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**A COMPARISON OF SOUTH-WESTERN ONTARIO  
SECONDARY SCHOOL TEACHERS' AND ELEMENTARY SCHOOL  
TEACHERS' ATTITUDES TOWARDS EDUCATIONAL CHANGE**

**by**

**Diane E. Schertzer**

**A Thesis  
Submitted to the College of Graduate Studies and Research  
through the Faculty of Education  
In Partial Fulfillment of the Requirements for  
the Degree of Master of Education at the  
University of Windsor**

**Windsor, Ontario, Canada**

**2000**

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## **ABSTRACT**

The purpose of this study was to examine the attitudes of a sample of south-western Ontario secondary school and elementary school teachers towards educational change. This was accomplished through a researcher completed interview. The structured interviews were conducted with 40 secondary school teachers and 37 elementary school teachers working within the southwestern Ontario separate and public school boards.

The interview focused on four broad categories forming the centre of concentration for this paper: types of change; the teachers' role in the change process; the impact of the change; and the teachers' feelings concerning the change. The first category investigated the types of educational changes identified. The origins of the change, the objectives of the change, and the timetable of the change were also investigated. The information was used to identify teachers' attitudes about present changes and their willingness to participate in future changes.

The findings indicated that teachers as a block were negative towards educational change. The attitudes of teachers, whether positive or negative in regards to change and future willingness to participate in it was directly related to their degree of ownership of the change itself. Teachers feeling high ownership of the change were generally positive about the change and future changes. In turn, teachers with little or no ownership of the change were negative about change and pessimistic in talking about future changes.

Teachers, as a whole, wanted to be involved in the change process. By becoming involved in the planning stages of change initiatives, teachers took responsibility for



implementation and evaluation of the process, leading to positive attitudes towards change initiatives.

## **ACKNOWLEDGEMENTS**

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I wish to dedicate this work to my parents, Andreas and Elizabeth Schertzer, for their unwavering support and faith in all of my educational endeavours.

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# **CHAPTER I**

## **INTRODUCTION**

A primary purpose of education is to prepare young people to function in society. Societies throughout the world are in a constant state of change and non-stop development. The world has changed in important ways over the last few decades, with society confronting incredible social, economic, and technological transformations. It is only expected that education be part of this phenomenon. Educators and statesmen are aware that the changes which have occurred in the structure of contemporary societies, in their domestic economies as in their foreign affairs, require parallel transformations in the area of the school system (Durkheim, 1977).

There is nothing new about educational change; indeed, change can be seen as the norm (Fullan, 1993; Gainey, 1993; Rallies & Goldring, 1993; Sikes, 1992). Calls for change have come from all sides of society, some, plain and practical, others urgent and ardent. Over the past several years, teachers in many countries have been faced with accelerated and intensive efforts towards educational change. The rate and frequency of changes introduced and imposed on the educational system by governing authorities have deviated from the norm. The efforts towards change have taken centre stage in education. Some have been accompanied by assessments of their impacts upon learning and development of students.

The quality of education and the need for improvement in schools has been debated. Current government legislation has addressed this issue in the forms of cutbacks and streamlining. The backlash to current legislation has been severe. Teachers,

principals, administrators, superintendents, parents, and students, have fought back in many ways. Strikes, petitions, rallies, cutting extracurricular activities, and even refusing to teach classes have been their rebuttal. Teachers especially, have felt under attack. Teachers have been stunned to find vast and radical new initiatives being foisted on them from above. As the Organization for Economic Co-operation and Development [OECD] (1989) put it:

[The] contemporary educational and political language is one of 'change', 'reform', and 'improvement'. Scarcely has one set of reforms been formulated, let alone properly implemented, and another is in genesis. (p.110)

These 'changes', 'reforms', and 'improvements' impact primarily upon teachers. They must accept, understand, and implement them, although in the current educational Zeitgeist teachers were unlikely to have been involved in their creation.

Change has its roots in a variety or combination of factors. Economic trends, historical events, different political parties coming into power, social and cultural developments, demographic trends, or technological advances contribute to change (Bailey, 1997; Benninger, 1996; Fullan, 1991; Gainey, 1993; Ontario Ministry of Education and Training [OMET], 1993; Sikes, 1992; Simonton, 1996). Behind these factors and motivating them lies the assumption (justifiable or not) that something was not quite right in the educational system and that students were not receiving the best possible education largely due to teachers and their teaching skills. It was interpreted that teachers lacked knowledge, skills, competency and even sometimes, as Hargreaves (1988) recorded, personal qualities. Changes were introduced in order to remedy the 'deficiencies' in the teachers and their teaching by helping them 'develop' and 'improve'.

Teachers, however, have been an easy target. Society has been quick to blame teachers for all its woes because of their influence on students' lives.

In addition, teachers have been in the peculiar position of being simultaneously both the subjects and the agents of change (Dale, 1988; Fullan & Hargreaves, 1992; Walker & Barton, 1987). They have been required to change themselves and what they did to meet the specifications laid down by policy makers who neither knew them nor the contexts in which they worked (Benninger, 1996; Claxton, 1989; Fullan & Miles, 1992; Huberman, 1988; Louis & Miles, 1990; Maeroff, 1988; Pratt, 1990; Sikes, 1992; Simonton, 1990; Wise, 1988). Obligated to make changes that they believe, based upon their professional experience, to be inappropriate or impossible, it is perceived that these changes have meant that their professional freedom and autonomy has been further curtailed (Apple, 1987; Fullan & Hargreaves, 1992).

Teaching has become a complex and demanding profession. Teachers must respond to the wishes of parents in regards to educational outcomes, the social need for wider access to education, and the pressures for more democratic participation within the schools (OECD, 1985). They must respond to the needs of a diverse and changing student population, rapidly changing technology in the workplace, and demands for excellence from all segments of society (Fullan, 1993). Teachers have been uncertain about how to influence students, especially about noncognitive goals. Forced to deal with teaching decisions often made on basic trial-and-error grounds with little chance for reflection or thinking through the rationale, frustration has set in. Teachers have dealt with constant daily interruptions from within the classroom (students and classroom



management) and from outside the classroom (parents and principal). They have constantly felt the critical shortage of time (Fullan, 1991, 1993).

Changes have added to the complexity of teaching. They have forced teachers to alter their administration and organizational systems, their pedagogy, curriculum content, the resources and technology used, and their assessment procedures.

### **Purpose of the Study**

The purpose of this study is to determine and compare secondary and elementary school teachers attitudes towards educational change. It also investigates how these attitudes may affect their dispositions towards future educational change..

### **Importance of the Study**

Four broad categories form the centre of concentration for this paper; change itself; the teachers' role in the change process; the impact of change; and the teachers' feelings concerning the change being identified. Characteristics of the change which were explored in depth were its origin, its strength and valence, its objective, teachers' roles in its initiation, the extent of its newness, and forces affecting its implementation. The teacher then discussed in detail how the change affected his/her practices, human relationships, time usage, professional development, students' school experience, and work life in general. The teacher then discussed his/her affective response to all these effects and how all this has influenced the teacher's level of readiness to participate and assume responsibilities in future educational change. The teacher also responded to a brief scale uniquely designed for the Consortium for Cross Cultural Research in Education to assess receptiveness-reluctance to engage in educational change. Appendix A contains the schema displaying each variable in the study, the posited locations of the

variable within the influence chain being studied, the interview question numbers associated with each variable, and the expected study outcome of knowledge, implications, and applications for addressing the issue of teacher responsibility-taking in educational change.

There is scarce evidence of any research done on the impact of educational change on the several dimensions of teachers' work life (e.g., practices; roles and responsibilities; work conditions; relationships with self, teacher colleagues, administrators, students, and parents; enthusiasm and discouragement). As education's key agent in the facilitation of change, the oversight of teachers needs addressing (Menlo, 1997).

Change forces reach a breaking point. As the twenty-first century draws near, so does this breaking point. Teachers' capacities to deal with change, learn from it, and help students learn from it will be critical for the future development of societies. If a healthy respect for, and mastery of, the change process does not become a priority, even well-intentioned change initiatives will continue to create havoc among those who implement it (Fullan, 1991).

### **Definition of Terms**

The terms used in this study are defined as follows:

Change Agent: "...being self-conscious about the nature of change and the change process, as being appreciative of its semi-unpredictable and volatile character, and as explicitly being concerned with the pursuit of ideas and competencies for coping with and influencing more and more aspects of the process toward some desired set of ends" (Stager & Fullan, 1992, p4).

**Change Forces:** “...drive change; propel it, move it and shape it in particular ways. They arise from the accumulated actions of many individuals within the society and its historical development, actions that form social, political, and economic patterns” (OMET, 1993, p13).

**Educational Change:** the planned or unplanned alteration of culture, structures, systems, and/or practices in the schools or school systems. Real change whether desired or not, “...represents a serious personal and collective experience characterized by ambivalence and uncertainty; and if the change works out it can result in a sense of mastery, accomplishment, and professional growth” (Fullan, 1991, p.32).

**Phases of Change:** Fullan (1991) identified three broad phases to the change process. The first phase, initiation or adoption consists of the process up to and including a decision to adopt or proceed with a change. The second phase, implementation, encompasses the experiences associated with the first stages of the new change. The third phase, continuation, pertains to the decision, whether to continue with the said change or to leave it. Going through these phases was found to take three to five years for stable implementation and predictable outcomes.

**Work life:** refers to all aspects of life related to one’s occupation (working definition of the CCCRE).

## **CHAPTER II**

### **REVIEW OF LITERATURE**

#### **Pressures on Canadian Schools**

Schools have always been subjected to considerable amounts of criticism. Almost everyone has an idea about what should be added to the school's mandate. Not surprisingly, there has been no consensus on what should be deleted or reduced in importance (King & Peart, 1992). According to Levin and Young (1994), complaints about the declining quality of education can be found dating back to the ancient Greeks, and in every generation since. This was due to the high expectations put on public education. Teachers performed their educational responsibilities in an atmosphere of critical attention from the public. People expected schools to do countless things. There were two major purposes to schooling: to educate students in various academic or cognitive skills and knowledge, and to educate students in the development of individual and social skills and knowledge necessary to function occupationally and socio-politically in society (Bowles & Gintis, 1976; Fullan, 1991; Sarason, 1990; Schlechty, 1990). These can be labeled the cognitive/academic and the personal/social-developmental purposes of the education. Entwined in these purposes in democratic societies was the goal of equality of opportunity and achievement.

#### **The Meaning of Educational Change**

One of the most fundamental problems in education is that people do not have a clear, coherent sense of meaning about the intent of educational change, what it is, and how it proceeds. This lack of awareness has lead to much faddism, superficiality,

confusion, failure of change initiatives, unwarranted and misdirected resistance, and misunderstood reform (Fullan, 1991). The problem of meaning is central to making sense of educational change.

Fullan (1991) argues that to grasp the meaning of change, there must be an understanding of both the small and big pictures. The small picture concerns the subjective meaning or lack thereof, for individuals at all levels of the educational system. How people actually experience change as distinct from how it might have been intended is at the heart of the lack of success of most social reforms. The big picture is the sociopolitical process that influences educational change.

### **The Origins of Educational Change**

Educational change is a reasonably new phenomenon in the history of formal schooling. Until the mid-1800s, the education of young people was considered a part of child rearing (Gainey, 1993). In a predominantly agrarian society, parents educated their children with the skills necessary to continue the family's occupation. Farmers taught their sons agricultural skills; mothers taught their daughters household duties. Merchants and craftsmen also passed their trades on to their sons. Public schools at this time were thought of as secondary in importance when compared with the education children received at home. Children were needed on the farm, and thus the school calendar was planned around planting and harvest seasons.

With the advent of common schools, the education of children outside the household began. The overall expectation of public education during the agrarian age was "a little learning for many students". This pattern of child rearing and education began to alter as the household began to undergo major changes in the late 19<sup>th</sup> and early

20<sup>th</sup> centuries. When fathers began working in factories or offices, occupational training no longer occurred within households. With the loss of home education, lost too, was the emphasis on productive work habits (i.e., the responsibility for completing tasks, punctuality, pride in a job). As the family became less and less well-equipped to transmit personal characteristics, these duties passed along to the newly established public school (Gainey, 1993).

The scope of Western society changed from a predominantly rural population to an urban one. Traditional schools designed to serve the agrarian community were no longer meeting the needs of this new urban industrial society. Educators saw the industrial society needing a small force of well-educated elites and the mass trained for semi-skilled or low-skilled jobs. The purpose of the schools shifted from an emphasis on providing a basic education supportive of common culture, to the selection and sorting of students based on their potential to learn. Some students could learn while others were not capable. In essence, each student was presented with the opportunity to learn or fail (Gainey).

Gainey (1993) believed that both parents working outside the home made it increasingly more difficult for families to reinforce in their children those personal characteristics and values that would promote good performance in school. Schools were made to 'pick up the slack' and started assuming more responsibility for the transfer of social values and norms.

The industrial society was giving way to a new society where most Americans worked with information rather than producing goods. For the first time white-collar workers outnumbered blue-collar workers (Gainey, 1993). Technological advances, such

as the computer, satellite technology, and telecommunications, led the transition from an industrial society to an information society (Benninger, 1996; Gainey). As society moved forward, increased pressure was placed on the education system to do the same. Gainey refers to the "...transition from an agrarian society to an industrial society (as being) measured in arithmetic terms, the transition from an industrial society to an information society (as being) measured exponentially" (p.4).

### **Study of Educational Change**

Since the 1960s, researchers and educators have come to better understand how educational change works in practice. Fullan (1991) identified four phases in this evolution of study and practice of planned educational change: 1) adoption (1960s), 2) implementation failure (1970-77), 3) implementation success (1978-82), and 4) intensification versus restructuring (1983- present). Fullan noted the trends as being more sharply pronounced in the United States than in Canada.

During the late 1950s, a time when most people finished school after eight or ten years, and the rate of secondary school completion was still low, schools were criticized for not being intellectually challenging (Bailey, 1997). Levin and Young (1994) noted that many critics argued that schools were too concerned with rote learning, that the curriculum was out-of-date and that students did not learn to think enough.

"Equal educational opportunity" was the key phrase adopted in the 1960s as the foundation for educational policy at elementary and secondary levels. Schools were criticized for being too restrictive, and that too many children were failing. The schools needed to play a larger role in the education of the poor (Graham, 1993). It was also adopted that all students could learn given sufficient time and the proper assistance.

