incorporating components of these strategies into plans of action they may be pursuing.

With the support and involvement of staff, we believe the project is proving to have a very positive and professionally rewarding impact on teaching skills for the benefit of students. It is the impact on student outcomes that will continue to be the focus of this study.

Implications and Recommendations

Based on the findings of this study, the following implications were derived. Reference is made exclusively to teachers as they were to "key players" in this process.

Staff support is crucial to the success of any intervention strategy. Without the voluntary support of teachers, a study of this nature and magnitude would not have been possible. Mandates were not a part of this process. Staffs must be given the opportunity for voluntary involvement in the very early stages of any project or study similar to this. This enhances the likelihood of acceptance and participation over an extended period of time.

Teachers must have the opportunity and the channels for "feeding " into the system. This generates an allegiance to the system of which they are a part. Under the leadership of central office administration all decisions relating to this project were made by a local committee of teachers. This included the identification of indicators of effective teaching, formulation of key variables which could impact the effectiveness of implementation, identification of 26 teaching

behaviors perceived to be critical to positive student outcomes, articulation of clear explanations of objectives, development and selection of data gathering instruments, and the development of an action plan for implementation in all division schools.

Direction and support from division administrators and the school board is critical to the potential for significant changes being made. The school board's commitment to this project, evident in the funding it provided to cover the cost of substitute teachers, the addition of a staffing component to all small schools, and the priority given the project in the divisions Three Year Plan were perceived as support for the project and its intent. This has provided the time teachers need for planning, introduction and implementation. Tangible benefits or results enhance the likelihood of continued commitment and participation. Rewards, whether intrinsic or extrinsic, serve as motivational tools.

Project Follow-up

The Board of Trustees of the Spirit River School Division, with the support of senior administration, has made a commitment to carry on with the study. Funding has been budgeted to cover costs of substitute teachers and the additional staffing component in our small schools for the forthcoming school year.

The extensive data collection currently in place will be continued. We are now completing only our first measurements of the effectiveness of modifying instructional strategies. In order that we may appropriately assess the results and establish relationships, should the results support this, additional years of research and documentation are required. To stop the process at this point would have a negative impact on the accomplishments of the last three years.

It is also our intent to continue to inform our publics of the efforts being directed at making our schools a better place for students. The local media and our school newsletters will continue to serve as the primary disseminators of information to the public. Discussions, productions and presentation at special events such as Education Week will continue to augment this process. Our ability to demonstrate to our publics that education is an excellent investment in our children and our future will continue to be a high priority.

Concluding Statement

Teachers do make a difference! This EQI project has been a positive experience for many stakeholders in the Spirit River School Division. We believe that the project is already having a very strong and professionally rewarding impact on teaching skills for the benefit of our students.

Using the same criteria for both summative and formative evaluations has heightened teacher awareness regarding professional expectations. The clear focus on learner needs and student outcomes and the staff development opportunities that are being provided are procedures that could be employed effectively in any district.

Similarly, the three documents prepared in the course of our own involvement in this project, the *Student Evaluation Handbook*, the *School Improvement Handbook*, and the *Teacher Planbook*, are all germane to promoting instruction in the classroom.

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Appendix A

Working Documents For Year One

Purpose and Intent

To establish indicators of effective, quality teaching, in a collaborative formative process, on a voluntary and anonymous basis, determine their validity and impact as to whether these indicators make a real difference to student learning.

Getting Started

1. Use one of the self-evaluation surveys to zero in on an area you would like to clarify or verify in terms of your own teaching. Copies are available from your principal or the Instructional Media Centre.

2. Seek collegial assistance.

3. Record your data on your school chart.

4. Take advantage of any opportunities to continue to seek collegial assistance, within your your school, within the school division, or further afield. Please record all professional contacts on your school chart.

5. Share your thoughts on the indicators or the process with any of the Local Committee members, so we can plan revisions for next year.

Variables

Variables are factors that will have an impact on any project through outside our external impact.

1. Geographic Distance, Spareness and Travel Time

   Evidence: Keep track of contact with other colleagues regarding self-improvement.

2. Extra time Provided for Staff Formative Evaluation Process

   Evidence: Keep track of how allocated time is being used for project objectives.

