

**SCHOOL CLIMATE CHANGE
DUE TO
SEMESTERING**

by

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Submitted in partial fulfillment of the
requirements for the degree of
Master of Arts in Education

Faculty of Education
Saint Mary's University
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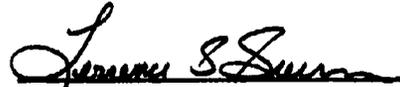
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ABSTRACT

SCHOOL CLIMATE CHANGE DUE TO SEMESTERING

The purpose of this study was to describe and explain any climate change of Duncan MacMillan High School as a result of a change to a semester system. Twenty teachers (staff 27) who had experienced a non-semestered year and a semestered year (2 consecutive years) were selected. Data were collected by means of a 55 item questionnaire on teachers perception of any change as a result of the adoption of a semester plan. In addition, information was obtained through informal interviews with 4 of the respondents. The variables which were rooted in the literature were used to build clusters of questions relating to any perceived change as a result of adopting semestering. Data were analyzed using descriptive statistics to delineate the responses and comparative statistics to describe relationships between selected control variables and questions.

The findings from this study show a moderately positive contribution to school climate at Duncan MacMillan High School as a result of semestering particularly in the areas of instructional effectiveness and student academic orientation. The qualitative material revealed that there had been no change in the school climate as a result of semestering and that any perceived change was not a direct result of semestering. Quantitative findings indicated that control variables of staff sex, teaching license level and years teaching experience at Duncan MacMillan High School were significantly related to staff perceptions as a result of a change to semestering.

Consequently, it can be concluded that the adoption of semestering resulted in a small, but, significantly positive change in the school climate at Duncan MacMillan High School.

Derek W. Bridgehouse

June 1994

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CHAPTER I
OVERVIEW AND PURPOSE OF THE STUDY
INTRODUCTION

As educators move from one school to another they are struck by the differences in the schools' 'climate'. Halpin notes you don't have to be in a school very long before you feel or encounter the atmosphere of a place (Wallich, 1980).

Recognizing that schools differ markedly, people are quick to sense or "feel" the individuality of a school (Wallich, 1980). Advocates of educational reform often describe this individuality of schools in terms of 'climate'.

The distinguishing factor in a schools' climate comes from observations of the behaviour of people in the schools. Teachers in one school could appear to be relaxed and at ease with one another seeming competent and generating a sense of confidence (Wallich, 1980). In another school, tension could be present in the staff's behaviour and an on edge feeling can be sensed (Wallich, 1980). A school with high levels of disorder, low morale and poor co-operation between teachers and administration is probably not a good place to learn or teach. Such a school is bound to have a poor public image. In some schools teachers and students work together in a spirit of harmony while in others there are fragmented cliques without productive goals.

The climate is an end product of the relationships that exist among the schools' stakeholders, i.e., teachers, students, administration and parents, as they work to balance the organization and individual dimensions of the school climate (Wallich, 1980). School climate is seen as the relatively enduring patterns of shared perceptions (by teachers, students and parents) of the characteristics of the school i.e., "What people say" (Keefe and Kelly, 1990).

Positive school climate does not occur naturally. Planning and leadership are necessary components to improve climate. Administrators need to: a) be sensitive to the

internal climate, b) diagnose problems, c) implement change and d) monitor progress as changes are instituted (Kelly, 1980).

This phenomenon led to a study of educational change in order to better understand what components are necessary to improve or maintain the climate.

In Halifax County-Bedford District School Board, semestering was something of an anomaly. In the District which contains nine high schools, four are semestered. Consequently, semestering is seen as an experiment to be evaluated and compared to the present traditional organization of the school.

PURPOSE OF THE STUDY

The purpose of this study is to describe and explain any climate change of Duncan MacMillan High School as a result of a change to a semestered system.

Can this research document in concrete, useful terms what impact semestering will have on the school climate of D.M.H.S.?

In this study the relationship will be explored between school climate of D.M.H.S. and perceptions of teachers as they pertain to assumed school climate determinants.

Two questions will guide the present study.

- (1) Do teachers perceive school climate to be more positive as a result of a change to a semester system?
- (2) Has a change to semestering contributed to the creation and/or maintenance of a positive school climate?

SIGNIFICANCE OF THE STUDY

Positive school climate does not occur naturally. Research suggests that the majority of teachers tend to view semestering positively. This concern led me to undertake

a study of educational change in order to better understand what components are necessary to improve or maintain the school climate of Duncan MacMillan High School. This researcher thought it useful to explore the relationship between school climate and semestering in a local context, as a result of Duncan MacMillan High School adopting and implementing this timetable innovation.

It is within this context that this study will be conducted. It will focus on 1) whether climate changes occurred within the school; 2) teachers reactions/perceptions to any change and 3) an examination of the congruence of the study's findings with the literature on school climate.

RATIONALE

Duncan MacMillan High School (D.M.H.S.) is a rural junior - senior high school (7 -12) with a staff of 25 teachers and 340 students of whom 150 are in the high school. D.M.H.S. adopted semestering to its grade 10 - 12 and partial semestering to its grade 7 - 9. It was implemented at the high school in response to a need. It would allow students a wider selection of course offerings so they could have the same advantage as students in the larger high schools within the District.

The staff formed a Semestering Committee to research the concept and to examine what was involved in implementing a semester-system. In the spring of 1991 after maneuvering between factions for and against reorganization the staff and administration decided to adopt semestering in the Fall of that same year.

In permitting the school (D.M.H.S.) to semester, the Board required the school to in-service its staff and monitor the program over a period of two years. The school administration began immediately working out the logistics and schedules for implementing the system in the school.

As a teacher at D.M.H.S., I was part of the implementation of this organizational change.

Being intimately associated with the system I felt strongly that this change warranted further investigation to find if it would effect the school climate, enhance student-teacher relations, promote good morale and ensure positive learning and working conditions.

Although current research suggests that there is a positive relationship between school climate and semestering, it is logical to explore the determinants of climate in the school in a local context and the apparent atmosphere that exists in the school as a result of adopting and implementing semestering.

LIMITATIONS

It is assumed that an organizational change in the form of semestering may not be the only factor that is conducive to a positive learning environment, but it is an influence that is related to the development of a positive school climate. While this inference is grounded in the research literature, it may not always be the case.

Since this study was limited to one school staff, it would not be realistic to generalize the results to a larger population. This staff, however, which was fairly experienced, averaged twenty years teaching experience in the same building and approximately fifty percent of whom were married to each other.

Within the reality of the school setting a number of conditions may have affected the results. This study is limited to the confines of Duncan MacMillan High School. The perceived changes or advantages or disadvantages of semestering may not be common to different schools. Therefore, its applicability to other high schools in or out of the Halifax County-Bedford District School Board cannot be assumed.

A third limitation in this study is the dependence on a survey that is a 'self-perceptionnaire' and therefore limited by the variables linked to this category of data

collection. This survey instrument itself would have to be validated through testing in many schools.

The time of testing may have been a limitation, however, this investigator chose a time that was believed to be advantageous in the time table for teachers where they could be addressed formally regarding the questionnaire.

DELIMITATIONS

This study was concerned only with those teachers at Duncan MacMillan High School who had experienced a semestered year compared to a non-semestered year. It was anticipated that the practical implications from the implementation of this organizational change will be relevant to the Halifax County Bedford District School Board for future implementation.

The data for this study were gathered from teachers during a staff meeting prior to the Christmas Break in December 1992. It is not known if the time of testing would have affected the data.

Information was obtained from a questionnaire administered to teachers and a thirty minute interview with a representative sample of the group. The interview format (Appendix A) and the questionnaire (Appendix B) were reviewed prior to the data collection in the Winter 1992-93. The questions for the questionnaire and climate categories were developed in relation to information needed to describe/explain any climate change at Duncan MacMillan High School. They were also grounded in the research literature.

CHAPTER II
REVIEW OF THE RELATED LITERATURE
THE SEMESTER SYSTEM

In most cases where a school system has adopted semestering as a form of school organization for one of its secondary schools, some sort of evaluation is considered. Such evaluation is usually carried out to determine what changes have taken place under the semester system. It is difficult to determine from studies of these evaluations whether certain changes or perceived advantages or disadvantages are common to different schools.