There was an attitude that there were no good and poor learners, just fast and slow learners. Schools were required to teach all students, not just give them an opportunity to learn. The initial development of special education in the 1960s was one response to these concerns. The 1960s, as Fullan (1993) noted, can be seen as the adoption era. This was due to the preoccupation with the number of innovations of the day being “taken on”, or adopted. Innovations were the mark of progress.

By 1970, the feelings towards innovation were turning sour. The term implementation came into use to describe what was happening (or not happening) in practice. Goodlad, Klein & associates, 1970; Gross, Giacquinta & Berstein, 1971; Sarason, 1971; Smith & Keith, 1971 saw innovations adopted (or implemented) mindlessly, with no forethought being given as to follow-through. The early 1970s saw implementation failing because “that is what people were experiencing and that is what researchers were writing about” (Fullan, 1991, p.6). Goffin (1995) maintained that governments were coming under fire as the optimism about solving social problems began to diminish. Funding towards education was also dwindling as compared to the 1960s. The focus on expansion and change was replaced by contraction and conservatism.

By the late 1970s there was a slight turn in the favour of implementation. Implementation research and practice, school improvement, effective schools, staff development (e.g., coaching), and leadership (e.g., the role of the principal) were all success stories. These innovations were just starting points for future processes associated with these accomplishments.



In the early 1980s, the recognition of the growing educational crisis (poor academic performance, high dropouts, declining quality and morale of the teaching force, weak and uncoordinated curriculum) had already created momentum for reform (Fullan, 1991). Researchers attacked the ways in which reform was being implemented. They claimed that policy makers were inclined to "...look for the quick fix and (were) too preoccupied with the ad hoc, small-scale, piecemeal innovations, instead of tackling more basic structures and more comprehensive reforms" (p.6) The hollowness of attempting to implement one innovation at a time was criticized by the National Commission of Excellence in Education in the prominent document *A Nation at Risk* (1983). It emphasized the importance of educational reform. This report called for large scale educational change and emphasized the need for government action (Fullan, 1993). A second wave of reform, referred to as restructuring, quickly followed. The first phase of restructuring focused on academics and teaching. Academics became redefined as success for all students. Equity as well as excellence became a major concern. On the agenda were new policies and programs for early education, dropout prevention, and coordination of social agencies, communities, and businesses (Fullan, 1991).

The American educational crisis spilled into Canada. The period of economic growth and the expansion of the educational system ended in the seventies. Job opportunities were reduced and criticism of the schools for failing to teach basic skills increased (King and Peart, 1992). Public concern was evident in Ontario, where, "...the philosophy of continuous progress and the development of the whole child had led to extremes." (p. 14) Fiscal restraints on schools increased. Provincial governments began to reinstitute central policies in a number of areas. Several provinces reintroduced or

extended provincial examinations, and many provinces developed other kinds of student assessment programs to try to measure what students were learning. Curriculum choices for students were curtailed (Bailey, 1997). Levin and Young (1994) believed that the changes were an attempt to improve schools through tighter control over what was done and how it was done.

### **Education Today**

The restraints on education continued into the 1990s. The move towards making the educational system more efficient and more accountable was evident. Restructuring became a key word in the language of contemporary education reform to characterize changes needed in the organizational structure of schools. The purpose of restructuring was to transform the nature of teachers' work and to reorganize governance systems. This included public accountability and more value or performance for the monetary investment (Elmore & Associates, 1990; Peterson, McCarthy & Elmore, 1996; Tyack, 1990). In Ontario since 1995, government control of education has been increasingly centralized. The number of school boards were reduced to nearly half while the province assumed full responsibility for the funding of education.

The introduction of changes in the forms of mandates to better students' performance, added to the existing pressures on Ontario schools. Ontario has experienced several major educational changes over the past years. These include:

- 1) The Common Curriculum (1992-93): A new elementary curriculum from grades 1-8;

- 2) The Transition Years Program (1992-93): A new intermediate program for grades 7-9 which included destreaming (removal of class placement based on level of difficulty) for students in grade nine;
- 3) New Ontario Curriculum (1997-98): This replaced the Common Curriculum which had been introduced five years earlier;
- 4) Elimination of grade 13 also known as Ontario Academic Credit Year (1999-2000, for Grade 9 students);
- 5) Bill 160 (1997): An Act to promote greater efficiency, accountability, and effectiveness in Ontario education;
- 6) Establishment of parent advisory councils mandated in all schools (1995);
- 7) Removal of principals and vice-principals from teachers' unions (1997);
- 8) Establishment of a standardized report card and reporting system for students in Grades 1-8 for all Ontario students (1997);
- 9) A return to the basics and establishment of expected outcomes at each grade level from grade 1-8 (1997).

Also, Canada entered a period of increased government cutbacks. The areas most vulnerable to reductions in funding were health and social services and education.

Throughout the decade there have been confrontations about salary, teaching resources and class sizes, to name but a few, as provinces attempt to reduce expenditures.

Increased societal expectations of teachers, major restructuring of educational programs and reduction in educational funding are now combining to increase the stress of teaching (King & Peart, 1992).

## **The Impetus for Educational Change**

Virtually every western nation and every Canadian province have undergone some form of educational reform. The question remains why people in education decide to push for or promote particular changes. Benninger (1996), Fullan (1993), Gainey (1993), Gallagher (1995), Levin and Riffel (1997), and Rallis and Goldring (1993) believed schools change because the social and economic environment within which they exist continues to transform at an accelerated pace. The changes facing schools have not been confined to education, but are rooted in a major and more general transition from an industrial to a postindustrial society (OMET, 1993). These changes have been pronounced in the areas of : 1) economic and occupational flexibility; 2) technological sophistication and complexity; 3) scientific uncertainty 4) cultural and religious diversity; and 5) organizational fluidity (OMET, 1993).

### **Economic and Occupational Flexibility**

Labour markets, job opportunities, and occupational structures have been undergoing an extraordinary transformation. The leap that propelled the world into a global-information society changed postindustrial economics from the selling of goods and products to service. This shift in production required a redistribution of knowledge throughout the work force. Knowledge became a valuable resource, a necessity for survival in society. With the emergence of a more flexible economy came the demand for new skills and approaches. Individuals were required to draw on their experience, identify the significant from the irrelevant, use creative problem solving, and make value judgments (Gainey, 1993; OMET, 1993).

## **Technological Sophistication and Complexity**

Technological advances in communications have made information and knowledge available to a greater segment of the population. When comparing today's world with that of 50 years ago, the first differences typically noted are cars, planes, computers, and video. When the first schools operated, print was the only information technology available. Teachers either spoke to students or the students read. Today, the situation is very different. Video, whether broadcast by television, videotapes, satellites, or by other means, has had a tremendous impact on the way in which people obtain information (Bailey; 1997; Benninger, 1996; O'Brien, 1994; OMET, 1993).

Computerization is a major technological development that has had enormous implications for education. Computers provide increased access to information, as well as provide people with ease of storage, retrieval, and transmission of valuable information. Computers have the capacity to allow much more individualized learning, and much more learning at locations other than school (Bailey, 1997).

## **Scientific Uncertainty**

Changes in communication and technology have changed what one knows and how one comes to know it. The transmission of knowledge to and from sources around the world is at one's fingertips. The amount of information society possesses has increased exponentially (Gainey, 1993) since the industrial age, a mere 50 years ago. The after effects of scientific knowledge, namely, technological innovations, global competition and recent recession, has left the business sector to undergo considerable restructuring. This rate of change has revved the global market, but at the same time threatens the stability and endurance of knowledge, making it fragile and transient. As

scientific knowledge becomes more transitional, conclusions previously drawn need to be revised or reversed. This requires a reexamination and emphasis on the processes of inquiry, analysis, and information gathering that today's society has come to know. In order for businesses to remain globally competitive, companies must adapt and develop new technologies. They rely on their employees to 'have an edge' on their competitors and demand a greater variety of new competencies from them. The jobs of the information age require individuals to be capable of learning and to be, creative, inventive, motivated, and critical. Society looks towards the educational system to help people develop these skills.

### **Social and Cultural Diversity**

Several demographic changes in Canadian society have had implications for schools. Researchers (Bailey, 1997; Foot, 1998; Levin & Young, 1994; OMET, 1993) believe that the rise and fall in the number of school-age children, changes in the structures of families, and changes in the ethnic composition of Canadian society all pose challenges.

The school-age population has been on a decline since the 1970s, from just under 6 million in 1971 to under 5 million by 1985 (Canadian Education Statistics Council, 1990). The 1950s and 1960s saw a period of rapid growth, which King and Peart (1992) and Foot (1998) referred to as the 'baby-boom generation'. This boom period was followed by a pronounced drop in the number of students in Canadian schools. The 'baby-boom echo' (Foot) began in 1980. This period saw the children of the 'baby-boom generation' enter the school system. In 1986, Grade 1 enrolment increased for the first time in 20 years. For the remainder of the 1980s and into the 1990s, the echo continued

to push elementary enrolment up. By 1996, the school-age population had increased to nearly 5.5 million students (Statistics Canada, 1999).

An increase in immigrant children has added to the complexity of teaching. Teachers may have a substantial number of students whose first language is not English. Their culture is not Anglo-Saxon or French, which are predominant in Canada. The schools are under pressure to ensure that these children receive an education comparable to that of their 'Canadian' counterparts. Levin and Young (1994) believed that cultural differences also create issues for schools in their communication with parents and communities whose values and beliefs are often different from those embraced by the schools.

### **Organizational Fluidity**

In order to remain globally competitive, the business world must adapt and develop their organizations to meet the challenges and changes of today's society. The conventional, bureaucratic organizations of the industrial era do not fare well in the volatile conditions of the technological age. The kinds of organizations most likely to prosper in this era "...are ones characterized by flexibility, adaptability, creativity, opportunism, collaboration, continuous improvement, a positive orientation towards problem-solving and commitment to maximizing their environment and themselves" (OMET, 1993).

Fullan (1992) stated that people have become so accustomed to the presence of change that they rarely stop to think what change really means to themselves or those around them. The crux of change was how individuals came to grips with this reality. The meaning of change and the factors and processes that account for it were

underestimated. Change (Marris, 1975; Shoen, 1971) involved loss, anxiety, and struggle. “Whether the change is sought or resisted, and happens by chance or design; whether we look at it from the standpoint of reformers or those they manipulate, of individuals or institutions, the response is characteristically ambivalent” (Marris, p.7). New experiences were always initially reacted to in the context of some familiar, reliable construction of reality in which people were able to attach personal meaning to the experiences regardless of how meaningful they might be to others. Marris saw this conservative impulse as compatible with growth, in that it sought to consolidate skills and attachments, whose secure possession provides the assurance to master something new.

Past studies (Baliey, 1997; Benninger, 1996; Consortium for Cross-Cultural Research in Education [CCCCRE], 1997; Gitlin & Margonis, 1995; Grant, Peterson & Shojgreen-Downer, 1996; King & Peart, 1992; Lasley, Matczynski & Benz, 1998; Mullaley, 1986; Palazzolo, 1998; Salinitri, 1998; Simonton, 1996) have examined educational change and teachers’ attitudes towards it. From 1994 to 1996, eleven countries of the CCCRE collected qualitative and quantitative interview data from secondary teachers. Various kinds of educational change and their impacts on the dynamics of secondary teachers’ work lives were investigated. Teachers’ dispositions towards involvement in future changes in education were also investigated. The research teams were located at higher education and research institutions in Australia, Canada, England, Hungary, India, Israel, Netherlands, Poland, Russia, South Africa, and the United States. The schedule of interview questions, designed by the Consortium, was the same for each country, except for language. Through detailed interviews, teachers discussed characteristics of a change that personally affected them, including its origin,



its strength and valence, its objective, teachers' roles in its initiation, the extent of its recentness, and forces affecting its implementation. Teachers discussed in detail how the change affected their practices, human relationships, time usage, professional development, students' school experience, and work life in general. Teachers reflected on how all this had influenced their level of willingness to participate and assume responsibilities in future educational change.

Their findings were reported by country and drawn together as a series of in-depth studies through both quantitative and qualitative procedures. In summary, teachers under the conditions of externally imposed change did not all respond positively or negatively to the same features of the change. As Poppleton (1998) reports, it was not so much the origin of the change itself or its nature that is important as the way in which it is implemented. The majority of internally generated changes were responded to in a positive manner.

In Benninger's (1996) study of Ontario principal and teacher attitudes towards educational change, 45 secondary school teachers and 9 secondary school principals were interviewed, using the same instrument as the CCCRE. Findings showed that government and community initiated change projects had an overall positive effect on the professional development of most educators surveyed. The implementation of change also forced educators to better organize their use of time. One of the greatest hindrances to the implementation of change for both teachers and principals was the lack of communication and consultation with teachers. Many respondents felt their opinions were not sought during the decision making process. Consequently, negative feelings on the part of the excluded educators were observed. The majority of principals indicated

their willing participation in future changes. Teachers had a slightly more apprehensive outlook concerning their roles in future change projects. Their concern focused on the rate of change and the number of changes that had been introduced in the school system.

A study of Ontario secondary adult day-school teachers' perceptions of the effects of educational changes on their work lives and on their dispositions towards future educational changes was conducted by Simonton (1996). The instrument of the CCCRE was used to question 41 teachers. Findings indicated that participants were positive about recent educational changes. Changes considered to have had the strongest effect on their work lives included changes in policy or practice regarding both subject matter and teaching methodology or school structure and were initiated or planned by the teachers. Teachers felt these changes helped meet the needs of students and improve relations between students and teachers. Other benefits included greater teaching satisfaction and better relations between teachers in terms of collaboration and professionalism. Concern was found in the lack of preparedness and control of change. Overall, teachers were willing to be active participants in future educational changes.

In Bailey's (1997) study, 45 secondary teachers from south-western Ontario were interviewed, using the instrument developed by the CCCRE, to examine attitudes towards educational change. Findings indicated that teachers as a bloc were indifferent towards educational change, being relatively evenly divided between those who responded with some degree of positivism, and those who responded with some degree of negativism. Many teachers believed that their opinions were not sought during the decision-making process. Consequently negative feelings towards change were observed. The majority of teachers indicated a willingness to participate in future change projects. Those giving

negative responses were concerned with the rate of change and the number of changes that had been introduced in the school system. They felt bombarded with change and thus reluctant and tired of participating in change implementation.

Salinitri's (1998) study, using the instrument of the CCCRE, focused on the attitudes of 11 south-western Ontario secondary school teachers. Changes in student experiences resulting from greater diversity of students' physical, psychological, and emotional demands surfaced as concerns. Government mandated policy changes without teacher consultation lead to frustrations, demoralization of the profession (see Nantais, 1999) and feelings of negativity towards future change initiatives.