3. Strong Inservice/Professional Development

   Evidence: Keep track of the number of teachers attending EQI workshops and/or who sign out support documents/resources.

4. Teacher Experience

   Evidence: Keep track of school-based numbers of teachers who participate in formative exchanges.

5. Staff/Administrative Attitude

   Evidence: Keep track of the number of teachers participating.

Outcomes

We require data to fulfill the requirements of this project. The following are examples of data gathering which will indicate whether this project does make a difference to student learning on a divisional basis.

1. Staff self-evaluation surveys.
2. Rate of staff participation in the project.
3. Divisional averages on standardized tests.
4. Student interest surveys.
5. Data gathering staff instruments.
6. a. Classroom disruptions/referrals to school office.
   b. Suspensions/expulsions
   c. Dropout rates

Educational Quality Indicators
Record Sheet

Please take a moment to fill in your EQI contracts on your school chart after each contract. You may want to keep a personal record in your book. If more than one purpose/objective is discussed, please write each number in the space provided.

Date	Years of experience: (Check one) 0-2 3-5 6-8 9-10 11+	Purpose: Objective number	Local: in school	Distant: out of school	Was this allotted EQI time?

Appendix B

Parent and Student Surveys

Letter to Parents

Dear Parents:

The Spirit River School Division is now completing the third and final year of a three year Action Research Project (Educational Quality Indicators Project) in cooperation with Alberta Education. Our specific purpose is to determine what are the conditions which are the most important for effective teaching and instruction. A local committee of experienced Divisional teachers developed the initial criteria, input of parents, students, and teachers was gathered through surveys such as this the last two years, and the resulting set of criteria is being utilized in addressing teacher performance in the classroom.

Parents with children in grades two, five, eight and eleven have been selected to give a parental cross section perspective to this process. We would appreciate your completing the following questionnaire and returning it in confidence to your school or the Division Office by May 10th, 1992. Your anonymity is guaranteed. These parental responses will be summarized and given serious consideration in the refining of our criteria for the third and final year of this project.

Thank you for taking the time to complete and return this survey. Through your efforts the process will become just that much more meaningful.

Yours truly,

Roger Rymhs
Deputy Superintendent of Schools

As a parent, how important do you think each of these qualities is for a good learning environment for your child(ren)? Please mark one box beside each statement.

		Very Important	Less Important	Don't Know
1.	**Sequentially Developed Planning and Preparation**			
1.1	The teacher maintains/develops short, unit and long term, flexible plans with an evaluation process.	❐	❐	❐
1.2	The teacher adheres to Curriculum/Program of Studies documents.	❐	❐	❐
1.3	The teacher provides a safe and organized environment with resources and equipment readily available.	❐	❐	❐
1.4	The teacher provides for individual learning needs with consideration of student abilities, based on diagnostic information.	❐	❐	❐
1.5	The teacher provides a variety of learning activities.	❐	❐	❐
1.6	The teacher ensures that objectives are stated and understood.	❐	❐	❐
1.7	The teacher provides for motivation of students.	❐	❐	❐
1.8	The teacher makes learning activities relevant.	❐	❐	❐
1.9	The teacher plans for interdisciplinary activities.	❐	❐	❐
2.	**Key Instructional Strategies**			
2.1	The teacher circulates during pupil activities.	❐	❐	❐
2.2	The teacher presents clear assignments which are relevant to student experiences.	❐	❐	❐
2.3	The teacher exhibits classroom management skills.	❐	❐	❐
2.4	The teacher provides an environment whereby active learning takes place within a working a and non-threatening atmosphere.	❐	❐	❐
2.5	The teacher provides a physical classroom environment which is stimulating, enriched, relevant and has displays of student work.	❐	❐	❐
2.6	The teacher exhibits a variety of questioning techniques.	❐	❐	❐