The basic feature of the semester system is that the school year is divided into two semesters (September to January and February to June). There are variations in how the system operates, there is full credit, half-credit and mixed models involving semestered and non-semestered organizations in the same school. King et al., (1977) offer the following points regarding semestering; students normally take three or four courses, each for a full credit each semester. Students may enter programs at the beginning of each semester, in September and February, and leave after successful completion of courses or graduate at two points, in January and June. There are two main categories - four period and five period day; in both types, each course a student takes is offered each day for a semester. Courses may be rolled over a number of days and a variety of period lengths from 70 - 80 minutes may be used.

Stennett (1982) states that in almost all surveys taken the majority of teachers and students tend to view the full credit semester system positively. Stennett (1982) groups the advantages and disadvantages of semestering into six categories (teachers, students, instructional, interpersonal, overall effectiveness and administration).

TEACHERS

Advantages -

1. Teachers are better prepared and lessons are taught better.

Disadvantages -

1. Teachers have to work harder in a semestered school. Longer periods require more in-depth study and more preparation time.
2. It is difficult for all teachers in all subjects to use the longer period effectively.
3. Testing and evaluation take more of the teachers time.
4. Teachers' overall workload is increased, especially at the end of the first semester.

STUDENTS**Advantages -**

1. Students find it easier to manage four subjects than eight.
2. Students in difficulty can get more attention from their teachers.
3. Less time is required to get a diploma.
4. Students can take more credits if they wish.
5. Students can move to the work force more easily because some can enter in February.
6. Students have access to a wider variety of courses.
7. Students have less difficulty arranging a special time-table.

Disadvantages -

1. It is more difficult for a student to transfer into or out of a semestered school.
2. Slower learning students have more difficulty with longer periods.

INSTRUCTIONAL**Advantages -**

1. Increased period length gives a better balance between instruction and practice.
2. Skills subjects are taught more effectively because students have the opportunity for daily practice.

Disadvantages -

1. Forgetting during a semester gap in cumulative subjects (e.g. Mathematics and French) and skill subject (e.g. typing) may be a problem.

2. **Semestering involves a loss of instructional time, which, in turn, tends to restrict the amount of material covered.**
3. **Semestering requires that courses be re-designed.**
4. **Subjects requiring reflection and extensive reading (e.g. literature, history) are more effectively taught in the 10- month system.**
5. **Field trips and extra-curricular activities may be sacrificed because of time pressures. (Some argue that semestering encourages field trips.)**
6. **In physical education, semestering may lead to an imbalance in 'seasonal activities'.**
7. **It is not possible to hold a large group of students together over the extended time required for a successful music program (e.g. band) in a semestered school.**

INTERPERSONAL

Advantages -

1. **There is more opportunity for more capable students to help the less capable.**
2. **There are fewer discipline problems in semestered schools.**
3. **School spirit and student morale are better in semestered schools.**
4. **Teachers get to know students better and more quickly.**

OVERALL EFFECTIVENESS

Advantages -

1. **The drop-out rate is reduced.**
2. **More drop-outs return to complete their studies.**
3. **The semester system makes better use of specialized equipment, reference books, shop facilities, etc.**
4. **The number of text books is reduced by 50% and related storage problems are lessened.**
5. **Fewer classrooms are required to operate a semestered school.**
6. **Student and teacher absences are less frequent.**

Disadvantages -

1. A prolonged absence by a student or teacher can have more serious effects in a semestered school.

ADMINISTRATIVE**Advantages -**

1. It is easier to time-table technical subjects.

Disadvantages -

1. Increased administrative time is required because of doubled registration, time-tabling, examination scheduling, etc.
2. The workload of counsellors is greatly increased.
3. In a mix of semestered and non-semestered schools, the semestered schools may experience 'second semester pressure' from students from non-semestered schools.

A review of the literature indicates that the most current work has researchers attempting to assess the effects of semestering on educational outcomes (e.g. student achievement Raphael and Wahlstrom, 1986; and drop-out rates Sharman, 1990). Robinson and Killip (1991) have organized research on semestering, from the perspective of teachers; student views and instructional \ educational issues.

TEACHER PERSPECTIVE

Research conducted in the 1970's (King et al., 1977), indicated that teachers generally had a positive view of semestering. Teachers indicated that adjustments were needed in instructional strategies with the longer time periods in full credit semestering and teachers in some areas (math, science, french) expressed some concern with the coverage and retention of material (Raphael, 1986).

STUDENT VIEWS

Ross (1977) noted that semestering permitted greater flexibility, and choice available to students, better interpersonal relations between students and teachers, and the greater likelihood of teachers and students getting to know each other better.

The results from past studies are mixed on the effects of the semester system on student interest, satisfaction and motivation. Raphael and Wahlstrom (1986) report better attitudes on the part of the students in math in a semestered system, while Sharman (1989) reports no relationship between type of school system and student satisfaction.

INSTRUCTIONAL \ EDUCATIONAL ISSUES

The research to date presents a very mixed picture. Studies can be cited to support the view of that there is no relationship between school organization and achievement (Ross, 1977 and Sharman, 1989).

The argument seems to be that the longer periods can entail problems for student concentration particularly dealing with technical subjects and that modifying instructional strategies to maintain student attention and interest result in less material covered. Skills requiring frequent practice i.e., music, language and computer key-boarding may suffer in a semestered system although the longer class periods do mean that practice sessions can reinforce material. That students in a semester system may forget subject matter or skills may deteriorate has been a concern expressed by teachers.

In a major study investigating the impact of semestering on high schools in Ontario, Davis et al., (1977) assessed the effects of semestering versus non-semestering upon the intellectual, social and emotional growth of students. Davis et al.s', (1977) major findings from this intensive study are as follows:

1. there was more variety in classroom methodology in semestered schools versus non-semestered.
2. students in semestered schools experience more student involvement in classroom activities and greater student participation in classroom decision making versus non-semestered.
3. interpersonal relationships between students and teachers were more positive in semestered schools versus non-semestered.

4. semestered schools had no higher effect on students achievement versus non-semestered.
5. in semestered schools, students and teacher absence had a more detrimental effect on student achievement versus non-semestered.

A recent case study evaluating semestering (Ireland et al., 1989) at Lynwood High School was carried out by the Carleton Board of Education. All teachers and students and a sampling of parents completed a questionnaire about semestering.

Eighty-two percent of all respondents expressed general satisfaction with semestering. Students (60%) and parents (58%) felt there were more advantages for students in semestering while forty-five percent of teachers thought there were more disadvantages. A consistently high proportion of teachers felt that it worked well in more subject areas.

With fewer subjects, students (80%) and parents (75%) felt that students were able to do better work. Teachers (45%) were less certain. Teachers (66%) believed that they were able to vary their approaches and strategies more in semestered courses. Respondents were divided as to whether students produced better work as a result of the longer periods: students and parents thought they did; teachers thought they did not.

Some aspects of semestering were identified as disadvantages. Fifty-eight percent of students felt 'homework had increased as a result of semestering'. Forty-three percent of teachers thought it had stayed the same or were not sure. Absence from class was seen to be a problem and most respondents felt it was harder to catch up on missed work in a semestered situation. Students were divided as to whether they did more in depth work in semestered courses. Teachers felt that 'there never seemed to be enough time' to finish the course, there was a sense of rushed work, and major assignments occurred too frequently.

Administration at Duncan MacMillan High School surveyed students, teachers and parents at the end of the first semester (January, 1992) for their reactions to the changes

to a semestered system. Ninety-one percent of students were either satisfied or very satisfied. Seventy-seven percent of teachers were satisfied or very satisfied. Although teachers found it advantageous for students, they found they faced a period of adjustment and adaptation themselves. Of parents sampled, an 80% satisfaction level resulted, based on a return of more than half of mailed questionnaires.

Ninety percent of senior high students successfully completed three full credits during the first semester and 56 % actually completed four. Administration credits the semester system for allowing students to focus on fewer courses while providing a wider variety of choices.

On the whole, administration found the feedback to be generally favourable with respect to satisfaction level through the adoption and implementation of semestering. Since this survey was administered at the end of one semester, administration were in agreement that it was difficult to see the negatives and realized that more time is warranted for an accurate assessment of the change to semestering.

PLANNED CHANGE

When educational innovation occurs in schools it involves organizational change. However, this change occurs only to the extent that there is an adjustment in the behaviour of individuals (Gross et al., 1971). Ideally, change should be seen as a stage in a progression toward some ultimate goal, a progression that retains some sense of stability and security for teachers, students and parents (King et al., 1975).