Palazzolo (1998) studied south-western Ontario elementary teachers' attitudes towards educational change. Structured interviews, using the instrument of the CCCRE, were conducted with 14 elementary teachers. Teachers felt that government-mandated policy change regarding the assessment and evaluation of students was the most significant change. Issues of concern for teachers were in the areas of teacher workload, student discipline, and reduction in preparation time and professional development. Consequently, a negative attitude towards current and future changes was noted.

Teachers attributed their negative attitudes to the lack of communication among government agencies, school administrators, and teachers during the initiation and implementation process. The involvement of teachers in the planning stages of change initiatives was recommended. If given some ownership over the change process teachers were more willing to see change in a more positive light (King & Peart, 1992; Mullalley, 1986).

Gitlin and Margonis's (1995) case study traced participant reactions to a site-based management school reform by interviewing all the people who were influential in conceiving, administering, and planning the change process. Questionnaires were sent out to 75 randomly selected parents, all of the teachers, and the principal in the school. The questions focused on the person's understanding of the reform process, the role he/she played in the process, and his/her attitude towards the school and others involved in the reform. This questionnaire was accompanied by classroom observation and further interviews.

Their results indicated that teachers' resistance to reform revolved around two central issues: authority, in terms of decision-making latitude over their own work; and workload, by means of increasing their responsibilities. Teachers were quick to point out that the structure of their work was not addressed as part of the reform effort. Their resistance was seen as self-protective and modest. Resistant teachers indicated that reformers should focus on the preconditions for the reform, which means giving teachers the authority and time they need to teach in ways which they believe to be right. The researchers argue that promoting teachers engagement in reform endeavours will possibly eliminate the "...push-pull cycle where outsiders push for reforms and teachers resist, leaving schools fundamentally unchanged" (p.377).

Grant et al. (1996) studied the effect of reform on elementary school teachers from non-affluent urban schools. The researchers found that teachers differed in their understandings of the reform due to a number of factors including. These included the students they had, the subjects they taught, the texts they used, their teaching practices, their prior knowledge and experience, budget cuts in their school districts, parents'

demands and concerns about reforms, and their work setting. They concluded that complex and uncertain demands with which teachers must deal increased in complexity when they faced multiple reform initiatives.

King and Peart (1992) surveyed over 17,000 Canadian teachers, by questionnaire, about their work lives. Teachers viewed the number of imposed governmental changes as a response to public opinion and impending elections, rather than to recommendations from educators. In regards to the influence of change in their work lives, surveyed teachers strongly criticized the lack of teacher consultation and in-service programming in the process of restructuring schools. Many teachers, having experienced these inadequacies numerous times, have become worn out.

Perceived teacher involvement in provincial and territorial educational policies varied greatly. Few Ontario teachers (14%) agreed they had substantive input in policy development, as compared to almost half (47%) of Prince Edward Island teachers. Teachers who felt they had meaningful input in educational policy fell into a low stress group. Conversely, those who felt disengaged more likely experienced high stress levels. King and Peart (1992) suggested that if teachers could be actively involved in the adaptation and implementation of educational changes, the experiences associated with them might not be so difficult.

In a study by Lasley et al. (1998), teachers, both change ready and change resistant, were assessed as to their attitudes towards a mandated change in the science curriculum. The researchers believed that the attitude disposition of those involved in the creation and implementation of school programs was missing in the reform process (Hall & Hord, 1987; Lasley et al., 1998). They believed that these attitudes influence teachers'

disposition towards change. Consequently, this led to failed projects due to teacher resistance to implement the new change proposal.

Mullaley (1986) studied teachers' perceptions of change. Forty-two elementary teachers chose six externally initiated changes which all teachers experienced and two internally initiated changes that pertained only to the school. Teachers were asked to rate the concerns regarding the changes on a scale of one to five. Teachers' greatest concerns were their roles in the change process; significantly, the quantity of input, training, choice and involvement in the change; clarity of information and time-line factors. To a lesser extent, teachers' focused upon the content of change, its inherent source, and the impact of the change. Teachers rated the externally initiated administrative changes negatively, the externally initiated curricular changes moderately, internally initiated local changes positively, and the externally initiated union change negatively.

Teachers indicated the desire for more participation in change, particularly with those changes close to them. Teachers' views of union initiated change indicated that teachers can accept the negative aspects if they hold confidence in the organization. Mullaley believed that change success could be increased through the use of school-centred, teacher and student-oriented change processes.

The imposition of change on teachers has, in the past, been for the most part, unsuccessful (Bailey, 1997; Benninger, 1996; Elbaz, 1990; Fullan, 1991, 1993; Fullan & Miles, 1992; Goodlad, 1983; Hargreaves & Dawe, 1989; Huberman & Miles, 1984; Lasley et al., 1998; Palazzolo, 1998; Pratt, 1990; Salinitri, 1998; Sykes, 1992). Wise (1977) believed that this was because they had taken a generalized, 'hyper-rational' approach and have failed to take a realistic view which acknowledges that teachers were,

first and foremost, people, and that schools were social institutions. Fullan (1991) argued that it has failed because they were developed from persons or groups outside the teaching profession who presented a managerial or policy perspective. The viewpoint of this change agent, whether at the local, regional, or provincial level, was typically very different from that of the teacher expected to implement it (Fullan, 1991; Gross, Giacquinta, & Berstein, 1971; Smith & Keith, 1971). Fullan (1991), Gross et al. (1971) and Smith and Keith (1971) contended that failure to develop an adequate design for implementation of change and technical problems in the management of change have lead to its demise.

There is now an overwhelming need for greater involvement of teachers as partners in educational reform teams. Acknowledgment and consultation resounds from teachers as change initiatives continue to be foisted upon them at unprecedented rates. In Ontario, teachers are becoming overwhelmed by these changes [see page 13 for recent educational changes], as Hargreaves (1994) noted:

“(They are)...bemused by their contradictory nature, and angry about the reductions of time, resources, and professional development support for their implementation. Do this *and* that; do more *with* less, be more professionally empowered, *yet also* more compliant with our demands: these are the paradoxes of change that Ontario teachers are having to confront in the 1990s” (p.2).

Many reform initiatives have acknowledged the teacher, but have failed to acknowledge the centrality of the teacher’s role in affecting change (Fullan & Hargreaves, 1991).

Two research questions arise from the review of literature. The questions to be investigated are:

**Research Question 1:**

Do elementary teachers' attitudes towards educational change differ from the attitudes of secondary school teachers towards educational change?

**Research Question 2:**

Do elementary teachers' attitudes towards future educational changes differ from the attitudes of secondary school teachers towards future educational changes?



## **CHAPTER III**

### **METHODOLOGY**

The present study compares and contrasts elementary and secondary school teachers' attitudes towards educational change within the last five years. This paper seeks to investigate how the following change attributes affect teachers' attitudes towards educational change and future educational changes. The following attributes were used as guides to investigate these research questions: 1) The origin of the change; 2) the objective of the change; 3) the teachers' role in the change; 4) the rate of change; 5) the forces affecting the implementation of change; and 6) the strength and scope of the impact of change.

#### **Instrument**

To accomplish this purpose, information regarding the different kinds of change experienced by teachers and their attitudes towards change was gathered using a structured, in-depth interview. The Consortium for Cross-cultural Research in Education (CCCRE) developed this instrument. The CCCRE consists of researchers from 16 countries. The researchers developed a set of interview questions as an instrument to investigate the effects of educational change on the work lives of teachers.

Data regarding the different types of educational change experienced by teachers and their attitudes towards it were gathered during the Winter and Spring of 1998. Approval for gathering the data was received earlier from the Ethics Committee of the Faculty of Education, University of Windsor, by Dr. Hurley as a component of his corresponding graduate course. Graduate students assisted in the data collection.

In this study, the structured interview was used to provide the following information: 1) the identification of educational changes that have most affected the school and students; 2) the origin and the objective of the change; 3) the rate of change; 4) teachers' role in the change; 5) forces that helped and hindered the change effort; 6) how the change affected the teachers' work life, their relationships with others, and their professional development; 7) how the change affected students' school experiences and learning; and 8) teachers' feelings about the change identified and the efforts this change will have on their willingness to participate in future educational change. The rationale for choosing the structured interview methodology was that the qualitative, open-ended interview data and quantitative, closed, fixed-response data could later be compared and contrasted.

### **Subjects**

The population for this study consisted of secondary teachers and elementary teachers located in randomly selected schools within south-western Ontario separate and public school boards. Subjects were selected from eight comprehensive high schools and eight comprehensive elementary schools located in urban, suburban, and rural areas. From each school, an average of five teachers was interviewed. In total, 37 elementary teachers and 40 secondary teachers were interviewed. Each teacher had a minimal 5 years teaching experience.

### **Analysis of the Data**

The individual interviews took between 30 and 60 minutes to conduct and consisted of 12 in-depth questions (see Appendix A for framework). All interviews were conducted in the teachers' schools, during school hours. The interviewer recorded the

responses of teachers on a standard question and response sheet (see Appendix B). The responses were then coded by the researcher using a standard coding manual constructed by the Consortium (see Appendix C), which was then revised into collapsed categories (see Appendix D). Dr. Allan Menlo and Dr. Lee Collett from the School of Education at the University of Michigan, who originally developed the instrument and coding manual for the CCCRE, instructed the graduate students involved on the interview and coding process to ensure consistency in the interview process. The researcher later met with Dr. Menlo and Dr. Collett for further instructions regarding coding and analysis and to make certain the coding of interview data was accurately completed consistently with CCCRE protocols.

The change identified as most important by each interviewee was used as a focal point for the remaining questions in the interview. Teachers were asked to identify and rank order three educational changes that have affected their school within the past five years. For purposes of the study, the interviewers were interested in change that affected students; such as changes in subject matter; goals and aims of the school pertaining to educational outcomes; the skills and attitudes to be learned; methods of teaching and learning; evaluation techniques of student learning; students' non-classroom work experiences; and extra-curricular activities. The interviewers were not interested in changes in school governance, financing and staff hiring or layoffs.

The origin of the change was used to determine the initiators of the change. This study investigated changes initiated at all levels, including the federal, provincial, municipal, school board, school and community levels. The sources of the origin of the change were used to find commonality among teachers as to where change efforts were

believed to be started. These variables could determine if the subjects' attitudes towards the change effort were affected by the sources of the change as Berman and McLaughlin (1976) had discovered in their previous study of educational innovations.

The objective of a change may have an effect on the strength of teachers' commitment to the change effort (Berman & McLaughlin, 1976). The responses to this question were later coded into these categories: to improve student academic or social development; improve the effectiveness of the school's operation; to reflect a social, political, or cultural change or ideology; to improve the quality of teaching and student evaluation; and, to update the content of what is taught. The categories were collapsed into: improve education; accountability; efficiency; and social objectives.

The rate of change question was used to determine the length of time given to implement the change. Responses were categorized as gradual implementation, and immediate implementation. Depending upon the readiness of the participants and the extent to which the change project has been developed, rate of change may have an effect on the attitudes of those involved in the change process (Crandall, Eiseman, & Louis, 1986).

Teachers' roles in the change were identified in order for the researcher to identify how teachers perceived themselves throughout change process. The collapsed categories consisted of initiator, implementer and resister. An initiator role implies a change agent's role. Change agents act as instigators of change. They are committed to the change process (Fullan, 1993). The implementer role implies active participation in the execution of the program but the teacher did not necessarily have a part in the creation of the particular change. The resister role suggests the teacher was not in agreement with

the change and opposed its implementation. The CCCRE renamed this category as ownership of the change.

Factors that helped or hindered the change process were identified to gain a better perspective of the environment in which the changes were asked. For coding purposes, the availability of resources and support, individual competencies, and attributes of the plan were recognized as being possible assistants or obstacles of change.

How the change affected teachers' work lives, relationships with others and their professional development were used as indicators of the participants' attitudes towards the change and the degree of success the project has had in the school. Collaborative work relationships help staff deal with the demands of the change process (Fullan, 1991), promote positive attitudes and increase the chance of successful change implementation. Professional development prepares teachers for educational change, and helps teachers understand why change must occur, thereby affecting participants' attitudes towards change.

How the change affected student learning and their experiences at school was another indicator of the degree of success the plan has had in the school. Since most teachers are motivated by the achievements of their students (King & Peart, 1992), their attitudes may be reflected in the efforts it has had on student learning and experiences. The effects that this change has had on teachers can be a predictor as to their willingness to participate in future educational change efforts and how these future changes will be accepted.

The data gathered from the teacher interviews were sorted into categories according to a coding manual (see Appendix C) provided by the CCCRE. The

classifications listed in the coding manual were collapsed into smaller categories (see Appendix D).

The collapsed categories were then entered for data processing using the Statistical Package for Social Sciences 7.5 for Windows (SPSS Corporation 1997). The variables were analyzed using the Pearson Chi-Square and a one way analysis of variance (ANOVA). The ANOVA was used with the question below that was constructed using a scale variable. A scale variable uses numeric values. In this study the variable **‘The impact of the change on willingness to participate in 10 different roles in a similar change’** was considered a scale variable. The responses to each role had a numeric value. The sum of the codes were recorded for each predictor: the higher the numeric, the more willing the respondent was to participate in similar change.

The chi-square statistic was used to test whether the observed frequencies differed significantly from the expected frequencies. Cross-tabulations compared the distribution of each variable across the independent variables (elementary and secondary teacher panels).

The differences that were statistically significant, using a confidence level of 95% were interpreted. A confidence of at least 95% that a result is real corresponds to a significance of .05 (5%) or less for that result.

## CHAPTER IV

### RESULTS

A complete listing of the cross-tabulations of the collapsed variables are located in Appendix E. For the purposes of this study, only the variables showing a significant difference of  $p < .05$  were investigated.

**Table 1**      **MOST IMPORTANT CHANGE**

variable	secondary	elementary
Most important change		
<b>School Management</b>	<b>5</b> <b>12.5 %</b>	<b>0</b>
<b>Teaching</b>	<b>10</b> <b>25.0 %</b>	<b>2</b> <b>5.4 %</b>
<b>Learning Outcomes</b>	<b>1</b> <b>2.5 %</b>	<b>26</b> <b>70.3 %</b>
<b>Student Experience</b>	<b>24</b> <b>60.0 %</b>	<b>9</b> <b>24.3 %</b>
	<hr/> <b>40</b> <b>100 %</b>	<hr/> <b>37</b> <b>100 %</b>

**Chi-Square (3) = 40.244,  $p < .000$**

#### **Most Important Change**

The most important change variable showed significant differences between elementary and secondary teachers. In **Table 1**, 60 percent of secondary school teachers identified '**student experience**' as the most important change whereas 70.3 percent of elementary teachers felt '**learning outcomes**' were the most important. Elementary teachers identified the change from traditional grade point average to anecdotal reporting to be in the forefront. Secondary teachers who identified '**student experiences**' as most significant expressed changes in student experiences as being linked to lack of good work

habits and discipline, attitudes of parents and students, and students social behaviour.