		Very Important	Less Important	Don't Know
3.	**Communication Skills**			
3.1	The teacher provides clear explanation of objectives, assignments and behavioral expectations.	❐	❐	❐
3.2	The teacher exhibits a variety of positive reinforcement techniques.	❐	❐	❐
3.3	The teacher is an active listener.	❐	❐	❐
3.4	The teacher provides timely and relevant reviews.	❐	❐	❐
3.5	The teacher uses language appropriate to the developmental level of students.	❐	❐	❐
3.6	The teacher maintains regular parental information flow.	❐	❐	❐
4.	**Pupil/Teacher Relationships**			
4.1	Mutual respect is exhibited between teacher and students.	❐	❐	❐
4.2	Clear routines, expectations and rules are made known and followed.	❐	❐	❐
4.3	The teacher provides for positive peer interaction/support.	❐	❐	❐
4.4	The teacher uses a fair and meaningful evaluation process.	❐	❐	❐
4.5	The teacher provides prompt feedback on student assignments.	❐	❐	❐

Apart from personal qualities, please add any other measurable area you feel is important for effective teaching.

Return to: **Your School**

or

Spirit River School Division #47
Box 99
SPIRIT RIVER, AB
TOH 3GO

Letter to Students

Dear Students:

The Spirit River School Division is now completing the third and final year of a three year Action Research Project (Educational Quality Indicators Project) in cooperation with Alberta Education. Our specific purpose is to determine what are the conditions which are the most important for effective teaching and instruction. A local committee of experienced Divisional teachers has developed the initial criteria, which have been used by teachers in Divisional classrooms during the past two years.

Students in grades nine, ten, eleven and twelve have been selected once again to give a cross section perspective to this process. Accordingly, would you be good enough to complete the following questionnaire and return it in confidence to your school or the Division Office by May 10th, 1992. These student responses will be summarized and given serious consideration in the refining of our criteria for the coming year.

Thank you for taking the time to make this process more meaningful, since we are seeking information and help for the Project from students, parents and teachers.

Yours truly,

Roger Rymhs
Deputy Superintendent of Schools

As a student, how important do you think each of these qualities is for a good learning environment for you? Please mark one box beside each statement.

		Very Important	Less Important	Don't Know
1.	**Sequentially Developed Planning and Preparation**			
1.1	The teacher maintains/develops short, unit and long term, flexible plans with an evaluation process.	❐	❐	❐
1.2	The teacher adheres to Curriculum/Program of Studies documents.	❐	❐	❐
1.3	The teacher provides a safe and organized environment with resources and equipment readily available.	❐	❐	❐
1.4	The teacher provides for individual learning needs with consideration of student abilities, based on diagnostic information.	❐	❐	❐
1.5	The teacher provides a variety of learning activities.	❐	❐	❐
1.6	The teacher ensures that objectives are stated and understood.	❐	❐	❐
1.7	The teacher provides for motivation of students.	❐	❐	❐
1.8	The teacher makes learning activities relevant.	❐	❐	❐
1.9	The teacher plans for interdisciplinary activities.	❐	❐	❐
2.	**Key Instructional Strategies**			
2.1	The teacher circulates during pupil activities.	❐	❐	❐
2.2	The teacher presents clear assignments which are relevant to student experiences.	❐	❐	❐
2.3	The teacher exhibits classroom management skills.	❐	❐	❐
2.4	The teacher provides an environment whereby active learning takes place within a working a and non-threatening atmosphere.	❐	❐	❐
2.5	The teacher provides a physical classroom environment which is stimulating, enriched, relevant and has displays of student work.	❐	❐	❐
2.6	The teacher exhibits a variety of questioning techniques.	❐	❐	❐

		Very Important	Less Important	Don't Know
3. Communication Skills				
3.1	The teacher provides clear explanation of objectives, assignments and behavioral expectations.	❒	❒	❒
3.2	The teacher exhibits a variety of positive reinforcement techniques.	❒	❒	❒
3.3	The teacher is an active listener.	❒	❒	❒
3.4	The teacher provides timely and relevant reviews.	❒	❒	❒
3.5	The teacher uses language appropriate to the developmental level of students.	❒	❒	❒
3.6	The teacher maintains regular parental information flow.	❒	❒	❒
4. Pupil/Teacher Relationships				
4.1	Mutual respect is exhibited between teacher and students.	❒	❒	❒
4.2	Clear routines, expectations and rules are made known and followed.	❒	❒	❒
4.3	The teacher provides for positive peer interaction/support.	❒	❒	❒
4.4	The teacher uses a fair and meaningful evaluation process.	❒	❒	❒
4.5	The teacher provides prompt feedback on student assignments.	❒	❒	❒

Apart from personal qualities, please add any other measurable area you feel is important for effective teaching.