Most research studies on planned change emphasize the difficulties in implementing innovations and keeping them in place after the initial attention and support declines (Fullan, 1982). Fullan emphasizes that change is a process which takes place over a considerable period of time (more than one school year) and includes phases of adoption or initiation, implementation, continuation and outcome.

Studies have revealed that different combinations of factors affect each phase of the change process and that adopting a change is quite different from putting it into action or implementing it. Fullan (1982) describes implementation as the actual use of putting into practice of a particular change. Fullan differentiates between adoption and implementation. Adoption is the decision to use a new and innovative program, while implementation goes beyond this decision and deals with the logistics of putting the innovation into place. Further, he contends that there are five major components to implementation that include such things as institutional change which may involve the infusion of new materials; change roles of individuals; increased knowledge and understanding; and most importantly the 'internalizing' of the innovation-commitment.

In a review of the literature on change, some explanations to the difficulty in implementing change are noted: poor administrative planning, heavy workload on teachers, insufficient time to learn new practices to innovation and the need for the principal to be a more dynamic leader. In the past, studies have shown that the implementation of educational innovations were met with resistance due to poor planning and execution (Gross et al., 1971 and Hall et al., 1984).

Fullan (1982) points out that change depends on what teachers do and think. Research indicates that the quality of the working relationships among teachers is strongly related to the implementation of planned change (Corbett et al., 1987). Administrative planning and time for learning are all important because of how they affect teachers willingness to try or ability to carry out a new educational innovation.

Recent research has intended to help administration plan, implement and routinize change more rationally and in the process teachers seem to be more tolerant and cooperative as long as the educational innovation does not add to their work load (Acquila and Galovic, 1988). The attributes that must be fostered in the staff as defined by Fullan (1982) are collegiality, open communicative trust, support and help, interaction, and morale are all closely related.

Foley (1994) cites the research of Fullan (1991) considering some of the things change involves: to have a clear vision and be open minded; to take initiative and empower others; to provide support and pressure, to start small and think big; to expect results and be patient and persistent; to have a plan and be flexible; and to use top-down and bottom-up strategies.

SCHOOL CLIMATE

Educational practitioners and researchers often describe schools in terms of 'climate'. Research tells us that school climate makes a difference and common sense confirms it (Sweeney, 1992). Owens (1970) viewed climate as a function of dynamic inter-relationships between the needs of the organization as they are expressed by the demands of the individual. The set of internal characteristics that distinguishes one school from another and influences the behavior of people in it is called climate (Halpin, 1966). Upon entering a school one might for example describe a school as a 'warm, friendly place "or as a "cold, uncaring place'. Defining climate as a set of internal characteristics is similar in some respects to defining personality. Schools, like people have personalities and affect people in different ways (Halpin, 1966).

Principals and teachers generally agree that some school climates are good and some are bad. Some schools provide teachers and principals with feelings of accomplishment, both with the task they perform and with the interpersonal relations they experience. In others, teachers and principals are demoralized and apathetic (Halpin, 1966).

The climate is an end product of the school groups- students, teachers, administrators as they work to balance the organizational and individual dimensions of a social system. These products include shared values, social beliefs, and social standards (Hoy and Miskel, 1987).

School climate is the relatively enduring pattern of shared perceptions (of teachers, students, and parents) about the characteristics of a school and its members (Keefe and Kelly, 1990). Perceptions held by students, teachers and parents about the physical, social and learning environment of a school may influence both the process and outcomes that occur. Climate is measured by asking individuals to serve as an 'informant' (Keefe et al., 1985) and respond in terms of what they believe most people hold true about the characteristics of the schools environment. Similarly, Sweeney (1992) suggests the climate of the school reflects the 'feel' or 'shared meanings' of people who work and learn within. These shared meanings are reflected in key beliefs and values that influences the behaviour of those who hold them.

The shared perceptions of climate represent what most people believe. These shared perceptions tend to be persistent and stable over time. Just as meteorological climate is largely unaffected by the daily shifts in temperature, the climate of the school is a relatively stable phenomenon. If you were to walk into a school building and try to gain a sense of its prevailing climate, what would one look for? Along what lines would one assess its positiveness or negativeness?

It is generally agreed that school climate is important (Keefe et al., 1985). Principals and teachers acknowledge its importance when they speak of boosting morale, increasing involvement, and in general maximize job satisfaction and productivity. Researchers have recognized its importance by conducting many studies intended to indicate the impact of school climate on staff morale and student achievement and the relationships between leadership style and organizational climate (Keefe et al., 1985).

James and Jones (1974), distinguish among perspectives on how to measure climate. They found two basic approaches used most frequently to identify climate, both perceptual. The individual attributes' approach assumes that climate is a function of the interaction between personal and organizational characteristics and can be measured by individual perceptions. On the other hand, the organizational attributes' approach assumes

that climate is a function of stable organizational properties rather than unique perceptions and can be defined at the organizational level. It is this perspective that underlies most of the work in school climate.

According to Kottkamp et al. (1987), regardless of the system used to analyze climates, the major issues in climate research can be reduced to three questions: a) is climate to be conceptualized as an objective phenomenon (assumes to be validated by a jury of expert observers) or as a subjective phenomenon (arising from experiences of individuals in the organization)? b) is the reality upon which individuals act objective or individually and socially constructed? c) if climate is measured by perceptions, are these perceptions basic properties of the organization or merely properties of the person perceiving it?

Most educational practitioners and researchers working with school climate have consistently chosen to use perceptual definitions and perceptual measures of climate (Kottkamp et al., 1987). Halpin and Croft (1963) assume that the stakeholder's consensus in its perception of school climate determines organizational behavior. Halpin argued that collective perceptions of climate are basically attributes of 'something out there' rather than merely idiosyncratic responses, acknowledging that subjectivity and objectivity can never be totally separated (Kottkamp et al., 1987). Moreover, climate is identified through perceptual measures of organizational attributes.

One of the most widely known conceptualization and measurement of the organizational climate in schools is Halpin and Croft's 1963 study of elementary schools (Hoy and Miskel, 1987). Halpin and Croft mapped the organizational climate of schools when they observed that: 1) schools differ in their 'feel'; 2) the concept of morale did not provide an index of their 'feel'; 3) 'ideal' principals who are assigned to schools where improvement is needed are immobilized by the staff; and 4) the topic of organizational climate generated interest.

The approach used was one of developing a descriptive questionnaire to identify important aspects of teacher-teacher and teacher-principal interactions. A questionnaire was developed containing sixty-four Likert - type items, called the Organizational Climate Description Questionnaire. (OCDQ). This instrument looks at the social standards components of the school's culture, defining appropriate behaviors (Hoy and Miskel, 1987).

Four sub-scales on the OCDQ relate to teacher behavior while four other sub-scales relate to principal behavior. From certain combinations of scores gathered from these sub-scales a school's climate is indexed along a continuum from open to closed. Halpin and Croft (1963) state that the closer a school comes to having an open climate, the more facilitative will be the work environment.

Another study on school climate was done by Coughlan (1970) in developing the School Survey (SS). The School Survey is technically a satisfaction inventory measuring teacher morale with the working environment. The SS has been widely used in school climate research in conjunction with the Learning Environment Inventory (LEI).

The original version of the LEI for secondary students was developed by Walberg (1969) and although most of its use has been in classrooms, it had also been used to draw conclusions about school wide climate. The LEI contains 105 statements descriptive of typical school classes and respondents express agreement or disagreement with each statement on a four point scale. The LEI's 105 statements relate to 15 specific factors or sub-scales as follows:

1. cohesiveness - group feelings of intimacy; this factor separates group members from non-group members and contributes to learning in goal directed classes.
2. diversity - the extent to which class provides for diversity of pupil interests and activities.
3. formality - extent of behavior within class guided by formal rules as seen by pupils.