Teachers expressed the "...focus on social services requires more all around student care, not just academic services. Teachers have become all around caregivers, dealing with social problems, especially family breakdown. We must take care of the whole child".

**Table 2**      **PERCEIVED OBJECTIVE OF THE CHANGE**

variable	secondary	elementary
Perceived objective of the change		
<b>Improve Education</b>	<b>14</b> <b>35.0 %</b>	<b>11</b> <b>29.7 %</b>
<b>Accountability/ Efficiency</b>	<b>7</b> <b>17.5 %</b>	<b>24</b> <b>64.9 %</b>
<b>Social Objectives</b>	<b>19</b> <b>47.5 %</b>	<b>2</b> <b>5.4 %</b>
	<b>40</b> <b>100 %</b>	<b>37</b> <b>100 %</b>

**Chi-Square (2) = 23.363, p< .000**

### **Perceived Objective of the Change**

Teachers' perceptions of the objective of the respective change varied significantly, as seen in **Table 2**. Elementary teachers, 64.9 percent, felt '**accountability and efficiency**' to be the objective of the change. Teachers referred to the establishment of standardized report cards and reporting system for Ontario students in Grades 1-8. "There is a need for every student in Ontario to receive the same report card in order for there to be a common set of standards in evaluation methods."

Secondary teachers (47.5 percent) felt '**social objectives**' to be the objective of the change. This group felt a change in social, political, or cultural ideology would improve student social development. Teachers referred to the Transition Years program



and destreaming, recognizing the need to make a smooth transition from elementary to secondary school and to ‘provide adjustment before labeling.’ One teacher responded that it was “...to help them (students) get on track and set realistic goals and expectations.”

**Table 3**      **TEACHER OWNERSHIP OF CHANGE**

variable		secondary	elementary
Ownership	<b>Low</b>	<b>10</b> <b>25.0 %</b>	<b>11</b> <b>29.7%</b>
	<b>Medium</b>	<b>18</b> <b>45.0 %</b>	<b>26</b> <b>70.3 %</b>
	<b>High</b>	<b>12</b> <b>30.0 %</b>	<b>0</b>
		<hr/> <b>40</b> <b>100 %</b>	<hr/> <b>37</b> <b>100 %</b>
<b>Chi-Square (2) = 11.398, p&lt; .003</b>			

### **Teacher Ownership of Change**

In regards to ownership of the change, by looking at **Table 3**, the secondary panel felt they had more of a role in the change process. All elementary interviewees responded as having ‘**medium to low ownership**’. Teachers were frustrated. “The government imposed a change on teachers without their input and approval.” One teacher responded “...we were forced into implementation with no consultation, no input. My agreement was not sought nor cared about.” Another complained about mandated changes that resulted in having “...the extracurricular activities being appointed to them”.

Secondary teachers varied in their responses with 12 teachers (30 percent) feeling ‘**high ownership of the change**’. These teachers were involved in developing strategies,

activities, and programs for cooperative learning: “I researched the strategies for the board...and presented in-service programs for teachers.”. A department head, as an initiator, was allowed to “make decisions regarding curriculum, program modification and evaluation.”

**Table 4**      **TIMETABLE FOR CHANGE**

variable		secondary	elementary
Timetable for change	<b>Use Immediately</b>	<b>15</b>	<b>26</b>
		<b>37.5 %</b>	<b>70.3 %</b>
	<b>Use Gradually</b>	<b>25</b>	<b>11</b>
		<b>62.5 %</b>	<b>29.7 %</b>
		<hr/>	<hr/>
		<b>40</b>	<b>37</b>
		<b>100 %</b>	<b>100 %</b>
<hr/>			
<b>Chi-Square (1) = 8.291, p&lt; .004</b>			
<hr/>			

#### **Timetable for Change**

There was a significant difference in the perception of the timetable for implementation of the change, as indicated in **Table 4**. Sixty two percent of secondary teachers saw the change as being **implemented gradually**. These teachers indicated the gradual transition was necessary in order to develop implementation and contingency plans. One teacher indicated that “...it (destreaming) was announced years ahead but was only taken seriously when actually mandated. As a result we had to rush to implement it.”

Seventy percent of elementary teachers viewed **implementation as immediate**. Many teachers saw the urgency of the implementation. “...the change was introduced in the fall to be in full swing by December.” Teachers felt they were given little, if any, time for training, understanding, or acceptance.

**Table 5**      **FORCES HELPING THE EDUCATORS IMPLEMENT CHANGE**

variable		secondary	elementary
Resources provided	No	28 70.0 %	37 100 %
	Yes	12 30.0 %	0
		40 100 %	37 100 %
Chi-Square (1) = 13.149, p< .000			

**Forces Helping the Educators Implement Change**

The interviewees were asked to name anything that helped them implement the change. **Table 5** shows that all elementary teachers believed there were **no resources** (financial, human, or physical) made available to help with implementation. Thirty percent of secondary teachers felt these **resources** were made available. These teachers viewed workshops, provided by the Ministry or school administration, departmental in-servicing, and meeting with other schools as "...shedding some light on what they were supposed to do".

Teachers felt their **own professionalism** helped deal with the change. "I have a strong sense of obligation as a teacher and realize this (student evaluation) is a need to be filled. It comes down to self-preservation". One teacher reported a willingness to constantly learn "...whether reading, analyzing computer software, or attending independent workshops..." motivated them.

**Table 6**      **FORCES IMPEDING IMPLEMENTATION**

variable		secondary	elementary
System resources	No	22 55.0 %	11 29.7 %
	Yes	18 45.0 %	26 70.3 %
		40 100 %	37 100 %
<b>Chi-Square (1) = 5.012, p&lt; .025</b>			

### **Forces Impeding Implementation**

The interviewees were asked to identify any hindrances to the implementation of the change. Seventy percent of elementary teachers and 45 percent of secondary teachers, felt a **lack of resources**, specifically, financial, human, physical, and inservice training, hampered the change process.

The elementary interviewees complained about the '**lack of inservice training**', "leaving [teachers] in a void wondering about the protocol." "How can the new report card be consistent in interpretation without its users being effectively inserviced?" There seemed to be an underlying concern of " ...political waves of change, [specifically] Common Curriculum, Assessment Tools, Evaluation Reports...too many turnovers in a short time span."

Secondary teachers felt '**lack of physical and financial resources**' were the impediments that hindered teachers the most. These included less classroom space, lack of adequate supplies, and lack of textbooks for the indicated change or level. "There was no budget to finance purchase of new materials, to pay for writing teams, etc.."

**Table 7**      **IMPACT OF CHANGE ON TEACHERS PROFESSIONAL DEVELOPMENT**

variable		secondary	elementary
Impact of change on teachers professional development	<b>Negative Effect</b>	<b>28</b>	<b>12</b>
		<b>65.0 %</b>	<b>32.4 %</b>
	<b>No Effect</b>	<b>11</b>	<b>10</b>
		<b>27.5 %</b>	<b>27.0 %</b>
	<b>Positive Effect</b>	<b>3</b>	<b>15</b>
		<b>7.5 %</b>	<b>40.5 %</b>
		<hr/>	<hr/>
		<b>40</b>	<b>37</b>
		<b>100 %</b>	<b>100 %</b>
<hr/>			
<b>Chi-Square (2) = 13.109, p&lt; .001</b>			
<hr/>			

### **Impact of Change on Teachers Professional Development**

The identified changes had an overall **negative effect** (65.0 percent) on **professional development** for secondary teachers as seen in **Table 7**. One teacher response was to become "...apathetic and seeking out little professional development because it doesn't seem to matter...it's just a job, not a vocation any more". Lack of time was mentioned by many teachers. It was noted that the administration had reduced the number of professional development days and conferences due to economic constraints. There is "...not enough time to plan and implement new ideas and projects". Many teachers were tired and unmotivated, one stating "...I just can't get into it, you know"?

Elementary teachers had an overall **positive** (40.5 percent) outlook towards **professional development**. "I have an awareness of different approaches and strategies which can be used in the classroom". One teacher noted a personal growth in trying new methods as well as a feeling of being better prepared to report to students. "It has given

me a new insight as to the various styles of evaluation. I now use a great deal of rubrics when assessing”.

**Table 8**      **NATURE OF IMPACT ON STUDENTS**

variable		secondary	elementary
Negative impact	No	17 42.5 %	5 13.5 %
	Yes	23 57.5 %	32 86.5 %
		<hr/> 40 100 %	<hr/> 37 100 %
<b>Chi-Square (1) = 7.913, p&lt; .005</b>			

#### **Nature of Impact on Students**

The respondents were asked to rate the overall extent to which change had affected student learning and experiences. **Table 8** shows that 57.5 percent of secondary teachers and 86.5 percent of elementary teachers reported a ‘**negative impact**’ on the students’ learning. Teachers in the secondary panel felt that students were not receiving as much individual attention in the classroom “...they must do more of their learning independently, i.e., homework, projects and reports, there is less time with the teacher for consultation”. Other teachers felt that larger class sizes contributed to “...less time teaching and more time disciplining”. Teachers addressed the needs of students (strong, average and weak) were not being met. Specifically “...stronger students were not always challenged enough, weaker students got lost in the system, average students did not progress as much as they would have in a streamed class, and ‘at risk’ students’ needs were difficult to meet”.

Elementary teachers noted a negative impact on students learning. Teachers indicated that students seemed to have more work than they could manage. They also noted that their students were less serious and less interested in their learning stating "...students are far too concerned with their evaluation and test results. Students are giving less respect to teachers and have poorer work attitudes towards their studies".

**Table 9**      HOW TEACHER FEELS ABOUT THE CHANGE

variable		secondary	elementary
Teacher feeling about the change	<b>Very Negative</b>	7 17.5 %	8 21.6 %
	<b>Negative</b>	9 22.5 %	0
	<b>Somewhat Negative</b>	6 15.0 %	15 40.5 %
	<b>Somewhat Positive</b>	7 17.5 %	9 24.3 %
	<b>Positive</b>	5 12.5 %	5 12.5 %
	<b>Very Positive</b>	6 15.0 %	0
		40 100 %	37 100 %
<b>Chi-Square (5) = 19.086, p&lt; .002</b>			

#### **How Teacher Feels About the Change**

A six-point Likert scale was used to rate respondents' 'feelings about the changes' they had identified and analyzed in **Table 8**. In the secondary and elementary panels, 55.0 percent and 62.2 percent respectively responded as being either '**very negative**', '**negative**' or '**somewhat negative**'. This was reflective of the underlying negative impacts influencing other categories.

Importantly, in the secondary panel, six teachers felt ‘**very positive**’ about the change, whereas no elementary teachers responded with such enthusiasm. These six respondents were the same who identified as having a high ownership of the change. These 6 teachers have also been in the teaching profession for at least 14 years.

**Table 10**      **IMPACT OF CHANGE ON PARTICIPATION IN SIMILAR CHANGE**

Panel	N	Mean	Std. Deviation
secondary	40	23.4000	6.1719
elementary	37	23.4054	4.1463
<b>Total</b>	<b>77</b>	<b>23.4026</b>	<b>5.2622</b>

#### **Impact of Change on Participation in Similar Change**

Interviewees were asked if, as a result of their experience, they would be more or less willing to assume the following nine roles or responsibilities in a similar future change:

1. **Be a source of influence against the change.**
2. **Be left alone to work on own priorities.**
3. **Be kept informed.**
4. **Be consulted for opinion.**
5. **Be involved in the planning.**
6. **Be involved in carrying out the change.**
7. **Be involved in evaluating the results.**
8. **Be involved in evaluating the change process was carried out, or**
9. **Be a member of a coordinating/steering committee for the change.**



Respondents ascribed 1 point if they were **‘more willing’**, 2 points if they were **‘uncertain’**, and 3 points if they were **‘less willing’** to take on the roles or responsibilities of #1 and #2. Similarly, respondents were ascribed 1 point if they were **‘less willing’**, 2 points if they were **‘uncertain’**, and 3 points if they were **‘more willing’** to take on roles and responsibilities 3 through 9. Therefore, the higher the score (10=lowest, 30=highest), the stronger the teacher disposition towards taking a positive role in the change process.

A one-way ANOVA was completed on **“Impact of change on participation in similar change”** using the Panel as the Independent Variable. There was no main effect,  $F(1, 75) = 0.00, p > .1$ . However, the variances were not homogeneous (Levene Statistic = 13.796,  $p < .001$ ). In effect, there was more variability in the secondary panel. **Table 9** indicates the standard deviation away from the mean. This indicates that in the secondary panel more people are at the extremes in responding or response style.

Educators were very willing to take on most of the roles or responsibilities for the new change. Some educators even offered to assume additional roles such as researching the change or communicating support and helping to promote the change to peers and the public.

Interviewees who gave a negative response felt a need for more consultation with teachers before the change initiation is delegated to the school. One teacher stated, “I would like to have my input and experience count in determining what is best for the students I teach.” They were concerned with rate of change and the number of changes that have been introduced in the school system. These educators felt that they have been bombarded with changes. With the number of changes that have been introduced in the past, these educators have become reluctant and tired of participating in change

implementation. Change became redundant to these educators and motivation for school improvement slipped.

Some teachers, although quite willing, also sounded notes of caution: “I would not want to be carrying the load for any one part of the change”; “I’d be willing to communicate my support and help promote the change if I had some ownership of it.”

On the positive side, one secondary teacher commented “...I’ve always been interested in changes that could potentially improve our educational delivery system. We need to constantly strive to improve our teaching strategies.”

## **CHAPTER V**

### **DISCUSSION**

The research questions sought and examined elementary and secondary school teachers' attitudes towards educational change and future change initiatives. The study was conducted at a time when Ontario teachers had undergone, or were in the midst of, several major educational changes mandated by the Ontario Ministry of Education. The respondents identified and referred to one of a number of these changes. Generalizations from this research concerning the characteristics and effects of change on educators must be made cautiously.