Return to: **Your School**

or

Spirit River School Division #47
Box 99
SPIRIT RIVER, AB
TOH 3GO

Appendix C

Staff Survey

1. Did you attend an out of division professional development activity other than the March Teachers' Convention?

2. Did you participate in the EQI Project this year?

3. If yes, approximately how many times?

4. Did you read extra material to help clarify the Evaluation Indicators?

5. EQI will assist me in my professional growth . . .

6. Check one:

   Teacher _____ Administrator _____

7. Please comment on the EQI Project.

Appendix D

Teacher Performance Tally Sheet

(Scale "5" represents the highest possible)

I. Sequentially Developed Planning and Preparation

1.1	The teacher maintains/develops short, unit and long term, flexible plans with an evaluation process.	1 2 3 4 5
1.2	The teacher adheres to Curriculum/Program of Studies documents.	1 2 3 4 5
1.3	The teacher provides a safe and organized environment with resources and equipment readily available.	1 2 3 4 5
1.4	The teacher provides for individual learning needs with consideration of student abilities, based on diagnostic information.	1 2 3 4 5
1.5	The teacher provides a variety of learning activities.	1 2 3 4 5
1.6	The teacher ensures that objectives are stated and understood.	1 2 3 4 5
1.7	The teacher provides for motivation of students.	1 2 3 4 5
1.8	The teacher makes learning activities relevant.	1 2 3 4 5
1.9	The teacher plans for interdisciplinary activities.	1 2 3 4 5

II. Key Instructional Strategies

2.1	The teacher circulates during pupil activities.	1 2 3 4 5
2.2	The teacher presents clear assignments which are relevant to student experiences.	1 2 3 4 5
2.3	The teacher exhibits classroom management skills.	1 2 3 4 5
2.4	The teacher provides an environment whereby active learning takes place within a working a and non-threatening atmosphere.	1 2 3 4 5
2.5	The teacher provides a physical classroom environment which is stimulating, enriched, relevant and has displays of student work.	1 2 3 4 5
2.6	The teacher exhibits a variety of questioning techniques.	1 2 3 4 5

III. Communication Skills

3.1	The teacher provides clear explanation of objectives, assignments and behavioral expectations.	1 2 3 4 5
3.2	The teacher exhibits a variety of positive reinforcement techniques.	1 2 3 4 5
3.3	The teacher is an active listener.	1 2 3 4 5
3.4	The teacher provides timely and relevant reviews.	1 2 3 4 5
3.5	The teacher uses language appropriate to the developmental level of students.	1 2 3 4 5
3.6	The teacher maintains regular parental information flow.	1 2 3 4 5

IV. Pupil/Teacher Relationships

4.1	Mutual respect is exhibited between teacher and students.	1 2 3 4 5
4.2	Clear routines, expectations and rules are made known and followed.	1 2 3 4 5
4.3	The teacher provides for positive peer interaction/support.	1 2 3 4 5
4.4	The teacher uses a fair and meaningful evaluation process.	1 2 3 4 5
4.5	The teacher provides prompt feedback on student assignments.	1 2 3 4 5