4. **speed** - groups perception of how well teacher is able to communicate with and adapt to needs of pupils.
5. **environment** - physical environment, space, facilities.
6. **friction** - this factor relates to the amount of quarrelling and bickering perceived by pupils.
7. **goal direction** - pupils' perception regarding sanction of goal oriented direction.
8. **favouritism** - this factor best indicates whether pupils have a low academic self-concept.
9. **cliques** - the presence of sub-groups within a class; which can lead to hostility among members of group at large.
10. **satisfaction** - do pupils like their classes?
11. **disorganization** - the extent to which pupils consider the class disorganized in relation to the subject being studied.
12. **difficulty** - perceived difficulty levels associated with various courses.
13. **apathy** - the factor is used to indicate whether pupils within a class feel affinity with class activities.
14. **democracy** - this factor is used to qualify pupil position of an authoritarian - democratic continuum.
15. **competitiveness** - group perception of the degree of competition among members.

Epstein and McPartland (1976) used the construct of Quality of School Life (QSL) to identify schools with a climate of positive effect. Three factors they believed to contribute to the Quality of Life in a school are: a) satisfaction - a measure of students' general reactions to school; b) commitment to class-work - a measure of the level of student interest in work prompted by the educational opportunities available; and c) reactions to teacher - a measure of the nature of student - teacher relationships.

A secondary school climate measure, the Organizational Climate Description Questionnaire Rutgers Secondary (OCDQ - RS), developed by Kottkamp et al., (1987)

based on the concept of open to closed climate (Halpin and Croft, 1963), was developed expressly for secondary schools. The OCDQ - RS is a 34 item climate instrument that measures two aspects of school interaction. The five factors of principal supportive and directive behavior and teacher engaged, frustrated and intimate behavior emerged to form two basic dimensions of school climate - openness and intimacy. In belief, the OCDQ - RS is a framework providing a heuristic perspective for studying secondary schools and developing change strategies and school improvement.

Based on findings from research, studies improving the climate of a school show that changes must be made in the climate of a school, or students and teachers need to change their perceptions about what the school is like and the quality of what happens in school must become credible to those who have an active interest in the school and its outcomes (Kelly, 1989).

The National Association of Secondary School Principals (NASSP) Task Force on Effective School Climate has developed and validated an instrument for assessing school climate in secondary schools. This instrument is part of the battery of instruments and procedures included in the NASSP's Comprehensive Assessment of School Environment (CASE) model (Kelly, 1989).

The School Climate Survey can be used with parent, teachers, and students. Administration to all three groups permits comparison of perceptions and identification of possible discrepancies that may need attention.

The School Climate Survey collects data about perception on ten sub-scales:

1. teacher - student relationships - perceptions about the quality of the interpersonal and professional relationships between students and teachers.
2. security and maintenance - perceptions about the quality of maintenance and the degree of security people feel at the school.

3. **administration- perceptions of the degree to which school administrations are effective in communicating with different role groups and in setting high performance expectations for teachers and students.**
4. **student academic orientation - perceptions about student attention to task and concern for achievement at school.**
5. **student behavioral values - perceptions about student self-discipline and tolerance for others.**
6. **guidance - perceptions of the quality of academic and career guidance and personal counselling services available to students.**
7. **student - peer relationship - perceptions about students' care and respect for one another and their mutual co-operation.**
8. **parent and community - school relationships - perceptions of the amount and quality of involvement in the school of parents and other community members.**
9. **instructional management - perceptions of the efficiency and effectiveness of teacher classroom organization and use of classroom time.**
10. **student activities - perceptions about opportunities for actual participation of student in school sponsored activities.**

Measurement of climate solely by what most people believe, rather than as a collection of climate and individual responses, is the primary difference between the NASSP School Climate Survey and most other measures of climate, and second, is the emphasis on the collection of perceptions of climate from all major stakeholder groups.

According to Kelley (1989) the most significant outcomes from mini-projects using the CASE is that schools have developed a structure for ongoing climate assessment and planning for school improvement that has empowered teachers as agents of change. Teachers recognize that they have the influence, the information, and the processes to bring about significant improvement in the school.

According to Hoy and Tarter (1992) school climate is most often viewed using a personality metaphor that analyzes the atmosphere of the school in terms of its openness. Hoy and Tarter (1992) however, look at climate using a health metaphor to examine the general well being of the interpersonal relationships in the school. Applying the health metaphor to school climate is a recent practice.

Hoy and Tarter (1992) describe a conceptual framework to measure various school climate aspects including institutional integrity, initiating structure, consideration, resource support, principal influence, teacher morale, academic emphasis. The Organizational Health Inventory (OHI) is a 44 item questionnaire asking teachers to describe their behaviour along a 4 point scale. Results yield a profile of school health with seven dimensions and a general index of health.

If a school is to be both productive and satisfying, a number of elements must be present. According to Keefe et al., (1985) two emerge as essential: 1) a positive school climate and 2) a principal who supports the establishment and maintenance of this climate. Schools with a positive climate are places where people respect, trust and help one another, and where the school according to Keefe et al., (1985) projects a 'feeling' that fosters both caring and learning.

Keefe and Kelly (1990) also note that effective schools have effective principals and that these leaders develop and sustain a climate that is focused on the achievement of goals and is perceived positively by both teachers and students. Thus, the task of the principal is challenging - to make schools more effective and efficient, and to create a productive and happy environment for teachers, students and parents.

To maintain a climate that supports effectiveness, Keefe and Kelly (1990) suggest that principals must carefully monitor the climate of the school, collect measures of goal attainment (i.e., student satisfaction) and plan for school improvement based on the assessment. Keefe and Kelly (1990) who have studied school environment suggest that climate assessment is a first step in school improvement.

School climate has been described in a variety of ways; typologies and classification systems have been developed. However, these cannot tell principals what to do or not to do to improve school climate (Keefe et al., 1985). Since positive school climate does not occur naturally, Kelly (1980) reiterates that planning and leadership are necessary components to improve the environment. Principals need to be a) sensitive to the internal climate, b) diagnose problems, c) implement change and d) monitor progress as changes are implemented (Sweeney, 1988 and Kelly, 1980).

From the literature, Keefe et al., (1985) have identified four concerns on effective school climate: 1) that school and classroom climates differ widely; 2) that climate and satisfaction are two related but distinct concepts; 3) that climate does not define effectiveness, it only helps to predict it and 4) that student outcomes are the appropriate measures of the degree to which schools are successful. In a study in 1972 Thomas Wiggins investigated principals behavior and school climate. Wiggins hypothesized that statistically significant relationships existed between three aspects of principals behavior (interpersonal, orientation, organizational orientation and interpersonal values and teacher - principal interaction). Contrary to Wiggins expectations, principal behavior and organizational climate were shown not to be statistically significant. The instrument Wiggins used primarily measured teachers' perception of climate and principal behavior. In Wiggins study, he concluded that discrepancies existed between the way the teachers viewed the school climate and the way in which the principal perceived it.

In 1980 the University of Toledo surveyed Springfield Local Schools in Ohio. They issued a report on perceived improvements in overall school climate resulting from staff development activities initiated in response to a needs assessment. The staff in their schools identified the following as priority needs in an attempt to change school climate: student respect, parents support, better teacher - principal relations, counsellor involvement in discipline, community satisfaction and pride and positive student attitude.

School staff then developed activities which were designed to improve areas in the most need of change.

Miller (1981) discussed staff morale, school climate and educational productivity. His comments can be grouped in four major areas as reviewed from his findings:

- (1) the social climate of school and staff morale can affect student attitudes and learning.
- (2) administrative behavior can be important in facilitating positive staff morale and he cites the following:

- praising and giving support
- supporting teachers in conflicts with students and parents
- giving attention to teachers' physical comfort
- assuming responsibility for administrative actions
- demonstrating knowledgeability about current practices and strategies
- encouraging teachers' professional growth

- (3) research shows an open climate versus closed climate can affect student attitudes toward learning and problem solving ability.
- (4) Lastly, Miller cites the research of Aspy and Roebuck (1974) showing that "teachers can change when they work in situations with high levels of facilitative conditions".

One of the seven correlates of an effective school as identified by the research is a positive school climate: a positive attitude on the part of the entire school staff and student body exhibited through overt behavior that creates a warm, orderly learning environment (Licata, 1987). Licata (1987) believes that the development of such an environment in his 'Creating a Positive School Climate at the Junior High' depends on: strong leadership, a co-operative caring and committed staff, and educational philosophy stressing the importance of all students and lastly innovative programs that recognize students' self-worth.