The interview focused on changes experienced by teachers over the past five years. The changes considered by secondary teachers to have the strongest effect on their work lives were changes in policy or practice regarding the organization or structure for the delivery of education and the kinds of experiences students have in school, specifically, the Transition Years (Grades 7-9). It was the aim of the Ministry of Education to modernize the Ontario school curriculum, and promote greater educational opportunity for students. This program called for the destreaming of grade nine students and the incorporation of computer technology and more relevant and practical materials and techniques in their classrooms. This destreaming was identified by many respondents as having a social objective. Enhancing student's self-esteem, and delaying the effects of labeling were two of the objectives mentioned by the teachers as purposes for the Transitional Years initiative.

Elementary teachers identified learning outcomes of students, specifically regarding student assessment or evaluation, as the most significant change in the past 5 years. Accountability and efficiency was seen to be the objective of change, referring to the Ministry of Education's establishment of standardized report cards and Common Curriculum for Ontario students in Grades 1-8. Teachers, schools, and school boards were encouraged to utilize subject-integrated curriculum wherever possible.

Although the origins and objectives of the change varied between the panels, they reported their experiences to have been more negative than positive. In the studies discussed earlier, the imposition of change on teachers has been for the most part unsuccessful, and attitudes towards it, negative. The present study is no exception.

Benninger's (1996) and Bailey's (1997) studies identified students' experiences at school as significant for secondary teachers. The Transition Years Program was most frequently mentioned. Glassford (1997) believed the reasons given to support the negative reaction clustered around a few general factors. Many teachers opposed this particular reform package handed down by the Ministry. Destreaming, they believed, held back the more academically gifted, while frustrating the more academically challenged. Discipline problems became more evident. Teachers thought curriculum integration was out of place in a secondary-school setting organized around subject specialization. Assessment of this outcomes-based evaluation was to be overwhelming for an already heavy teacher workload partly due to increased class sizes.

Many teachers noted the change in the character of students. These changes reflect the changing structural and economic characteristics of families that bring children into the school system with a variety of social and emotional needs. Addressing these

needs has become another duty of today's teachers on top of their growing list of responsibilities to their superiors. One teacher reported "...we wear many hats, social worker, teacher, parent, friend, role model, disciplinarian."

Palazzolo (1998) recorded student assessment as the most important change for elementary teachers, namely the establishment of standardized report cards. Elementary teachers in the present study identified the change from traditional letter and numerical grades to anecdotal reporting as being most significant.

Teacher perceptions of the objective of the respective change in the present study concurred with that of past studies. Secondary teachers felt that the change had a social objective, namely to improve student social development or to reflect a change in social, political, or cultural ideologies. These teachers referred to the Transition Years Program. Elementary teachers referred to accountability and efficiency as the main objective. The establishment of standardized report cards and reporting system fueled this response.

The findings in teacher ownership of the change in the secondary panel are consistent with those of past studies. Many teachers felt they had no influence on the planning and initiation of the change. "It was frustrating because a change was being imposed on teachers without their input and approval. Their role was seen as that of implementer of policy handed to them. The present study, however, saw more responses at the extremes of this category, especially in the area of low ownership, than that of some past studies (Bailey, 1997; Simonton, 1996; Benninger, 1996). In these studies, fewer respondents saw themselves as having low ownership, or also termed, 'resister' to change. The increase in negativity is reflected by teachers' strikes, low morale, and general teacher frustration.

Elementary teachers were for the most part negative in the present study, stating low to medium ownership of the change. The majority of the respondents in Palazzolo's (1998) and Parent's (1999) studies saw their role as that of implementer. Respondents stated that they were required to implement change and in several instances, full co-operation was not sought. In Mullaley's (1986) study teachers indicated greatest concern with their role in the change process; significantly, the quantity of input, training, choice, and involvement in the change. The researcher believed that change success could be increased through teacher-centred change processes, involving teachers in the change process. Gitlin and Margonis (1995) and King and Peart (1992) believed that the negative attitudes and resistance to change initiatives reported in their respective studies could be remedied by promoting teachers' engagement in reform endeavours. This included in-service programming, consultation, and teacher authority, in terms of decision-making latitude over their own work. The majority of resistant teachers in the present and past studies all indicated that reformers should focus on the preconditions for the reform and give teachers the means to teach as in ways which they believe to be right.

When teachers were asked about the timetable for the change there was a significant quantitative difference between secondary and elementary perceptions. The majority of elementary teachers saw implementation as immediate. Teachers felt they were given little, if any, time for training, understanding or acceptance. The lack of time to prepare and understand the change made it difficult for the teachers to remain positive. Parent (1999) and Palazzolo (1998) reported similar findings. Many developed an attitude of negativity due to increased workload and stress levels in their work environment. The additional responsibilities that accompanied the change affected the

time teachers spent at school that in turn affected the amount of time spent at home with family and friends.

Secondary teachers saw implementation as gradual. Bailey (1997) and Benninger (1996) reported similar findings, with teachers seeing it as a “natural transition” necessary in order to develop implementation and contingency plans. These findings differ from Glassford’s (1997) analysis. The handing down of the “Transition Years” program in June, 1992 “...came like a lightning bolt from a clear blue sky to most classroom teachers in Ontario”. (p.4) It came as a statement of policy, for prompt implementation. When teachers were forced to implement a policy immediately, it more often prompted a negative response from teachers.

Teachers were asked to name what helped them implement the change. Asked whether resources were provided, elementary teachers responded with a resounding no. The elementary panel did, for the most part, see support from staff and administration as the driving force in implementation. Teachers found that the principals in-serviced their schools with workshops, consultations, and training. Some secondary teachers felt resources were made available to them by the Ministry, although nearly all felt it was not nearly enough to properly prepare and administer the changes handed to them. Conversely, in Simonton’s (1996) study, teachers were satisfied with the provisions of resources.

Teacher professionalism was significantly different between the panels. Many secondary teachers attributed their own attitude and feelings regarding the change as behaviour supportive to the change implementation. Teachers attributed a “positive outlook in the classroom”, and the need to “make education more relevant to the world

the kids live in”, as motivators of the change. Another teacher stated that a “strong sense of obligation as a teacher and a realization of a need to be filled” encouraged implementation. In both panels an underlying feeling of the need for collaboration surfaced in the teachers’ responses. This was documented in the past studies by Bailey (1997) and Parent (1999), Collaboration is linked with opportunities for continuous improvement and collective rather than individual enterprise (Fullan, 1993).

Teachers were vocal in regards to factors impeding implementation. There was a significant difference between panels in regards to the availability of “system resources”. Lack of funding and insufficient in-service training was of great concern to elementary teachers. Parent (1999) specifically identified lack of in-service training as a problem. It was seen by many to “leave teachers in a void wondering about protocol”. In regards to the new report card system, teachers felt that “without all teachers being properly trained on computers, how can the new report card be consistent in interpretation”? Fullan (1991) believed that more time for teacher meetings, planning, skill training, and trying out changes in the classroom is necessary. In regards to response consistency, when asked if resources were provided, not one elementary teacher responded ‘yes’. Interestingly, when asked what impeded implementation of the change, 33.3 percent of elementary teachers did not mention lack of resources. It can only be speculated that teachers could not see the parallels between the two questions.

Reported by numerous studies (Bailey, 1997; Benninger, 1996; Glassford, 1997; King & Peart, 1992; Mullaley, 1986) as one of the greatest hindrances to the implementation of change for teachers was the lack of communication and consultation with them. Many interviews in present and past studies believed that the Ministry of



Education did not actively consult teachers for their opinion or invite teachers to be part of the decision making process. Consequently, negative feelings on the part of the excluded teachers were observed. This finding corresponds to the findings of King and Peart (1992), where it was reported that only 14 percent of Ontario teachers believed they had any meaningful input in the development of provincial policies.

Teachers' attitudes towards professional development have changed significantly in regards to past studies. Bailey (1997) and Benninger (1996) reported an overall positive attitude among secondary teachers. Teachers were provided with opportunities giving them strategies for implementing change in their schools and classrooms. They brainstormed more with colleagues within the school and across Ontario by way of computer network, read more professional articles, attended more courses and workshops to update and broaden their skills. The increase in teacher workload and less preparation time gave teachers less opportunity to prepare for, and understand, the change. According to Fullan (1991), innovation cannot be covered through sporadic workshops or personal development. Teachers, as a whole perceived the change to be too quick, too many, and lacking in substantial research and development. This question illustrates the growing negativity over the past years.

Overall, teachers saw a negative impact on student learning and experiences. Bailey (1997) reported negative responses from teachers in reference to Transition Years program of destreaming grade nine students. Teachers hypothesized that higher ability students were no longer challenged by the subject content and that the lower ability students were frustrated by the subject content. Simonton (1996) noted that teachers felt students were 'more stressed or frustrated'. Teachers conveyed students' complaints

about large class sizes and insufficient time on the equipment, or contact with the teacher.

This finding is consistent with the results of the present study.

Elementary teachers in Palazzolo (1998) and Parent's (1999) studies felt that students were less serious, less interested and less active in their learning. Teachers' comments were consistent with the respondents in the present study. They felt that their students were far too concerned with their evaluation and test results. They seemed to not enjoy school and their attitudes towards teachers and work reflected this dislike. Some teachers attributed student disinterest to their own lack of motivation and energy in their job "...they react to it".

Teacher feelings about the change show a high percentage of negative responses in both panels. This reflected the underlying negative impacts influencing other categories. The secondary panel showed an interesting spread of responses. Six teachers felt 'very positive' about the change, whereas no elementary teachers responded with such enthusiasm. These teachers have been in their profession for a number of years. Their responses to ownership of change (high) indicate that teachers who have some ownership of change are often more accepting of change. Bailey (1997) saw similar responses from secondary teachers. Simonton's (1996) results reflected a more positive outlook (81 percent) towards the change. The change was seen by teachers as having a positive impact on students, regardless of the number of sacrifices the teacher had to make. Even teachers who selected the category '**somewhat negative**' (no teacher subscribed to the category, '**very negative**') assured the interviewer that teachers being "as creative and resilient as they are", would make the change something to feel positive about in the future.

Elementary teachers' responses were negative, corresponding to the studies of Parent (1999) and Palazzolo (1998). Teachers linked the increase in their workload to a decrease in their instructional time and an added workload usually taken home. This in turn cuts into personal time. This increases stress, affects efficiency, and promotes negativity. The lack of time to prepare and understand the change created an overall negative attitude towards the change. In fact, no elementary teachers responded as **'very positive'** as compared with six secondary teachers.

Teacher feelings about change, in the present study, reflect a growing negativism in the teaching profession. It is expected that there will be many more changes to come. It will be necessary for school systems to provide as many positive forces to help with the changes in order to create the right work culture for change. Teachers in the present study were required to modify their teaching methods, approaches and resources, and increase their own competence in order to accommodate the change.

Secondary and elementary teachers were, for the most part, very willing to take on most of the roles and responsibilities for the change, including creating, planning, and/or evaluating the change initiative. The secondary panel responded with more variability than the elementary panel. Their response style corresponded with their feelings towards change mentioned earlier. The teachers responding feeling **'very positive'** about the change were more willing to participate in similar change. One secondary teacher responded "...I find new ideas and plans very exciting, keeps me on my toes". On the contrary, other teachers who responded feeling **'very negative'** were unwilling to participate. One teacher plainly stated, "if it comes from the province we have basically no say, teachers' views are not taken seriously if asked for them at all". This comment is

indicative of the opinions of many teachers, both secondary and elementary. Fullan (1993) argued that if teachers know and understand what the change means, they can develop, implement, and evaluate strategies in accordance to the specific change. This allows teachers to have some kind of ownership of the change that may help make the change more positive. In the present study, teachers experiencing high ownership of the change were more willing to participate in future change and were more positive in their response style. Glassford (1997) reported that when teachers had been given the opportunity to serve on some form of implementation committee, whether within their own school, or at a Board level, their attitudes were more positive. “This involvement in planning brought with it greater exposure to information supporting reforms, and more chance for meaningful input into the implementation”. Glassford concludes that those teachers involved in the planning, implementation, and monitoring of the change reported positive responses.

Menlo (1999) observed that in the study of the CCCRE, cross-culturally, the willingness to participate in future change is related to how the origin of the change is perceived. If the change was perceived as government imposed, as in Canada, the impact was more negative. Teachers having negative feelings about their present change experience were often negative towards future educational change.

Reform movements of any kind have an impact on the lives of teachers. Over the past several years, teachers have been faced with accelerated and intensive efforts towards educational change. The move towards making the educational system more efficient and more accountable has come in the form of many educational change initiatives. These changes have taken on many names such as reform, restructuring,

innovation, and improvement. The purpose of restructuring is the same today as it was in the 1980s, public accountability and more value or performance for the monetary investment (Elmore & Associates, 1990; Peterson et al., 1996; Tyack, 1990).

Educational change has had the same basic structure and formula: designed and mandated by the top (government); and, adapted and implemented by the bottom (teachers). The current top-down approach is not working. The Ontario-wide strike of teachers sent a clear sign of the breakdown in teacher morale. Teachers have stated, more often than not, that they want to be involved in the change process. Researchers have pronounced over and over that if given the opportunity, teachers will play a role in the change process. Climates must exist for teachers to feel safe and comfortable in making change happen in the classroom. This means giving them an outlet to be heard and demonstrating an effort to respond to them. There is an overwhelming need for greater involvement of teachers as partners in educational reform.

Glassford (1997) pointed out three generalizations concerning the successful implementation of educational change. First, the proposed change must be good, and seen to be good, by those who are to implement it. Pendulum shifts in reforms do not work. The announcement by the Ontario Ministry of Education of Bill 160 and the revolt by teachers and supporters, are proof of this. Sincere reformers would do better to emphasize points of continuity between the status quo and their vision of a better future. Second, implementers, in this case teachers, need to be given the proper tools of time, funds, research information, new learning resources, and materials to make the change effective. Involvement on planning committees will often heighten commitment among teachers. Finally, the overall direction and coordination should come from the top-down,

but most importantly, it must give those implementing change, the teacher, the faith and freedom to do what is best for themselves and their students and let them work the change into their classrooms.

No matter what the change, secondary and elementary attitudes are negative. Attitudes are getting more negative over time, according to past studies and educational researchers. This pessimism centres upon the change process. Few educators in the present study were willing to participate in future change projects. They were concerned about the rate of change and the number of changes introduced in the school system. Lack of communication and lack of consultation with teachers were mentioned in many interviews. Teachers felt that they were implementers of mandated change, not initiators. They felt their views were not taken into consideration and that the planners of the change (in most cases the Ontario government) were not interested in their input. Teachers, as a whole, wanted to be involved in the change process. By involving teachers as partners in educational reform, they will take more responsibility for implementation and evaluation of the process, leading to more positive attitudes towards future change initiatives.