Appendix E

Classroom Environment Scale

Domain:	processes; schooling
Origin:	United States
Purpose:	"to assess the social climate of junior high and high school classrooms" (authors)
Description:	9 scores: *Relationship* dimensions (involvement, affiliation, teacher support); *Personal Growth/Goal Orientation* dimensions (task orientation, competition); *System Maintenance and Change* dimensions (order and organization, rule clarity, teacher control, innovation); 3 forms: real (90 items), ideal (90 items), short (36 items)
Age/grade range:	junior and high school students; teachers
Test development/ publication:	1974-1987
Author(s)/availability:	Rudolf H. Moos, Edison J. Trickett; Consulting Psychologists Press, Inc.; Institute of Psychological Research, Inc.
Reliability:	*Kuder-Richardson* (n=465; .67 to .86) *test-retest* (6 weeks, n=52; .72 to .90)
Validity:	*concurrent* (with teacher interview and observational data) *construct* (with absenteeism, self-concept, academic motivation)
Norms:	broad range of classroom (attempts to include variables such as SES, size of school, ethnic mix, public/private schools) students: 382 classrooms (average size of 20 to 30 students) teachers: 295 classrooms separate norms for different *subjects/areas*: science; math; business and technical; English/history/government/economics/social studies (combined as one set of norms)
Reviews:	MMY 10th ed. #60 (*R.A. Saudargas*, Associate Professor of Psychology, University of Tennessee, Knoxville, TN; *C.R. Smith*, Associate Professor of Special Education and Rehabilitation, Syracuse university, Syracuse, NY.)
Strengths:	good norms (although one reviewer commented that original norms are now 14 years old); strong reliability; modest validity; utilized in a large number of studies to date; the Short Form has acceptable technical properties
Weaknesses:	factor structure does not reproduce the 3 main dimensions; norms can be broken down by other variables such as size of school
Usefulness for EQI:	yes

Note. From *Educational Quality Indicators: Inventory of Assessment Instruments* (p. 29) by Alberta Education, 1990, Edmonton: Corporate and Fiscal Planning. Reprinted by permission.

CES Subscale and Dimension Descriptions*

Relationship Dimensions

1.	**Involvement**	the extent to which students are attentive and interested in class activities, participate in discussions, and do additional work on their own
2.	**Affiliation**	the level of friendship students feel for each other, as expressed by getting to know each other, helping each other with homework, and enjoying
3.	**Teacher Support**	the amount of help and friendship the teacher manifests toward students; how much the teacher talks openly with students, trusts them, and is interested in their ideas

Personal Growth/Goal Orientation Dimensions

4.	**Task Orientation**	the amount of emphasis on completing planned activities and staying on the subject matter
5.	**Competition**	how much students compete with each other for grades and recognition and how hard it is to achieve good grades

System Maintenance and Change Dimensions

6.	**Order and Organization**	the emphasis on students behaving in an orderly and polite manner and on the overall organization of assignments and classroom activities
7.	**Rule Clarity**	the emphasis on establishing and following a clear set of rules and on students knowing what the consequences will be if they don't follow them; the extent to which the teacher is consistent in dealing with student who break rules
8.	**Teacher Control**	how strict the teacher is in enforcing the rules, the severity of punishment for rule infractions, and how much students get into trouble in the class
9.	**Innovation**	how much students contribute to planning classroom activities, and the extent to which the teacher uses new techniques and encourages creative thinking

*Moos & Trickett (1987) *Classroom Environment Scale Manual*, p. 2.

Appendix F

Student's Perception of Ability Scale

Domain:	outcomes; affective
Origin:	Edmonton, Alberta
Purpose:	to measure subject-specific self-concept in elementary school children
Description:	70 items; 7 *scores*: general ability; arithmetic; school satisfaction; reading/spelling; penmanship/neatness; confidence; total
Age/grade range:	grades 2 to 6
Test development/ publication:	1977
Author(s)/availability:	Frederic J. Boersma, James W. Chapman; Psychometrics Canada, Ltd.
Reliability:	*alpha*: (n=642; .69 to .92; median of .82) *test-retest*: (4 to 6 weeks; n=603; .71 to .83; median of .78)
Validity:	*discriminant*: correlates very weakly with Piers-Harris Self-Concept Scale (-.029 to .078) (used by authors as claim of distinctiveness of academic self-concept from general self-concept) *construct*: correlates with scores from report cards (n=642; most coefficients in the range of .20 to .49; only school satisfaction subscale below .20); correlates with CTBS scores (n=389; strongest correlations were those between general ability, arithmetic and full scale of SPAS and CTBS scores; weakest were school satisfaction and penmanship subscales); correlates with measures of intelligence (Canadian Cognitive Abilities Test; Otis-Lennon; WISC-R): all coefficients below .30; learning disabled students scored significantly lower on the SPAS Full Scale than normals (3 studies; t-tests; $p<.01$) *predictive*: scores of SPAS at beginning of school year with scores on report cards at year-end (n=293; similar pattern of correlations as with previous study of 642 students)
Norms:	642 students in grades 3 to 6; collected in April/May 1977 from two schools in Edmonton; separate norms by gender; authors recommend development of local norms whenever possible
Review(s):	not yet reviewed by MMY
Strengths:	confidence intervals provided for use in the interpretation of change over time; use of factor analytic techniques to determine subscales
Weaknesses:	norms not very representative (only 2 schools involved); unclear if instrument is recommended for use in grade 2 (norms collected but not used); school satisfaction and penmanship subscales show weak validity
Usefulness for EQI:	yes