Sweeney (1988) states that effective schools share a number of characteristics, but one consistently; a positive school climate. He suggests that when the climate is right; there is a certain joy in coming to school either to teach or learn. When a school has a 'winning' climate, Sweeney (1988) says, people feel proud, connected and committed. Sweeney (1988) identified ten tips for improving school climate that were the result from numerous interviews with teachers, students, parents and principals. They are: 1) a supportive, stimulating environment, 2) student centered, 3) positive expectations, 4) feedback, 5) rewards, 6) a sense of family, 7) closeness to parents and community 8) communication, 9) achievement, and 10) trust.

Recent research tells us that most schools tend to have a positive climate (Sweeney, 1992). School size, community type, attendance level, teacher perceptions, student discipline and attitude and principal effectiveness can be climate dissatisfiers. Sweeney (1992) suggests key beliefs and values profoundly influencing teachers include respect for individual, self-esteem, and sense of efficacy.

SCHOOL CLIMATE VARIABLES

The characteristics of persons and groups within the school environment are often described as school climate variables:

Teacher Morale

Most researchers agree that school climate is closely related with teacher morale and the teachers perception of the climate. Kalis' (1980) study show a steady increase in negative feelings and perceptions of the school climate with the increase of teaching experience. Negative behaviour on the part of staff affects the entire school body. The development of techniques to change negative thinking and behaviours are critical to the school climate (Brown and Henry, 1992).

Brown and Henry (1992) cite the research findings of Brodinsky (1984) concluding the following reasons for low teacher morale: low status of teaching, the

schools' failure to maintain values and standards, low or poor quality relationships with the principal, a lack of positive reinforcement from instructional leaders, confusion about teacher responsibilities, little feed-back, little control over decisions that affect them, little consideration for teachers' opinions, and a lack of concern about teachers' problems.

Administrator - Teacher Relations

The relationships of the administration with teachers is important in creating a climate for achievement. Anderson (1982) cites Bell (1979) observing that the isolation of teachers and the absence of collegiality between teachers and administration was a prevailing characteristic leading to a 'climate crisis' in many urban schools. In a report designed to improve school climate, Breckenridge (1976) noted that administrative - teacher 'rapport' had a definite effect on climate (Anderson, 1982).

Teacher - Teacher Relationships

Teacher relationships with other teachers have been suggested as an important variable (Anderson, 1982). Wynne (1981) also found that a positive school spirit was associated with the amount of socialization among staff.

Teacher - Student Relationship

Teacher - student interactions appear to be an important climate variable (Anderson, 1982). Wynne (1981) points out the value of good relationships and non-academic events involving both teachers and students as contributing to a schools' climate.

Giving students a significant role in decision making seems to have beneficial effects. Anderson (1982) cites Beane (1979) concluding that self realization was associated with a less custodial orientation to pupil control.

Breckenridge (1976) found that climate itself improved when students were involved more in the decision making process (Anderson, 1982).

Student Participation

The type and extent of student interaction that is possible within a school appears to be a significant climate variable (Anderson, 1982). Anderson (1982) cites Rutter

(1980) reporting that the extent of the opportunities students have to participate in activities in the school is related to achievement, as in their freedom to use the building, and that pupil success in extra-curricular activities is strongly related to the likelihood that students will accept school rules.

Community - School Relationships

Anderson (1982) cites Breckenridge (1976) reporting that climate was improved by increasing the communication and rapport between parents and school. McDill et al., (1969) determined that the degree of parent involvement was significantly related to school climate and student achievement and plans (Anderson, 1982).

CLIMATE FOR CHANGE

From the educational change literature (Fullan, 1982), change is recognized to be a continuous process, not an event. Change is often greeted with suspicion and reluctance when expectations for behavior embedded in a new practice, or program do not coincide with existing conceptions of the way school life is or should be (Sarason, 1971). Such could be the case with the adoption and implementation of a semester system. Ideally, change should be seen as a stage in a progression that retains some sense of stability and security for teachers, students and parents.

According to Aquila and Galovic (1988) to change is to risk. These writers suggest that the principal is the key to change. If change is to be successful, the principal must understand how the school climate will accept the proposed innovation and where the climate needs modification. For change to be adopted (social practice or alternate teaching approach) that method must be compatible with staff because adoption of a new education practice requires more than absorbing the supposed benefits of the innovation - it requires commitment.

A change will not likely be effectively implemented if a majority of teachers and students are not committed to it. They must be willing to take on the risks and take on the

necessary workload inherent in the change. Acquila and Galovic (1988) suggest that the principal must provide constant support and encouragement both to those risking as well as those who are apathetic, resistant and threatened by change.

The critical problem for principals is to develop a school climate that will foster, rather than frustrate, change efforts. While teachers and principals are fearful of change, both must carry the burden of fostering a climate where change can occur. King et al., (1975) suggest two basic principles to consider when preparing for change: first, that problem areas arising from change be identified and secondly, some degree of involvement in decision making by those likely to be affected by the change.

By anticipating problems that might occur when educational change is introduced, principals develop strategies to deal with them before they become confrontational issues. It is important to identify potential areas of stress and develop procedures for addressing them such as disseminating accurate information and sharing decision making on what is proposed with all parties who have a vested interest in the change. King et al., (1975) point out that when those parties who will be affected by the change area involved in the procedures related to its implementation and evaluation, they have the opportunity to influence decisions, as well as be informed about what is taking place.

The extent of involvement in decision making might lead to a sharing of responsibility for the decision to adopt and implement an educational innovation and a greater commitment to it (Fullan, 1982). Although many of the implications of a change are difficult to anticipate, the time used in identifying potential sources of concern is well spent.

Acquila and Galovic (1988) point out that principals need to understand the dynamics of change and work with teachers to create a school climate that supports change and offers the best chance of realizing effective, lasting change.

If a school accepts the premise that it should provide the best possible learning climate for students and staff, then, the principals need to fulfil unique leadership

responsibilities. According to the CFK Ltd. School Climate Profile (1973) principals in working with staff and students need to provide leadership for:

- (1) assessing the schools' climate and isolating improvement needs.
- (2) setting goals to describe needed improvements.
- (3) reducing goals to manageable projects with measurable objectives.
- (4) developing and implementing activities for attaining the objectives.
- (5) evaluating progress by establishing check-points and periodically monitoring achievements.
- (6) improving each project in light of evaluative processes.

The administrator's awareness of his/her perception of leader behavior seems imperative for improving climate. Good leadership depends not only upon the administrators conception of what his/her job is; but also on his/her convictions and beliefs about people (Wallich, 1980).

Fox (1974) suggests that the school principal 'makes the difference'. He further notes that staffs that move rapidly from theory to practice are led by self-directed change-oriented administrators. Very simply stated, the principal knows where he is going.

According to Fox (1974) the task of the climate leader principal is to: 1) identify the needed school climate; 2) identify the organization behaviors observed among administrators and staff in the desired school climate; 3) identify the management system necessary to facilitate the desired outcomes; and 4) specify progress priorities to facilitate staff growth, accountability, and evaluation consistent with climate.

Effective leaders seek to make schools more effective and at the same time seek ways to embody in their interactions with teachers, students and parents, the principle: "This is not my school; this is not your school; this is our school, " (Kelly, 1989).

Effective leaders are concerned both with the processes used and the outcomes that are attained. Kelly (1989) states that school leaders must be certain that processes are

selected not merely because 'everyone is doing it' or 'we like it', but, instead focus must be on selecting processes that are credible and lead to improved outcomes.

For the school principal, the message is clear. No longer will it be permissible to sit back and do the trivial administering while the quality of education declines and his\her teachers, students and parents become dissatisfied with the climate of their schools.

If the principal is to survive, he\she must fully understand his\her leadership role and all other determinants and apply the skill and techniques necessary to make their school a place that both students and teachers feel good about being part of.

Shaheen (1974) suggests that a good school climate has these eternal truths:

- (1) it transcends what may for many seem to be the limitations of socio-economic levels and barriers.
- (2) it recognizes that improvement more probably will come through self-adjustment, not through the attempts to pressure change in others.
- (3) it accepts that philosophy may be more important than procedure, than organization. It sees that organizational change without philosophical commitment will leave many gaps.
- (4) good climate occurs primarily under the commitment and skills of top leadership, and from leaders who see human and interpersonal relations as critical to organizational improvement.
- (5) improvement, good climate, does not occur without change, but not all change means improvement.
- (6) good climate means a translation of your beliefs into action.
- (7) in a school with a good climate, the individual will be respected, and his\her self-esteem enhanced. Good climate recognizes that self-esteem requires that choices be provided, and that conviction cannot come through coercion.