### **Delimitations**

The method of sample selection was a limitation of this study. It is known that such non-random samples cannot be considered representative of any population.

Time constraints imposed on the interview schedule by the interviewee and the school timetable also proved to be a limitation. The interview was lengthy and required time for reflection. External time pressures may have contributed to answers being unfinished and/or lacking depth.

Furthermore, some of the participants were known to the interviewers. A bias may have existed because of this. The personal relationships the interviewers had with the participants may have affected their answers.

Finally, this study was limited to south-western Ontario teachers. The results can be generalized to all teachers only to the extent that this sample from the eight south-western Ontario secondary and elementary schools was typical of all other school teachers.

### **Recommendations for Further Research**

This study did not seek definitive answers. It sought to sample the attitudes of secondary and elementary school teachers concerning educational change. In documenting their experiences and present attitudes, the study provides a basis for further research in the area.

This study should be replicated with a larger number of subjects at both the secondary and elementary level. This would permit more generalizeable results. Extending beyond the sixteen schools and outside south-western Ontario would provide for discussion and research.

The results of these comparisons would represent important information to be communicated to educational researchers and policy makers. The results are valuable in informing educational practice through the voices and actions of school teachers in ways that existing research agendas have failed to do (Menlo, 1997).

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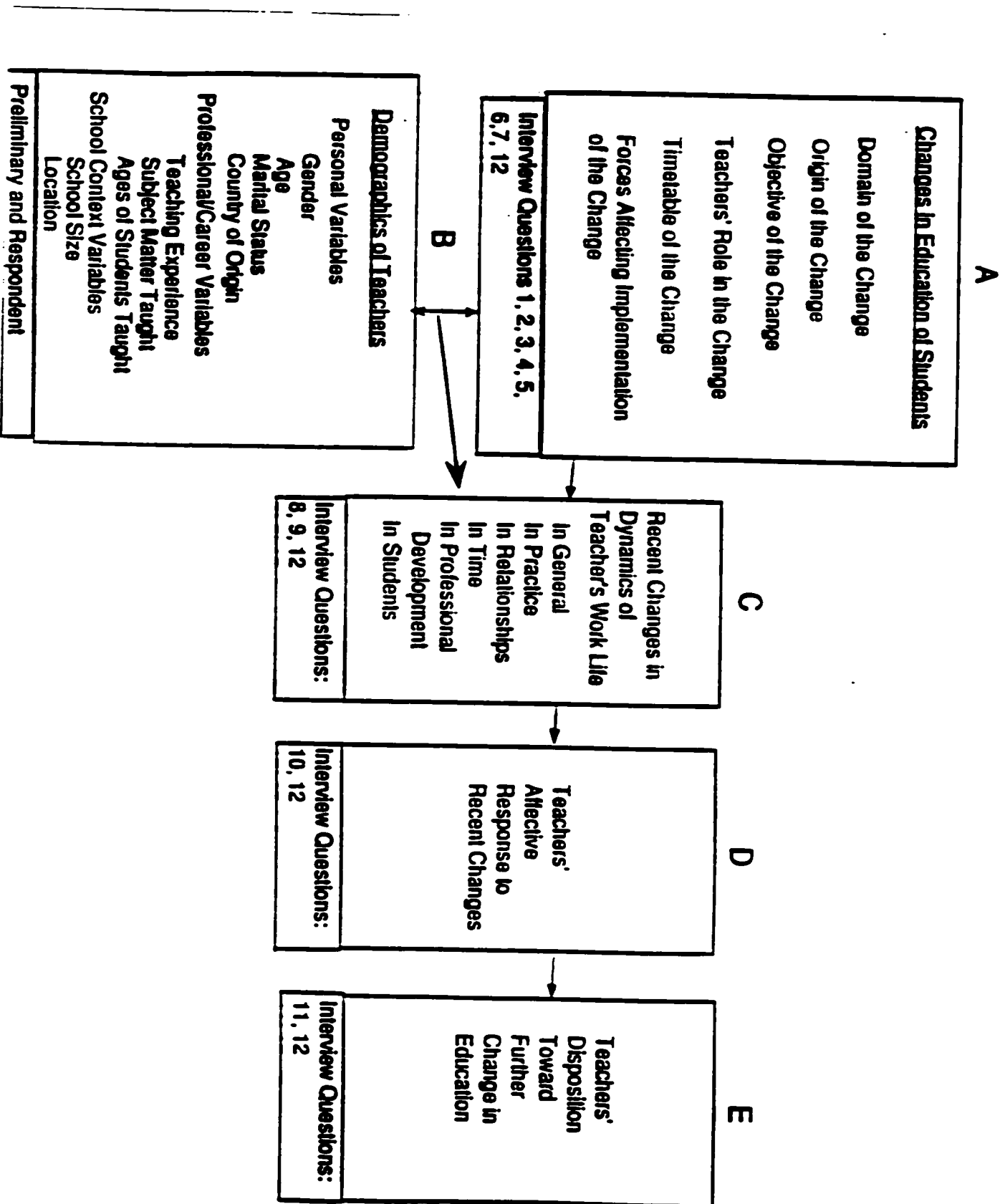
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## APPENDIX A





## APPENDIX B

### INTERVIEW FOR TEACHERS

Developed by the Consortium for Cross-Cultural Research in Education

#### Demographic Information and Interview Questions

##### Preliminary Information

Respondent ID \_\_\_\_\_ Interviewer ID \_\_\_\_\_

Date of Interview \_\_\_\_\_

Name Of School and City/Community in Which School is Located \_\_\_\_\_

Number of Teachers in the School \_\_\_\_\_

Number of Students in the School \_\_\_\_\_

Give a brief introduction to the Consortium and its efforts to increase understanding about the work lives of teachers.

Say that in this present effort we are trying to understand how teachers have been affected by changes in the education of students within the past five years. Clarify that we are interested in changes initiated in national, state, local, school system, school and classroom teacher levels. Explain that we are thinking of the education of students in a broad sense: such things as changes in subject matters; goals and aims; skills or attitudes to be learned; methods of teaching and learning; evaluation of student learning; non-classroom experience such as internships, joint arrangements between school and industry/business, and community service; extra-curricular activities; academic advising. Then indicate that we are not thinking of changes such as school governance, financing, and teacher hiring and lay-offs -- even though we realize these can have indirect effects on the education of students.

Be certain to ask if the person has any questions and take the time to respond and clarify. Add any other introductory information about the project and the interview, and ask if the person has any further questions. If the interview is to be tape-recorded, ask if the person has any objections.

##### Respondent Information

Number of Years Teaching \_\_\_\_\_ Number of Schools Taught At \_\_\_\_\_

Number of Teaching Years in Present School \_\_\_\_\_

Age Range of Students Taught in Present School \_\_\_\_\_

Primary Subject Matter in Present School \_\_\_\_\_

If From Another Country Within the Last 10 Years, What Country (ies) \_\_\_\_\_

Gender \_\_\_\_\_ Age \_\_\_\_\_ Marital Status \_\_\_\_\_

Questions:

1. Within the past five years, what changes in the education of students have affected you personally - positively, negatively, or otherwise - in your work as a teacher in your present school? (Ask for three. Record each of the changes: one after the a. one after the b. and one after the c. Read each one back to the person for accuracy. Be certain they all occurred at the present school.

a.

b.

c.

Which of these changes has had the strongest effect upon your work, the second strongest, and the third strongest? (Go back and place a 1 in front of the change with the strongest effect, a 2 in front of the change with the second strongest effect, and a 3 in front of the change with the third strongest effect.)

CONTINUED ON NEXT PAGE

*Tell the person that the remainder of the questions will only deal with the change having the strongest effect*

2. Where, in your view, did this change originate. For instance, did it originate with a teacher or group of teachers; the school; parent or community group; or local, provincial, or national agency, or something else? (Get explicit, detailed information for later reduction to a code or category.)

3. What did you understand as the main objective of this change?

4. Please tell me about your role in this change. For instance, was this a change which you were required to implement, or were you consulted about it, or were you invited to share in decision-making, or was your agreement sought, or were you or a colleague the initiator, or something else? (Get explicit, detailed information for later reduction to a code or category.)

CONTINUED ON NEXT PAGE

5. Was the change introduced as ready for immediate full implementation, or was it introduced as something to gradually develop over time?

6. What were the things that helped you implement the change? (If anything the person mentions needs to be clarified, ask the person to tell more about it.)

7. What were the things that impeded you in your efforts to implement the change? (If anything the person mentions needs to be clarified, ask the person to tell more about it.)

8. a. How much of your work and work life as a teacher has been affected by the change? (Hand the person scale card #8. Circle her/his answer on the scale below.)

1. *None of it*
2. *A little bit of it*
3. *Some of it*
4. *Much of it*
5. *Almost all of it*
6. *All of it*

CONTINUED ON NEXT PAGE

b. In what ways has change affected the things you do?

c. In what ways has change affected how you go about doing the things you do?

d. In what ways has change affected your relationship with others?

e. In what ways has change affected your use of time at work?

f. In what ways has change affected the extent of your own personal development as an educator?

g. What other aspects of your work as a teacher have been affected by this change?

CONTINUED ON NEXT PAGE

9. How much of your students' learning and experience at school have been affected by the change? Hand the person Scale Card #9. Circle her/his answer on the scale below.)

- a. *None of it*
- A little of it*
- Some of it*
- Much of it*
- Almost all of it*
- All of it*

b. What effects have you observed?

10. How do you feel now about the change? (Hand the person Scale Card 3 10. Circle her/his answer on the scale below.)

- 1. *Very negative*
- 2. *Negative*
- 3. *Somewhat negative*
- 4. *Somewhat positive*
- 5. *Positive*
- 6. *Very Positive*

CONTINUED ON NEXT PAGE

11. a. If, at present time, an educational change were to be introduced into your school, what roles or responsibility would you be willing to take? (Ask the person each of the following and record Yes, No, ?, or it Depends in front of each.)

- \_\_\_ Be a course of influence against the change
- \_\_\_ Be left alone to my own work and priorities
- \_\_\_ Be kept informed about the change
- \_\_\_ Be consulted for my opinion about some of the aspects of the change
- \_\_\_ Be involved in the creation of the idea for the change
- \_\_\_ Be involved in the planning of the change
- \_\_\_ Be involved in the carrying out of the change
- \_\_\_ Be involved in evaluating the results of the change
- \_\_\_ Be involved in evaluating how the change process was carried out
- \_\_\_ Be a member of a coordinating / steering committee for the change

b. Does your willingness or unwillingness to take on any of these roles have anything to do with your own experiences in the change we have been talking about?

Yes \_\_\_\_\_ No \_\_\_\_\_ Not Sure \_\_\_\_\_

c. (If Yes) Could you tell me a little more about this?

(If No or Not Sure) That's interesting. Could you say a little more about this?

CONTINUED ON NEXT PAGE

12. Have any further thoughts or feelings been raised in your mind as a result of these questions and your own response to them?



**APPENDIX C**

**CODING MANUAL**

**FOR CCCRE INTERVIEW RESPONSES**

**A VERSION TO FACILITATE INTERNATIONAL COMPARISONS**

(Published 1/30/97)

**Study on the Influence of Changes in  
Education on Teachers Work Lives**

**Consortium for Cross-Cultural  
Research in Education**

**NOTE:** This version of the coding manual has been constructed to yield information that can be directly compared across the participating countries. The document consists of three parts:

**Part 1** (pages 1 to 8) contains directions for coding the verbal responses of teachers. Use these directions to assign a numeric code to the teacher's response to each question in the interview transcript. These directions are consistent with the previous version of the Coding manual (7/19/95) except that, to ensure comparability, only one response is recordable for some items and an "other" category has been added to account for categories that may have been added by individual countries. Please know that the use of an "other" category in no way intends to diminish the obviously rich and in-depth information in the additional codes, but only to allow for direct comparisons along the lines of the mutually developed and agreed-upon response categories. Each team should carefully keep its added categories and the verbatim responses within them for use in writing their own-country chapters.

**Part 2** (page 9) is a Coding Guide Sheet that explains what numbers to record for each individual teacher, and the order of recording. To ensure accuracy, you may wish to make a copy of this sheet for each interview, then simply copy the codes from the transcripts onto the sheets.

**Part 3** (pages 10 & 11) is a Sample Data Summary Sheet. If you like, you may copy your Coding Guide Sheet scores directly onto this sheet — one teacher interview per line. If you do not have access to a computer, this summary sheet (or a typed version of it) may be sent to Michigan directly by FAX. However, if you do have access to a computer (word processor), we would much prefer that you send us a diskette (preferably 3.5 inch) containing a text file (ASCII code) of your Data Sheet. It is important that this file is saved as text-only (ASCII code) with line breaks (i.e., a physical return character at the end of each line).

**Coding the Cover Page of the Interview.**

The information contained on the cover page of the interview is quite straightforward, and does not require special coding judgments. Complete instructions for recording this information are contained in the first 13 variables of the Coding Guide Sheet on page 9.

**PLEASE NOTE:** For purposes of international comparison, only one response is to be coded for some interview questions. If a response fits more than one of the code categories for a given item, code **ONLY** that response you judge to be primary or most important. However, you should record multiple responses and additional codes for your own within-country analysis. Also, you should plan to use full verbal responses to augment, extend, and enrich international comparisons in publications or presentations.

1 Category Codes for Interview Question 1(a), 1(b), & 1(c): Domain of Change.

Select one code for 1(a) one for 1(b) and one for 1(c). Record as variables 14, 15, & 16)

- 1. Changes in Policy or Practice Regarding Student Assessment or Evaluation.
- 2. Changes in Policy or Practice Regarding Subject Matter.
- 3. Changes in Policy or Practice Regarding Teaching Method.
- 4. Changes in Policy or Practice Regarding both Subject Matter and Teaching Method.
- 5. Changes in Policy or Practice Regarding the Organization or Structure for the Delivery of Education (e.g., age level separations, scheduling of classes, school hours, size of classes).
- 6. Changes in Policy or Practice Regarding Financial Allocations.
- 7. Changes in Policy or Practice Regarding the Kind of Experience Students Have in School.
- 8. Changes in Policy or Practice Regarding Administrative Management of the School or School System.
- 9. Changes in Policy or Practice Regarding Relationships with Parents / Community Groups.
- 10. Other. For international comparisons try to code the response as one of the above. If that is impossible, code the response as Other [10]. For your own internal use in your country, you may wish to code additional categories as 10.11, 12 etc.