Reference:

Boersma, F.J., Chapman, J.W. & Maguire, T. (1979). The Student's Perception of Ability Scale: an instrument for measuring academic self-concept in elementary school children. *Educational and Psychological Measurement, 39*, 1035-1041.

Note. From *Educational Quality Indicators: Inventory of Assessment Instruments* (p. 60) by Alberta Education, 1990, Edmonton: Corporate and Fiscal Planning. Reprinted by permission.

Appendix G

Teacher Performance Baseline: Behaviors Addressed During Year Three (1991-92)

1.6 The teacher ensures that objectives are stated. (Responsibility: Divisional PD activity)

By stating the purpose of the lesson, the teacher lets the students know what they will learn and how they indicate what has been learned. Research clearly indicates that students' academically engaged time is enhanced considerably when objectives are known early in a lesson. There is, in turn, a direct relationship between the amount of time students are actively engaged in learning and the amount they ultimately learn and retention is enhanced through the provision of timely review. Professional development in the area of lesson preparation (i.e., Madeline Hunter Model) is planned during the upcoming year.

1.9 The teacher plans for interdisciplinary activities. (This indicator will not be addressed this year.)

Opportunities for cross-curricular activities are numerous, particularly at the elementary level. Although this behavior is not being formally addressed through the EQI Project this year, considerable time and energy will be devoted to addressing the province's Program Continuity initiatives scheduled to be in place by September of 1994.

2.1 The teacher circulates during pupil activities. (Responsibility: Deputy Superintendent)

Circulating throughout the room is considered critical to effective classroom management. It allows teachers to monitor student work and to communicate to students an awareness of their behavior, while at the same time attending to their academic needs. As a preventive measure, teacher movement seems to discourage misbehavior. Teacher awareness of the need to circulate will be addressed through a variety of initiatives in the course of the year.

2.5 The teacher provides a physical environment which is stimulating, enriched, relevant and has displays of student work. (Responsibility: Teacher and Division)

Very little research and relevant literature exist on the impact of facilities, particularly aesthetic attributes, on the learning process. Researchers do propose, however, that there is a positive difference in behavior and academic attainment in schools which are tidy and clean, in good decorative condition, and which display students' work on classroom walls (Priftis, 1984). All but one of the divisional schools have been totally renovated within the last five years. The exception, Central Peace High School, has recently undergone a major face lift. Teachers and administrators will continue to focus on providing environments conducive to learning.

2.6 The teacher exhibits a variety of questioning techniques. (Responsibility: ATA Professional Development Committee)

One of the goals of education is to assist students to develop the ability to think. This can be promoted through asking the right kinds of questions (i.e., Bloom's Taxonomy). At the division-wide Professional Development Day, all teachers will be participating in a half-day workshop on effective questioning in the classroom setting. This suggests the significance teachers have attached to questioning techniques, as they apply to learning.

3.2 The teacher exhibits a variety of positive reinforcement techniques. (Responsibility: Deputy Superintendent)

Just as do adults, students too appreciate recognition for effort expended. Praise and encouragement, given under appropriate circumstances, can be particularly motivating. It is most useful for the uncertain students to know that they are performing the assigned task correctly. Teacher support and encouragement lead to an even greater effort. In the course of the coming year, practical and proven strategies will be shared with teachers.