Lastly, Foley (1994) confirms the role of the principal in the change process. First, she suggests that the role of principals is crucial and they can make the difference between success and failure; second, principals must empower teachers to make decisions and

involve them at all stages of the change process and finally, principals must support teachers in their change efforts and foster a school climate that is conducive to change.

SEMESTERING AND SCHOOL CLIMATE

Ducharme and Ross (1974) evaluated semestering at Burford District High School reporting that the organization change contributed to improved human relationships and promoted a positive atmosphere in the school and developed a positive learning environment in its classrooms. Responses from their study indicated that teachers and students perceived the longer periods of the semestered timetable as having a positive effect on relationships within the student body and student -staff relations.

Ducharme and Ross (1974) reveal that the findings on human relationships reflected the atmosphere or climate in the school. They found that both teachers and students characterized the climate existing in all aspects of the school as relaxed rather than tense; 71% of the students and 85% of the teachers perceived the total school environment as very relaxed or relatively relaxed.

In conclusion, Ducharme and Ross (1974) suggest that semestering is by no means the only factor that is conducive to a positive learning environment but, it clearly is a major influence on the development of positive social relationships and school atmosphere.

Most studies are attitudinal surveys and lack a statistical base suitable for determining what occurs in the semestered school environment. Brophy (1978) organized a study which focused on curriculum, activities in the teaching - learning situation, and student - teacher relationships in semestered and non-semestered schools.

Semestered teachers stated that they covered less content and they were more concerned with the use of the content as opposed to the amount. Brophy (1978) discovered that as a result of semestering, the reorganization of content lead to a number of process goals; thus lending support to semestered teachers' concern about curriculum.

Brophy (1978) states that changing the organizational structure of a school will not in itself result in better teaching but it can provide the conditions for teachers to adopt the strategies most appropriate and relevant to the learner. Semestering may encourage teachers to alter their methods of presentation by allowing opportunities for more intensive and varied instruction within longer class periods. Brophy's study indicated that overall, there was more variety in teaching - learning activities in semestered classes than non-semestered classes.

It has also been claimed by semestering advocates that semestering gives teachers the opportunity to know their students better and improve student - teacher relationships. Brophy's study indicated that teachers of semestered classes did have better personal knowledge of their students than non-semestered teachers.

In conclusion Brophy (1978) suggests that the semestered school environment could foster 1) curricula better adapted to the needs of students, 2) more variation in teaching - learning activities and 3) an improvement of teacher - student relationships.

SUMMARY

This literature review indicates that it is difficult to determine from studies whether certain changes or perceived advantages and disadvantages of the semestered system are common to different schools. There is a general consensus in the literature that the majority of teachers and students tend to view the semester system positively.

The literature illustrates that an organizational change in the form of semestering should be viewed by stakeholders, i.e., teachers and students, as a stage in a progression toward an ultimate goal. The literature further shows that the adoption of a change is quite different from its implementation as this phase in a change process is often met with resistance due to poor planning and execution and often depends upon what teachers think.

The literature further indicates that for an organization to change like that in the form of semestering to be adopted and effectively implemented, it must be compatible with staff because it requires more than absorbing the supposed benefits - it requires commitment.

While the literature shows that teachers and administration are often fearful of change, both must carry the burden of fostering a climate where change can occur. The literature indicates that importance of administration in creating a climate for change that will foster rather than frustrate change efforts in the school.

The literature review indicates that school climate is the pattern of shared perceptions of the stakeholders about the characteristics of the school and is discovered by asking those stakeholders what they believe most others hold true about those characteristics of the school environment.

The literature shows that positive school climate does not occur naturally, but is evident where people respect, trust and help one another and projects a feeling of caring and learning. In the literature review various school climate measures are examined: Halpin and Croft (1963) Organizational Climate Description questionnaire (OCDQ); Walberg (1969) Learning Environment Inventory (LEI); Epstein and McPartland (1976) Quality of School Life (QSL); Kottkamp et al., (1987) Organizational Climate Description Questionnaire - Rutgers Secondary (OCDQ - RS); and Kelley (1989) Comprehensive Assessment of School Environment (CASE).

Last, the literature review indicates that a frequently cited motive for introducing semestering as a form of organizational change is in the belief that semestering improves the quality of interpersonal relationships in the school.

CHAPTER 111
RESEARCH DESIGN AND METHODOLOGY
RESEARCH DESIGN

Purpose of the Study

The purpose of this study was to describe and explain any climate change of Duncan MacMillan High School as a result of a change to a semester system.

In this study a research approach was necessary which a) fostered the collection of detailed data about participants reactions and perceptions, and b) provided instances of variation in climate content as a result of semestering.

A number of questions needed to be addressed to fulfil the purpose of the study:

- (1) Which variables are found to be significantly related to perceived change in administrator - teacher relations?
- (2) Which variables are found to be significantly related to perceived change in teacher - teacher relations?
- (3) Which variables are found to be significantly related to perceived change in teacher - student relations?
- (4) Which variables are found to be significantly related to perceived change in instructional effectiveness?
- (5) Which variables are found to be significantly related to perceived change in student academic orientation?
- (6) Which variables are found to be significantly related to perceived change in student - peer relations?
- (7) Which variables are found to be significantly related to perceived change in student behavioral values?
- (8) Which variables are found to be significantly related to perceived change in student activities?
- (9) Which variables are found to be significantly related to perceived change in parent and community - school relations?

These questions resulted in the formulation of generalizations found to be related to school climate perception sub-scales as grounded in the literature review.

Design of the Study

This study was a qualitative and quantitative study conducted by one researcher with an insider's view. The researcher was a member of the school's staff for five years and has been both a participant in and an observer of the implementation of semestering at D.M.H.S.

Procedures

Twenty teachers (staff 27) from Duncan MacMillan High School were included in this study which was carried out during the month of December 1992. The instrument used to conduct the study (Appendix B) was delivered to twenty staff members who had taught both a non-semestered year and semestered year (2 consecutive years) at D.M.H.S. Most of the surveys were completed at a staff meeting, with the exception of four which were completed at home.

The questionnaires required approximately ten - fifteen minutes to complete and were collected by the researcher. Nineteen out of twenty (95%) of the questionnaires were returned.

A smaller sample of teachers who had completed a questionnaire was selected from the sample. Four teachers consented to be interviewed. The choice of the subjects sex, age, years teaching, and different academic subject background was determined by the willingness and ability of the subject to communicate information in a taped interview.

These teachers were subjected to an informal interview (Appendix A) which was recorded on tape. The information from these interviews was used to supplement and bring to life the results from the application of the statistical techniques. As well it helped to illustrate individual differences between and within groups.

Descriptive and comparative statistics were calculated using an available statistical package (Statview 512 +).

Ethical Safeguards

Some of the data gathered for this study was of a sensitive nature, therefore, every precaution was taken to insure confidentiality and anonymity. Teachers were identified by number only with no possibility of tracing completed questionnaires to their specific source. No names were used in any of the analysis. The procedures for maintaining confidentiality were explained to staff prior to the administering of the questionnaire and again to those consenting to be interviewed prior to the interview taking place.

Permission and Approvals

Permission to conduct the research was requested of and obtained from the Administration of Duncan MacMillan High School. The proposed study was submitted to the Saint Mary's Department of Education who approved the proposal.

Nature of the Study

Statistical procedures used in this study were descriptive as well as exploratory. According to Ary et al., (1985) descriptive procedures are basically methods of handling quantitative information in such a way as to make that information meaningful.

Exploratory and descriptive research methods will be applied to this study in an attempt to describe teachers perceptions about any climate change of D.M.H.S. as a result of a change to a semester system.

In addition to the descriptive statistics, a portion of the study is a correlational study which determines the strength of the relationship between teacher perceptions toward any climate change as a result of semestering as well as other variables including sex, license level, years experience and years teaching at D.M.H.S. None of these variables are manipulated during the study.

The present study was exploratory in the sense that it sought to determine which variables were most significantly associated with teachers perceptions about any change in school climate at D.M.H.S. as a result of a change to a semester system. It was descriptive because it seeks to provide an explanation of teachers who perceived any change in school climate.