## 2 Category Codes for Interview Question 2: Origin of the Change

(Select one code for responses to this question and record it as variable 17)

- 1. Teachers with no assigned school management responsibilities.
- 2. Teachers with some assigned school management responsibilities.
- 3. Administration at the School level.
- 4. Administration at the School system level (district or local/regional authority).
- 5. Students.
- 6. Community: Parents.
- 7. Community: Lay, civic groups or organizations.
- 8. Community: Educational organizations (e.g., subject matter associations, educational issue associations, general professional educator associations, or education unions).
- 9. Local Government Agencies.
- 10. State Government Agencies.
- 11. National Government Agencies.
- 12. Unsure of Origin.
- 13. Other. For international comparisons try to code the response as one of the above. If that is impossible, code the response as Other [13]. For your own internal use in your country, you may wish to code additional categories as 13.14,15, etc.

## 3 Category Codes for Interview Question 3: Objective of the Change

(Select one code for responses to this question and record it as variable 18)

- 1. To improve student academic development
- 2. To improve student person-social development
- 3. To improve efficiency and/or effectiveness of the school's operation
- 4. To improve the quality of teaching
- 5. To reflect a social, political, or cultural change or ideology
- 6. To increase educational accountability
- 7. To improve security and rights of students, faculty, or staff
- 8. To update the content of what is taught
- 9. To improve the student evaluation/assessment system
- 10. Other. For international comparisons try to code the response as one of the above. If that is impossible, code the response as Other [10]. For your own internal use in your country, you may wish to code additional categories as 10.11,12, etc.

## 4 Category Codes for Interview Question 4: Teacher's Role in the Change

(Use one code for responses to this question. If more than one role is mentioned, select the lowest numeric code — i.e., the most influential role — and record it as variable 19.)

1. Initiator.
2. Planner.
3. Shared in decision-making.
4. Implementer.
5. Supporter/Adviser.
6. No role.
7. Resister.

**5 Category Codes for Interview Question 5: Timetable of the Change**

(Select one code for responses to this question and record it as variable 20.)

1. Ready for immediate full implementation.
2. Gradually develop and implement over time.
3. Other. For international comparisons try to code the response as one of the above. If that is impossible, code the response as Other [3]. For your own internal use in your country, you may wish to code additional categories as 3.4.5 etc.

**PLEASE NOTE:** Questions 6, 7, 8(b) to 8(e), and 9(b) are recordable as multiple response categories. These are coded by using "1" to record which categories apply and a "0" to record which categories do not apply. Follow the directions that appear with each question.

**6 Category Codes for Interview Question 6: Forces Helping Implementation**

(For each category below, use a "1" to indicate that the category content was mentioned one or more times in the interview response or a "0" to indicate that it was not mentioned. Record the series of zeroes and ones as the 14-digit "score" for variable 21)

1. Administrative support from the School. (1=Mentioned, 0=Not Mentioned)
2. Administrative support from the School system (district or local/regional authority). (1=Mentioned, 0=Not Mentioned)
3. Financial Resources made available. (1=Mentioned, 0=Not Mentioned)
4. Human Resources made available. (1=Mentioned, 0=Not Mentioned)
5. Physical Resources made available. (1=Mentioned, 0=Not Mentioned)
6. Professional development opportunities. (1=Mentioned, 0=Not Mentioned)
7. Own attitudes/feelings regarding the change. (1=Mentioned, 0=Not Mentioned)
8. Own competence. (1=Mentioned, 0=Not Mentioned)
9. Help from colleagues. (1=Mentioned, 0=Not Mentioned)
10. Student support. (1=Mentioned, 0=Not Mentioned)
11. Having a plan laid out for us. (1=Mentioned, 0=Not Mentioned)
12. Developing a plan by herself/himself. (1=Mentioned, 0=Not Mentioned)
13. Developing a plan with colleagues. (1=Mentioned, 0=Not Mentioned)
14. Other. (1=Mentioned, 0=Not Mentioned) For your own internal use in your country, you may wish to code additional categories as 14, 15 16 etc.

**7 Category Codes for Interview Question 7: Forces Impeding Implementation**

(For each category below, use a "1" to indicate that the category content was mentioned one or more times in the interview response or a "0" to indicate that it was not mentioned. Record the series of zeroes and ones as the 14-digit "score" for variable 22)

1. Lack of time. (1=Mentioned, 0=Not Mentioned)
2. Lack of resources: Financial. (1=Mentioned, 0=Not Mentioned)
3. Lack of resources: Human. (1=Mentioned, 0=Not Mentioned)
4. Lack of resources: Physical. (1=Mentioned, 0=Not Mentioned)
5. Lack of communication/consultation with teachers. (1=Mentioned, 0=Not Mentioned)
6. Opposition from colleagues. (1=Mentioned, 0=Not Mentioned)
7. Lack of inservice training. (1=Mentioned, 0=Not Mentioned)
8. Too many changes at one time. (1=Mentioned, 0=Not Mentioned)

- 9. Lack of administrative support. (1=Mentioned, 0=Not Mentioned)
- 10. Lack of student readiness. (1=Mentioned, 0=Not Mentioned)
- 11. Lack of careful planning. (1=Mentioned, 0=Not Mentioned)
- 12. Lack of self competence. (1=Mentioned, 0=Not Mentioned)
- 13. Opposition from outside the school. (1=Mentioned, 0=Not Mentioned)
- 14. Other. (1=Mentioned, 0=Not Mentioned) For your own internal use in your country, you may wish to code additional categories 14, 15 16 etc.

**8a Category Codes for Interview Question 8a: Impact of the Change on Worklife**  
(Select one code for responses to this question and record it as variable 23)

1=None of it, 2=A little of it, 3=Some of it, 4=Much of it, 5=almost all of it, and 6=All of it.

**8b Category Codes for Questions 8(b) & 8(c) combined: Impact on Things You Do**  
(For each category below, use a "1" to indicate that the category content was mentioned one or more times in the interview response or a "0" to indicate that it was not mentioned. Record the series of zeroes and ones as the 11-digit "score" for variable 24)

- 1. Use teaching methods, approaches, and resources which are different from before. (1=Mentioned, 0=Not Mentioned)
- 2. The content of what I teach has undergone some changes. (1=Mentioned, 0=Not Mentioned)
- 3. More efforts by me to increase own competence. (1=Mentioned, 0=Not Mentioned)
- 4. Need to manage more stress. (1=Mentioned, 0=Not Mentioned)
- 5. Need to give more attention to students, their work, and/or their products. (1=Mentioned, 0=Not Mentioned)
- 6. Own teaching has become more rushed and superficial. (1=Mentioned, 0=Not Mentioned)
- 7. More emphasis on student evaluation/records. (1=Mentioned, 0=Not Mentioned)
- 8. More planning of own work, topics, presentations. (1=Mentioned, 0=Not Mentioned)
- 9. More work on student discipline. (1=Mentioned, 0=Not Mentioned)
- 10. No changes in the things I do or the way I do them. (1=Mentioned, 0=Not Mentioned)
- 11. Other. (1=Mentioned, 0=Not Mentioned) For your own internal use in your country, you may wish to code additional categories as 12, 13, 14, etc.

**8d Category Codes for Interview Question 8(d): Impact of Change on Relationships**

(For each category below, use a "1" to indicate that the category content was mentioned one or more times in the interview response or a "0" to indicate that it was not mentioned. Record the series of zeroes and ones as the 13-digit "score" for variable 25)

- 1. More strained relationships and conflict with colleagues. (1=Mentioned, 0=Not Mentioned)
- 2. More harmonious relationships with colleagues. (1=Mentioned, 0=Not Mentioned)
- 3. Relationships with colleagues are more formal and work-related. (1=Mentioned, 0=Not Mentioned)
- 4. Interaction with fewer colleagues outside my own subject area. (1=Mentioned, 0=Not Mentioned)
- 5. Interaction with more colleagues outside my own subject area. (1=Mentioned, 0=Not Mentioned)
- 6. More support from administration. (1=Mentioned, 0=Not Mentioned)
- 7. Less support from administration. (1=Mentioned, 0=Not Mentioned)
- 8. Relations with students are more strained. (1=Mentioned, 0=Not Mentioned)
- 9. More harmonious relationships with students. (1=Mentioned, 0=Not Mentioned)
- 10. Less time to give to my family/friends. (1=Mentioned, 0=Not Mentioned)
- 11. Greater accountability is expected by administration. (1=Mentioned, 0=Not Mentioned)
- 12. No significant changes in relationships. (1=Mentioned, 0=Not Mentioned)
- 13. Other. (1=Mentioned, 0=Not Mentioned) For your own internal use in your country, you may wish to code additional categories as 13, 14, 15 etc.

**8e Category Codes for Interview Question 8(e): Impact change on Use of Time**

(For each category below, use a "1" to indicate that the category content was mentioned one or more times in the interview response or a "0" to indicate that it was not mentioned. Record the series of zeroes and ones as the 12-digit "score" for variable 26)

1. Use of time is more under own control. (1=Mentioned, 0=Not Mentioned)
2. Use of time is less under own control. (1=Mentioned, 0=Not Mentioned)
3. More prioritizing by me of the things I do. (1=Mentioned, 0=Not Mentioned)
4. Greater self-consciousness of time usage. (1=Mentioned, 0=Not Mentioned)
5. Less time within school hours for lesson preparation and checking student work.
6. More time within school hours for lesson preparation checking student work.
7. Less time to think about personal/career issues. (1=Mentioned, 0=Not Mentioned)
8. More time to think about personal/career issues. (1=Mentioned, 0=Not Mentioned)
9. More time is taken up with meetings. (1=Mentioned, 0=Not Mentioned)
10. Less time is taken up with meetings. (1=Mentioned, 0=Not Mentioned)
11. There has been no significant effect on my use of my time. (1=Mentioned, 0=Not Mentioned)
12. Other. (1=Mentioned, 0=Not Mentioned) For your own internal use in your country, you may wish to code additional categories as 12, 13, 14, etc.

**8f Category Codes for Interview Question 8(f): Impact on Teacher's Professional Development**

(Select one code for responses to this question and record it as variable 27)

1. There has been a positive impact on my professional development. (Includes comments such as "Career progression is considered more seriously by me.")
2. There has been a negative impact on my development. (Includes comments such as, "It is more difficult to keep up well with new developments in my field.")
3. There has been no change regarding my professional development.

**8g Category Codes for Interview Question 8(g).**

(For international comparisons, record these responses under 8(b) through 8(f) using the codes already established.)

**9a Category Codes for Interview Question 9(a): Rate Impact of Change on Students**

(Select one code for responses to this question and record it as variable 28)

1=None of it, 2=A little of it, 3=Some of it, 4=Much of it, 5=almost all of it, and 6 =All of it.

**9b Category Codes for Interview Question 9(b): Nature of the Impact on Students**

(For each category below, use a "1" to indicate that the category content was mentioned one or more times in the interview response or a "0" to indicate that it was not mentioned. Record the series of zeroes and ones as the 12-digit "score" for variable 29)

1. They are more serious, interested, active in their learning. (1=Mentioned, 0=Not Mentioned)
2. They are less serious, interested, active in their learning. (1=Mentioned, 0=Not Mentioned)
3. They are more knowledgeable. (1=Mentioned, 0=Not Mentioned)
4. They are less knowledgeable. (1=Mentioned, 0=Not Mentioned)
5. They are more cooperative. (1=Mentioned, 0=Not Mentioned)
6. They are more competitive. (1=Mentioned, 0=Not Mentioned)
7. They are more skillful in their communication. (1=Mentioned, 0=Not Mentioned)
8. They are less skillful in their communication. (1=Mentioned, 0=Not Mentioned)
9. They seem to have more work than they can manage. (1=Mentioned, 0=Not Mentioned)
10. There are more differences between them. (1=Mentioned, 0=Not Mentioned)

1. Generally, no effects have been observed. (1=Mentioned, 0=Not Mentioned)  
 12. Other. (1=Mentioned, 0=Not Mentioned) For your own internal use in your country, you may wish to code additional categories as 12, 13, 14 etc.

**10 Category Codes for Interview Question 10: How teacher feels about this Change**  
 (Select one code for response to this question and record it as variable 30)

1=Very Negative, 2=Negative, 3=Somewhat negative, 4=Somewhat Positive, 5=Positive, and 6=Very Positive.

**11a Category Codes for Interview Question 11(a): Impact of the Change on Teacher's Disposition Toward Further-Similar Change**

(Code responses to each of the ten roles listed under question 11(a) as 1, 2, or 3. Then record the SUM of the codes as variable 31. For purposes of international comparisons, do NOT include any additional roles.)

Role \_\_\_\_\_ Code Responses As:

- |   |  |
|---|--|
| 1. _____ Be (an) influence against ...          | more willing=1, unsure, it depends, etc.=2, less willing=3 |
| 2. _____ Be left to own work and priorities ... | more willing=1, unsure, it depends, etc.=2, less willing=3 |
| 3. _____ Be kept informed about the change      | less willing=1, unsure, it depends, etc.=2, more willing=3 |
| 4. _____ Be consulted for opinion ...           | less willing=1, unsure, it depends, etc.=2, more willing=3 |
| 5. _____ Be involved in the creation ...        | less willing=1, unsure, it depends, etc.=2, more willing=3 |
| 6. _____ Be involved in the planning ...        | less willing=1, unsure, it depends, etc.=2, more willing=3 |
| 7. _____ Be involved in carrying out            | less willing=1, unsure, it depends, etc.=2, more willing=3 |
| 8. _____ Be involved in evaluating (results)    | less willing=1, unsure, it depends, etc.=2, more willing=3 |
| 9. _____ Be involved in evaluating (process)    | less willing=1, unsure, it depends, etc.=2, more willing=3 |
| 10. _____ Be a member of a coordinating team    | less willing=1, unsure, it depends, etc.=2, more willing=3 |

\_\_\_\_\_ Record the Sum of the codes for the 10 roles as variable 31

**11b Category Codes for Interview Questions 11(b) and 11(c) combined: Impact Of The Change On Teacher's Disposition Toward Further Change in General**

(Select one code for responses to this question and record it as variable 32. Use the content of all responses for within-country analyses.)

1. If 11(b) is "Yes" and 11(c) is a negative effect.
2. If 11(b) is "No" or "Uncertain" or "It depends ..." etc..
3. If 11(b) is "Yes" and 11(c) is a positive effect.