3.4 The teacher provides timely and relevant reviews. (Responsibility: Divisional PD activity. To be incorporated into 1.6 above)

Appendix H

Parent/Student Survey Results

The following are the composite numbers for each of the three annual surveys. Responses received were as follows: 1990 – 81 students, 77 parents; 1991 – 234 students, 75 parents; 1992 – 261 students, 75 parents.

	PARENT RESPONSES			STUDENT RESPONSES		
	1990 (n=77)	1991 (n=75)	1992 (n=75)	1990 (n=81)	1991 (n=234)	1992 (n=261)

1. Sequentially Developed Planning and Preparation

1.1 The teacher develops short unit and long term flexible plans with an evaluation process.

Very Important	50	52	63	Very Important	52	139	177
Less Important	21	16	7	Less Important	17	62	41
Don't Know	6	4	6	Don't Know	12	33	42
No Response	0	3	1	No Response	0	0	1

1.2 The teacher adheres to Curriculum/Program of Studies documents.

Very Important	39	33	50	Very Important	29	101	183
Less Important	33	35	24	Less Important	41	95	48
Don't Know	5	4	0	Don't Know	11	37	28
No Response	0	3	1	No Response	0	1	2

1.3 The teacher provides a safe and organized environment with resources/equipment readily available.

Very Important	72	65	69	Very Important	55	163	212
Less Important	3	7	5	Less Important	20	52	46
Don't Know	2	2	0	Don't Know	6	19	3
No Response	0	1	1	No Response	0	0	0

1.4 The teacher provides for individual learning needs with consideration of student abilities, based on diagnostic information.

Very Important	72	69	70	Very Important	60	157	214
Less Important	2	2	4	Less Important	18	47	26
Don't Know	2	2	0	Don't Know	3	29	21
No Response	1	2	1	No Response	0	1	0

	PARENT RESPONSES			STUDENT RESPONSES			
	1990 (n=77)	1991 (n=75)	1992 (n=75)		1990 (n=81)	1991 (n=234)	1992 (n=261)
1.5 The teacher provides a variety of learning activities.							
Very Important	65	65	65	Very Important	52	164	209
Less Important	12	8	9	Less Important	21	49	42
Don't Know	0	1	0	Don't Know	8	20	10
No Response	0	1	1	No Response	0	1	0
1.6 The teacher ensures that objectives are stated and understood.							
Very Important	70	67	67	Very Important	60	171	222
Less Important	6	5	7	Less Important	13	39	36
Don't Know	1	0	1	Don't Know	8	23	3
No Response	0	3	0	No Response	0	1	0
1.7 The teacher provides for motivation of students.							
Very Important	58	65	65	Very Important	50	153	191
Less Important	16	6	7	Less Important	23	57	56
Don't Know	3	2	1	Don't Know	8	21	14
No Response	0	2	2	No Response	0	3	0
1.8 The teacher makes learning activities relevant							
Very Important	65	68	63	Very Important	54	171	190
Less Important	10	6	10	Less Important	20	46	57
Don't Know	2	0	2	Don't Know	7	17	14
No Response	0	1	0	No Response	0	0	0
1.9 The teacher plans for interdisciplinary activities.							
Very Important	47	48	46	Very Important	43	111	136
Less Important	22	9	23	Less Important	25	85	98
Don't Know	8	16	6	Don't Know	13	38	27
No Response	0	2	0	No Response	0	0	0

	PARENT RESPONSES			STUDENT RESPONSES		
	1990 (n=77)	1991 (n=75)	1992 (n=75)	1990 (n=81)	1991 (n=234)	1992 (n=261)
2. Key Instructional Strategies						
2.1 The teacher circulates during pupil activities.						
Very Important	50	51	61	22	93	115
Less Important	23	17	14	47	111	125
Don't Know	4	2	0	12	20	21
No Response	0	5	0	0	10	0
2.2 The teacher presents clear assignments which are relevant to student experiences.						
Very Important	66	71	70	62	176	211
Less Important	10	3	3	15	41	42
Don't Know	1	1	2	4	17	8
No Response	0	0	0	0	0	0
2.3 The teacher exhibits classroom management skills.						
Very Important	70	69	73	51	143	163
Less Important	7	2	2	24	70	88
Don't Know	0	3	0	6	20	8
No Response	0	1	0	0	1	2
2.4 The teacher provides an environment whereby active learning takes place within a working and non-threatening atmosphere.						
Very Important	72	71	70	62	148	192
Less Important	5	4	5	13	66	57
Don't Know	0	0	0	6	20	12
No Response	0	0	0	0	0	0
2.5 The teacher provides a physical classroom environment which is stimulating, enriched, relevant and has displays of student work.						
Very Important	65	56	65	37	119	146
Less Important	10	17	9	32	90	110
Don't Know	2	2	1	12	25	5
No Response	0	0	0	0	0	0
2.6 The teacher exhibits a variety of questioning techniques.						
Very Important	60	56	60	37	109	127
Less Important	15	16	12	32	98	116
Don't Know	2	3	2	12	27	18
No Response	0	0	1	0	0	0