The Sample

The sample for this study was taken from the staff of Duncan MacMillan High School from those teachers who had taught two consecutive years (a non-semestered year and semestered year) during 1991 - 93. Twenty teachers were involved in the sample. Twenty questionnaires were distributed and there were nineteen returned for a return rate of 95%. Fifteen questionnaires were completed at school during a staff meeting and four were completed at teacher's homes.

RESEARCH METHODOLOGY

Quantitative and Qualitative Methods

This study used both quantitative and qualitative methods. Both techniques were used in a complimentary fashion. According to Davis (1993) the use of various measures of the same variable is a sound way to check the data. Comparable results from two different approaches (triangulation) help strengthen the conclusions of each of the individual approaches. The quantitative component of the study was conducted by a

questionnaire (Appendix B) completed by each teacher in the sample. It was administered in person in all but four cases by the researcher. The structure and content of the questionnaire evolved from the literature review.

The qualitative part of the study was managed by individual informal interviews which were tape recorded. A sample of four teachers was selected from the group being studied. The format of the informal interview (Appendix A) was grounded in appropriate qualitative theory for the administration of such technique (Bogdan and Biklen, 1982).

Data Collection Procedures

Quantitative data was gathered by means of a questionnaire. Perceptions held by teachers were measured using a Likert-type scale. Twenty teachers (Grades 7-12) in Duncan MacMillan High School were questioned. The questionnaire was distributed, completed and returned during a staff meeting in December 1992. In addition, four teachers, who had completed the questionnaires, were interviewed in the guidance office to bring some of the quantitative data to life.

Data Analysis

Since the data was exploratory in nature, a variety of statistical analyses were undertaken. Descriptive statistics (means and standard deviation) were used to delineate the responses and comparative statistics are used to describe relationships between the category variables (sex, license, etc.). Comparative statistics include correlation coefficients, analysis of variance (ANOVA) and regression analysis. Decisions regarding statistical significance were made at the .05 level.

RESEARCH INSTRUMENTATION

Data for this study were gathered by means of a self-administered questionnaire supplemented by selective personal interviews.

The Questionnaire

A questionnaire was designed for teachers specifically for the purpose of: consolidating opinions and views about any change in school climate (visible or perceived) as a result of change to semestering. The questionnaire was developed and patterned after a secondary school semester survey (Bramwell and Mann, 1973). School climate perceptions sub-scales came from Kelly's (1989) School Climate Survey which is part of the Comprehensive Assessment of School Environment (CASE) model. The organization of the questions to be used at the secondary level concerning the nature of school climate was based in concept on the OCDQ -RS (Kottkamp et al., 1987).

The questionnaire, entitled "School Climate Change Survey" (SCCS), (Appendix B) consisted of fifty-five items for teachers. The response format for all items was a five point Likert-type scale: ranging from strongly agree (1) to strongly disagree (5).

The various questions developed for the questionnaire entitled "School Climate Change Survey" referred to the opinions or perceptions of the teacher in a semestered environment compared to a non-semestered environment. The questions related to the following nine school climate perception sub-scales: (1) administration - teacher relations, (2) teacher - teacher relations, (3) teacher - student relations, (4) instructional effectiveness, (5) student academic orientation, (6) student - peer relations, (7) student behavioral values, (8) student activities, and (9) parent and community - school relations.

Informal Interview

According to Bogdan and Biklen (1982) an interview is a purposeful conversation, usually between two people that is directed by one in order to get information. The subject of these interviews were teachers who had completed the questionnaire. An interview format that would be flexible enough to allow subjects to tell their story while at the same time structured enough to allow the researcher to make comparisons was selected (Bogdan and Biklen, 1982). All subjects were questioned on the same semestering and school climate matters. The questions were general in nature because it was intended that the information gained from the interviews would supplement the more specific information gained from the questionnaires.

Each interview was preceded by a brief introduction in which the purpose of the study was explained and the safeguards for confidentiality were outlined. Four interviews were recorded on tape.

Review of Test

Since the questionnaire was grounded in the literature, the questionnaire was reviewed with a faculty adviser for consistency and to procure opinions on whether the instrument would obtain the desired data and to elicit any other suggestions there might be for improvement. The following changes were made after the review: (1) many questions were rewritten for purposes of clarity and simplification, (2) the questionnaire was shortened from 60 items to 55, (3) the questionnaire was reformatted to facilitate and shorten the time needed to respond and to make it more attractive, and (4) the directions were rewritten to make them easier to read and understand.

SUMMARY

The research design and methodology and research instrumentation were outlined in this chapter. Data were collected from nineteen teachers intimately associated with the semester system at Duncan MacMillan High School. Quantitative data were accumulated for teachers from a fifty-five item questionnaire. Qualitative data were accumulated from four arranged informal interviews with four teachers. The statistical techniques used for the data analysis were descriptive and results were further examined by analysis of variance (ANOVA) and regression analysis. The interviews were tape recorded to supplement the quantitative data. The study was exploratory and descriptive in nature.

CHAPTER IV

PRESENTATION OF THE FINDINGS

This chapter contains a description of the responses or perceptions of teachers to fifty-five statements which measure any change in school climate as a result of a change to semestering according to selected school climate perception sub-scales or determiners.

In addition to the descriptive statistics (means, standard deviations (S.D.), averages and percentages) used to delineate the responses, comparative statistics are used to describe relationships between category variables (sex, license, etc.). Comparative statistics include correlation coefficients, analysis of variance (ANOVA) and regression analysis.

The response format for all items was a five point Likert-type scale ranging from strongly agree (1) to strongly disagree (5). Means are provided to reflect the total of the scores in the distribution. Standard deviation scores are provided to indicate the distances of the scores from the mean.

Responses to each question of the nine school climate perception sub-scales are examined separately. Percentages were determined for each question and for the purpose of this study any change in the school climate perception sub-scale item was considered to be evident if 50 percent or more of the respondents perceived such a change.

Following these analyses, a table is presented to indicate the extent to which each question is related to the various category variables in a correlation matrix. Simple correlation coefficients are provided for interpretable relationships derived from the analysis. Then an analysis of variance for (sex) was completed to determine if relationships existed between the questions which were significant from the correlation analysis and the category variable.

Simple regression was completed on licence and D.M.H.S. teaching experience to determine if relationships existed between the questions and the category variables.

Administrator - Teacher Relations

In the first section of the questionnaire, dealing with administrator-teacher relations, perceptions of the degree to which administration are effective in communicating with teachers and in setting performance expectations were examined.

Item One

Compared to last year, administration sensitivity to teacher problems has increased.

The mean is 2.8 and S.D. is 1.0. Thirty-seven percent of the teachers either agreed or strongly agreed with the statement, while 42 percent felt there was no change in administrative sensitivity to teacher problems in a semester system.

Item Two

Compared to last year, conflicts between teachers and administration have increased.

The mean is 2.9 and the S.D. is 0.8. Fifty-eight percent of the teachers perceived no change in conflicts with administration in a semester system.

Item Three

Compared to last year, administrative attempts to help me with my problems have increased.

The mean is 2.6 and the S.D. is 0.7. Forty-two percent of teachers either agreed or strongly agreed with the statement that administrative attempts to help with problems had increased in a semester system.

Item Four

Compared to last year, there is more opportunity to discuss school matters with administration.

The mean is 3.0 and S.D. is 0.8. Fifty-three percent of teachers perceived no change in opportunities to discuss school matters with administration.

Item Five

Compared to last year, the level of trust between teachers and administration had increased.

The mean is 3.0 and S.D. is 0.7. Seventy-four percent of teachers perceived no change in the level of trust with administration in a semester system.

Item Six

Compared to last year, attempts by administration to give me useful ideas and information has increased.

The mean is 2.7 and S.D. is 0.7. Fifty-three percent of teachers perceived no change, while 30 percent agreed or strongly agreed that administration conveyed useful ideas and information in a semester system.

Item Seven

Compared to last year, opportunity for open and candid communication has increased.

The mean is 2.7 and S.D. is 0.7. Fifty-eight percent of teachers perceived no change in increased opportunity for open and candid communication in a semester system.

Summary

The mean and standard deviation of these scores for the cluster of questions in the administrator - teacher relations school climate perception sub-scale were 2.8 and 0.5.

Teacher - Teacher Relations

In this section of the questionnaire, perceptions of the degree to which teachers are communicating and the quality of the interpersonal and professional relationships are examined.

Item Eight

Compared to last year, there has been more opportunity to meet colleagues during break.