**12 Category Codes for Interview Questions 12: Consciousness Raised by Interview**  
 We will not use responses to this item for international comparisons

## APPENDIX D

### AERA 97: COLLAPSED-CATEGORY CODEBOOK (January 21, 1997) Page 1

The following codes are based on combinations of the original categories defined by the Coding Manual for CCCRE Interview Responses dated 12/6/96. Please see that manual for the definitions of the original code categories. The bold-face labels in the items below correspond to the vertically printed variable names in the header of the document entitled "Data Listing for New Collapsed Variables" which immediately follows this codebook.

Q1a.Collapsd version of Question 1 (first choice). **Domain of Change.** The collapse rule is shown below. All teams agreed that any Document 1 responses coded as 10 (Other) in the Q1A column would be distributed among the new codes if at all possible.

<u>Collapsed Category Titles</u>	<u>Original Code Categories Included</u>
1. School System Management	6, 8, 9
2. Teaching	2, 3, 4
3. Learning Outcomes	1
4. Student Experience	5, 7

Q1b.Collapsd version of Question 1 (second choice). **Domain of Change.** The collapse rule is the same as for 1A above.

Q1c.Collapsd version of Question 1 (third choice). **Domain of Change.** The collapse rule is the same as for 1A above.

Q2.Collapsd version of Question 2. **Origin of Change.** The collapse rule is shown below. For international comparisons category 12 (Unsure of origin) is treated as missing data. All teams agreed that any Document 1 responses coded as 13 (Other) would be distributed among the new codes if at all possible.

<u>Collapsed Category Titles</u>	<u>Original Code Categories Included</u>
1. Teacher Initiated	1, 2
2. School Initiated	3, 4, 5
3. Community Initiated	6, 7, 8
4. Government Initiated	9, 10, 11

Q3.Collapsd version of Question 3. **Objective of Change.** The collapse rule is shown below. All teams agreed that any Document 1 responses coded as 10 (Other) would be distributed among the new codes if at all possible.

<u>Collapsed Category Titles</u>	<u>Original Code Categories Included</u>
1. Improve Education	1, 4, 8, 9
2. Accountability/Efficiency	3, 6
3. Social Objectives	2, 5, 7

Q4.Collapsd version of Question 4. **Teacher Role in Change.** This variable will be

converted to a scale by reversing the category numbers so that "resister"=1 and "initiator"=7 and then relabeling the variable as "ownership".

**Q5. Collapsed version of Question 5. Timetable for Change.** The collapse rule is shown below. It was agreed that any responses previously coded as 3 (Other) would be considered gradual since they were definitely not immediate. Do not recode, this was done automatically.

<u>Collapsed Category Titles</u>	<u>Original Code Categories Included</u>
1. Use immediately	1
2. Use gradually	2, 3

**Q6. Collapsed version of Question 6. Forces Helping Implementation** This is the first of a series of questions that permit multiple responses. Each category in this type of question is represented by a dichotomous variable indicating whether the category was present in the response being coded (0/1=yes/no). Each new "collapsed" variable is derived from a combination of the original-code variables. An individual teacher's score on the new variable is a "1" if there is a "1" in ANY of the original dichotomous variables. The multiple-response collapse rule is shown below. All teams agreed that any Document 1 responses coded as a "1" in variable Q6\_14 (Other) would be distributed among the new codes if at all possible.

<u>Collapsed Variable Titles</u>	<u>Original-Code Variables Included</u>
Q6_1. Resources Provided	Q6_03, Q6_04, Q6_05
Q6_2. Support Provided	Q6_01, Q6_02, Q6_06, Q6_09, Q6_10, Q6_11
Q6_3. Professionalism	Q6_07, Q6_08, Q6_12, Q6_13

**Q7. Collapsed version of Question 7. Forces Impeding Implementation.** The multiple-response collapse rule is shown below. All teams agreed that any Document 1 responses coded as a "1" in variable Q7\_14 (Other) would be distributed among the new codes if at all possible.

<u>Collapsed Variable Titles</u>	<u>Original-Code Variables Included</u>
Q7_1. System Resources	Q7_02, Q7_03, Q7_04, Q7_07, Q7_09
Q7_2. Personal Resources	Q7_01, Q7_12
Q7_3. Implementation and/or Decision-Making Process	Q7_05, Q7_08, Q7_10, Q7_11
Q7_4. Opposition of Others	Q7_06, Q7_13

**Q8a. Question 8(a). Impact of Change on Worklife.** Both the old and new versions of 8(a) are scale variables with values ranging from 1="none of it" to 6="all of it".

**Q8bc. Collapsed version of Question 8(b)&(c). Impact on Things You Do.** The multiple-



response collapse rule is shown below. All teams agreed that any Document 1 responses coded as a "1" in variable Q8B11 (Other) would be distributed among the new codes if at all possible.

<u>Collapsed Variable Titles</u>	<u>Original-Code Variables Included</u>
Q8B_1. Interactive Teaching	Q8B_01. Q8B_02. Q8B_05. Q8B_09
Q8B_2. Pre/Post-Teaching	Q8B_07. Q8B_08
Q8B_3. Teacher Coping	Q8B_03. Q8B_04. Q8B_06
Q8B_4. No Change	Q8B_12

**Q8d. Collapsed version of Question 8(d). Impact on Relationships.** The multiple-response collapse rule is shown below. All teams agreed that any Document 1 responses coded as a "1" in variable Q8D13 (Other) would be distributed among the new codes if at all possible.

<u>Collapsed Variable Titles</u>	<u>Original-Code Variables Included</u>
Q8D_1. More Negative	Q8D_01. Q8D_03. Q8D_04. Q8D_07. Q8D_08. Q8D_10. Q8D_11
Q8D_2. No Change	Q8D_12
Q8D_3. More Positive	Q8D_02. Q8D_05. Q8D_06. Q8D_09

**Q8e. Collapsed version of Question 8(e). Impact on Use of Time.** The multiple-response collapse rule is shown below. All teams agreed that any Document 1 responses coded as a "1" in variable Q8E12 (Other) would be distributed among the new codes if at all possible.

<u>Collapsed Variable Titles</u>	<u>Original-Code Variables Included</u>
Q8E_1. Poorer Time Use	Q8E_02. Q8E_05. Q8E_07. Q8E_09
Q8E_2. No Change Time Use	Q8E_11
Q8E_3. More Prioritizing	Q8E_03
Q8E_4. Better Time Use	Q8E_01. Q8E_04. Q8E_06. Q8E_08. Q8E_10

**Q8f. New version of Question 8(f). Impact on Teacher's Professional Development.** To transform the old version of 8(f) to a scale variable with higher values more positive, the original codes were automatically recoded as follows.

<u>New Category Titles</u>	<u>Original Code Categories Included</u>
1. Negative Effect	2
2. No Effect	3
3. Positive Effect	1

**Q9a. New version of Question 9(a). Impact of Change on Students.** Both the old and new versions of 9(a) are scale variables with values ranging from 1="none of it" to 6="all of it".

Q9b. Collapsed version of Question 9(b). Nature of Impact on Students. The multiple-response collapse rule is shown below. All teams agreed that any Document 1 responses coded as a "1" in variable Q9B12 (Other) would be distributed among the new codes if at all possible.

<u>Collapsed Variable Titles</u>	<u>Original-Code Variables Included</u>
Q9B_1. Negative Impact on S's	Q9B_02, Q9B_04, Q9B_06, Q9B_08, Q9B_09
Q9B_2. No Impact on S's	Q9B_11
Q9B_3. More Diff. Among S's	Q9B_10
Q9B_4. Positive Impact on S's	Q9B_01, Q9B_03, Q9B_05, Q9B_07

Q10. New version of Question 10. How Teacher Feels About Change. Both the old and new versions of 10 are scale variables with values ranging from 1="very negative" to 6="very positive".

Q11a. New version of Question 11(a). Impact on Participation in Similar Change. Both the old and new versions of 11(a) are scale variables with values ranging from 10 to 30 as calculated by the rules in the original coding manual.

Q11b. New version of Question 11(b). Impact on Participation in Any Change. Both the old and new versions of 11(b) are scale variables with values ranging from 1="negative effect" to 3="positive effect".

## APPENDIX E

### NON SIGNIFICANT RESULTS ( $p > .05$ )

#### Perceived Originator of Change

variable		secondary	elementary
Perceived originator of the	<b>Classroom teacher</b>	<b>5</b> <b>2.5%</b>	<b>0</b>
	<b>School Administration</b>	<b>2</b> <b>5.0%</b>	<b>0</b>
	<b>District Admin.</b>	<b>6</b> <b>15.0%</b>	<b>11</b> <b>29.7%</b>
	<b>Parents/Groups</b>	<b>5</b> <b>12.5%</b>	<b>7</b> <b>18.9%</b>
	<b>Community Orgs.</b>	<b>3</b> <b>7.5%</b>	<b>0</b>
	<b>Educational Orgs.</b>	<b>1</b> <b>2.5%</b>	<b>0</b>
	<b>State Government</b>	<b>22</b> <b>55%</b>	<b>17</b> <b>45.9%</b>
	<b>National Government</b>	<b>0</b>	<b>2</b> <b>5.4%</b>
		<b>40</b> <b>100 %</b>	<b>37</b> <b>100 %</b>

**Chi-Square (7) = 11.345,  $p < .124$**

#### FORCES HELPING THE EDUCATORS IMPLEMENT CHANGE

variable		secondary	elementary
Support provided	<b>No</b>	<b>6</b> <b>15.0 %</b>	<b>6</b> <b>16.2%</b>
	<b>Yes</b>	<b>34</b> <b>85.0%</b>	<b>31</b> <b>83.8%</b>
		<b>40</b> <b>100 %</b>	<b>37</b> <b>100 %</b>

**Chi-Square (1) = .022,  $p < .883$**

**FORCES IMPEDING IMPLEMENTATION**

variable		secondary	elementary
Personal resources	No	29 72.5 %	21 56.8 %
	Yes	11 27.5 %	16 43.2 %
		40 100 %	37 100 %
<b>Chi-Square (1) = 2.092, <math>p &lt; .148</math></b>			

variable		secondary	elementary
Implementation and/or Decision-making Process	No	18 45.0 %	18 48.6 %
	Yes	22 55.0 %	19 51.4 %
		40 100 %	37 100 %
<b>Chi-Square (1) = .103, <math>p &lt; .749</math></b>			

variable		secondary	elementary
Opposition of Others	No	26 65.0 %	31 83.8 %
	Yes	14 35.0 %	6 16.2 %
		40 100 %	37 100 %
<b>Chi-Square (1) = 3.527, <math>p &lt; .060</math></b>			

**IMPACT ON THINGS YOU DO**

variable		secondary	elementary
Interactive teaching	No	7 17.5 %	11 29.7 %
	Yes	33 82.5 %	26 70.3 %
		40 100 %	37 100 %

**Chi-Square (1) = 1.605,  $p < .205$**

variable		secondary	elementary
Pre/Post Teaching	No	19 47.5%	18 48.6 %
	Yes	21 52.5%	19 51.4 %
		40 100 %	37 100 %

**Chi-Square (1) = .010,  $p < .920$**

variable		secondary	elementary
Teacher Coping	No	18 45.0%	25 67.6 %
	Yes	22 55.0%	12 32.4%
		40 100 %	37 100 %

**Chi-Square (1) = 3.970,  $p < .056$**

**IMPACT ON RELATIONSHIPS**

variable		secondary	elementary
More Negative	No	16	12
		40.0%	32.4%
	Yes	24	25
		60.0 %	67.6 %
		40	37
		100 %	100 %

**Chi-Square (1) = .476, p< .490**

variable		secondary	elementary
No Change	No	37	34
		92.5 %	91.9 %
	Yes	3	3
		7.5 %	8.1 %
		<hr/> 40	<hr/> 37
		100 %	100 %

**Chi-Square (1) = .010, p< .921**

variable		secondary	elementary
More Positive	No	22	21
		55.0%	56.8 %
	Yes	18	16
		45.0 %	42.7 %
		<hr/> 40	<hr/> 37
		100 %	100 %

**Chi-Square (1) = 1.181, p< .554**

IMPACT ON USE OF TIME

variable		secondary	elementary
Poorer use of Time	No	10	11
		25.0 %	29.7 %
	Yes	30	26
		75.0 %	70.3%
		40	37
	100 %	100 %	
Chi-Square (1) = .217, p< .642			

variable		secondary	elementary
No change in use of Time	No	38 95.0 %	34 91.9 %
	Yes	2 5.0 %	3 8.1 %
		<hr/> 40 100 %	<hr/> 37 100 %
Chi-Square (1) = .306, p< .580			

variable		secondary	elementary
More Prioritizing	No	30 75.0 %	32 86.5 %
	Yes	10 25.0 %	5 13.5 %
		<hr/> 40 100 %	<hr/> 37 100 %
Chi-Square (1) = 1.617, p< .204			

variable		secondary	elementary
Better use of Time	No	27 67.5 %	27 73.0 %
	Yes	13 32.5 %	10 27.0 %
		40 100 %	37 100 %
Chi-Square (1) = 1.613, p< .446			

#### NATURE OF IMPACT ON STUDENTS

variable		secondary	elementary
No Impact	No	38 95.0 %	37 100 %
	Yes	2 5.0 %	0
		40 100 %	37 100 %
Chi-Square (1) = 1.899, p< .168			

variable		secondary	elementary
More differences	No	31 77.5 %	33 89.2 %
	Yes	9 22.5 %	4 10.8 %
		40 100 %	37 100 %
Chi-Square (1) = 1.042, p< .357			



variable		secondary	elementary
Positive Impact on Students	No	31 77.5 %	33 89.2 %
	Yes	9 22.5 %	4 10.8 %
		40 100 %	37 100 %
Chi-Square (1) =, p< .			

IMPACT OF CHANGE ON WILLINGNESS TO PARTICIPATE IN ANY FUTURE CHANGES

variable		secondary	elementary
Impact of change on willingness to participate in any future change	Negative Impact	20	24
		50.0 %	64.9 %
	No Impact	15	6
		37.5 %	16.2 %
	Positive Impact	5	7
		12.5 %	18.9 %
	<hr/> 40	<hr/> 37	
	100 %	100 %	
Chi-Square (2) = 4.444, p< .108			

## **VITA AUCTORIS**

Diane Schertzer was born on January 2, 1972 in Windsor, Ontario. She graduated from Belle River High School in 1991. She received her Bachelor of Arts, majoring in History, from the University of Windsor in 1994. She attended the Toronto Montessori Institute in Richmond Hill, Ontario, receiving a Primary Diploma and Elementary Diploma in 1995. She accepted an elementary teaching position at the Montessori School of Northern Virginia in Annadale, Virginia, where she taught for two years. Diane moved back to Windsor to complete a Master of Education degree in Administrative Studies at the University of Windsor.