	PARENT RESPONSES			STUDENT RESPONSES		
	1990 (n=77)	1991 (n=75)	1992 (n=75)	1990 (n=81)	1991 (n=234)	1992 (n=261)

3. Communication Skills

3.1 The teacher provides clear explanation of objectives, assignments and behavioral expectations.

Very Important	74	74	73	Very Important	65	180	221
Less Important	2	1	2	Less Important	13	42	30
Don't Know	1	0	0	Don't Know	3	11	10
No Response	0	0	0	No Response	0	1	0

3.2 The teacher exhibits a variety of positive reinforcement techniques.

Very Important	63	66	69	Very Important	45	137	184
Less Important	13	7	5	Less Important	29	80	70
Don't Know	1	2	1	Don't Know	7	16	7
No Response	0	0	0	No Response	0	1	0

3.3 The teacher is an active listener.

Very Important	75	73	73	Very Important	46	176	236
Less Important	2	1	2	Less Important	27	45	18
Don't Know	0	1	0	Don't Know	8	12	7
No Response	0	0	0	No Response	0	1	0

3.4 The teacher provides timely and relevant reviews.

Very Important	56	60	69	Very Important	46	131	175
Less Important	20	14	6	Less Important	27	77	73
Don't Know	1	1	0	Don't Know	8	26	13
No Response	0	0	0	No Response	0	0	0

3.5 The teacher uses language appropriate to the developmental level of students.

Very Important	69	70	67	Very Important	55	145	200
Less Important	7	3	6	Less Important	18	71	56
Don't Know	1	2	2	Don't Know	8	18	5
No Response	0	0	0	No Response	0	0	0

3.6 The teacher maintains regular parental information flow.

Very Important	62	57	67	Very Important	13	57	65
Less Important	15	17	7	Less Important	49	146	175
Don't Know	0	1	1	Don't Know	19	31	21
No Response	0	0	0	No Response	0	0	0

	PARENT RESPONSES			STUDENT RESPONSES		
	1990 (n=77)	1991 (n=75)	1992 (n=75)	1990 (n=81)	1991 (n=234)	1992 (n=261)
4. Pupil/Teacher Relationships						
4.1 Mutual respect is exhibited between teacher and students.						
Very Important	76	72	73	56	191	227
Less Important	0	0	2	13	22	23
Don't Know	1	0	0	2	18	11
No Response	0	3	0	0	3	0
4.2 Clear routines, expectations/rules made known & followed.						
Very Important	73	68	72	51	153	181
Less Important	3	6	3	25	61	72
Don't Know	1	1	0	5	19	8
No Response	0	0	0	0	1	0
4.3 The teacher provides for positive peer interaction/support.						
Very Important	65	60	63	52	162	197
Less Important	9	12	12	22	57	52
Don't Know	3	2	0	7	15	12
No Response	0	1	0	0	0	0
4.4 The teacher uses a fair and meaningful evaluation process.						
Very Important	77	74	74	73	192	227
Less Important	0	1	1	6	28	28
Don't Know	0	0	0	2	14	5
No Response	0	0	0	0	0	1
4.5 The teacher provides prompt feedback on student assignments.						
Very Important	61	67	67	50	155	212
Less Important	15	8	8	25	61	45
Don't Know	1	0	0	6	18	4
No Response	0	0	0	0	0	0

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