The mean is 3.4 and the S.D. is 0.8. Forty-one percent of teachers either disagreed or strongly disagreed that there had been more opportunity to meet with colleagues during break in a semester system.

Item Nine

Compared to last year, I have stronger feelings of being 'pushed'.

The mean is 2.2 and the S.D. is 1.2. Sixty-three percent of teachers perceived stronger feelings of being 'pushed' in a semestered system compared to a non-semestered year.

Item Ten

Compared to last year, the quality of my teaching has improved.

The mean is 2.9 and the S.D. is 1.0. Forty-two percent of teachers perceived no change, while 37 percent agreed that the quality of their teaching had improved in a semester system.

Item Eleven

Compared to last year, my enjoyment of teaching school has increased.

The mean is 3.3 and the S.D. is 1.1. Twenty-six percent of teachers perceived no change, while 42 percent disagreed or strongly disagreed that their enjoyment of teaching had increased in a semestered system.

Item Twelve

Compared to last year, the 'day to day climate' at our school has improved.

The mean is 3.1 and the S.D. is 1.0. Forty-two percent of teachers perceived no change, while 37 percent disagreed or strongly disagreed that the 'day to day' climate of the school had improved as a result of semestering.

Item Thirteen

Compared to last year, communication among teachers about school matters has improved.

The mean is 2.8 and the S.D. is 0.8. Fifty-eight percent of teachers responded neutrally or perceived no change in communication among staff about school matters as a result of the semester system.

Item Fourteen

Compared to last year, co-operation and team-work in staff efforts to accomplish school goals has improved.

The mean is 2.5 and the S.D. is 0.7. Fifty-three percent of teachers either agreed or strongly agreed with the statement as they perceived improved efforts and team-work in attempts to accomplish school goals in a semester system.

Item Fifteen

Compared to last year, staff members planning together and co-ordinating their efforts has increased.

The mean is 2.7 and the S.D. is 0.7. Fifty-three percent of teachers perceived no change, while 37 percent agreed or strongly agreed that staff efforts to plan together had increased in a semester system.

Item Sixteen

Compared to last year, conflicts among teachers have decreased.

The mean is 2.9 and the S.D. is 0.7. Sixty-eight percent of teachers responded neutrally or perceived no change with the statement that conflicts among teachers had decreased in a semester system.

Summary

The mean and standard deviation of these scores for the cluster of questions in the teacher - teacher relations school climate perception sub-scale were 2.9 and 0.1.

Teacher - Student Relations

In this section of the questionnaire, perception about the quality of the interpersonal and professional relationships between students and teachers were examined.

Item Seventeen

Compared to last year, there has been more opportunity to get to know students as individuals.

The mean is 3.4 and the S.D. is 0.8. Fifty-two percent of teachers perceived no change, while 37 percent disagreed or strongly disagreed with the statement that there has been more opportunity to get to know students better in a semester system.

Item Eighteen

Compared to last year, students' understanding of the course concepts has increased.

The mean is 3.3 and the S.D. is 1.0. Forty-seven percent of teachers perceived no change, while 30 percent disagreed or strongly disagreed that students understanding of course concepts had increased in a semester system.

Item Nineteen

Compared to last year, informal chats with the students have increased.

The mean is 3.4 and the S.D. is 1.0. Forty-two percent of teachers perceived no change, while 42 percent disagreed or strongly disagreed with the statement that informal chats with students had increased in a semester system.

Item Twenty

Compared to last year, class discussions with the students have increased.

The mean is 2.8 and the S.D. is 1.0. Forty-two percent of teachers either agreed or strongly agreed with the statement that class discussion with students had increased in a semester system.

Item Twenty-One

Compared to last year, there is more opportunity to give students extra help.

The mean is 3.5 and the S.D. is 1.1. Fifty-three percent of teachers either disagreed or strongly disagreed with the statement that there was more opportunity to give students extra help in a semester system.

Item Twenty-Two

Compared to last year, there is more opportunity to give individual attention to students.

The mean is 3.5 and the S.D. is 1.0. Fifty-three percent of teachers either disagreed or strongly disagreed with the statement that there was more opportunity to give students individual attention in a semester system.

Item Twenty-Three

Compared to last year, there is more opportunity for student input into curriculum.

The mean is 3.3 and the S.D. is 0.7. Fifty-two percent of teachers perceived no change, while 35 percent disagreed or strongly disagreed that there was more opportunity for student input into curriculum in a semester system.

Summary

The mean and standard deviation of these scores for the cluster of questions in the teacher - student relations, school climate perception were 3.3 and 0.7.

Instructional Effectiveness

In this section of the questionnaire, perceptions of the efficiency and effectiveness of teacher classroom organization and use of classroom time were examined.

Item Twenty-Four

Compared to last year, the amount of talking the teacher does in class to students has decreased.

The mean is 2.6 and the S.D. is 0.7. Fifty-two percent of teachers either agreed or strongly agreed with the statement that the amount of talking they do in class to students had decreased in a semestered system.

Item Twenty-Five

Compared to last year, a variety in class activity for students has increased.

The mean is 2.2 and the S.D. is 0.8. Seventy-three percent of teachers either agreed or strongly agreed that variety in class activity for students had increased as a result of semestering.

Item Twenty-Six

Compared to last year, the number of topics I have been able to cover in a course has increased.

The mean is 4.1 and the S.D. is 0.7. Eighty-nine percent of teachers either disagreed or strongly disagreed with the statement that they covered more course content in a semestered year.

Item Twenty-Seven

Compared to last year, the number of interesting class periods has increased.

The mean is 2.0 and the S.D. is 0.9. Forty-seven percent of teachers responded neutrally, while 31 percent agreed or strongly agreed that there was an increase in interesting classes as a result of semestering.

Item Twenty-Eight

Compared to last year, the total amount of work for teachers outside school has increased.

The mean is 1.8 and the S.D. is 0.8. Eighty-four percent of teachers either agreed or strongly agreed with the statement that the total amount of work outside of school had increased due to semestering.

Item Twenty-Nine

Compared to last year, time for students to think has increased.

The mean is 3.5 and the S.D. is 1.0. Fifty-three percent of teachers responded neutrally about increase in time for students to think in class.

Item Thirty

Compared to last year, student participation in class has increased.

The mean is 2.7 and the S.D. is 0.7. Fifty-seven percent of teachers agreed or strongly agreed that student participation in class had increased as a result of semestering.

Item Thirty-One

Compared to last year, students' understanding of the course concepts has increased.

The mean is 3.3 and the S.D. is 1.0. Forty-two percent of teachers responded neutrally, while 37 percent disagreed or strongly disagreed with the statement that students understanding of course concepts had increased due to semestering.

Item Thirty-Two

Compared to last year, the 'pace' of the school day has increased.

The mean is 1.7 and the S.D. is 0.7. Ninety-five percent of teachers either agreed or strongly agreed with the statement that the 'pace' of the school day had increased due to semestering.

Summary

The mean and standard deviation of these scores for the cluster of questions in the instructional effectiveness school climate perception sub-scale were 2.7 and 0.5.

Student Academic Orientation

In this section of the questionnaire, teacher perception about student attention to task and concern for achievement were examined.

Item Thirty-Three

Compared to last year, student homework has increased.

The mean is 2.5 and the S.D. is 1.0. Fifty-two percent of teachers agreed or strongly agreed that homework for students had increased as a result of semestering.

Item Thirty-Four

Compared to last year, exams, tests, and quizzes for students have increased.

The mean is 2.5 and the S.D. is 0.8. Fifty-two percent of teachers agreed or strongly agreed that exams and tests for students had increased as a result of semestering.

Item Thirty-Five

Compared to last year, student enjoyment of classes has increased.

The mean is 2.8 and the S.D. is 0.8. Forty-two percent of teachers responded neutrally, while 37 percent agreed or strongly agreed with the statement that student enjoyment of classes had increases as a result of semestering.

Item Thirty-Six

Compared to last year, the students' feeling of being 'pushed' to complete work has increased.

The mean is 1.8 and the S.D. is 0.6. Ninety percent of teachers agreed or strongly agreed that there was an increased feeling of students being 'pushed' to complete work in a semestered system.

Item Thirty-Seven

Compared to last year, student interest in courses has increased.

The mean is 2.7 and the S.D. is 0.7. Fifty-two percent of teachers responded neutrally or perceived no change, while 37 percent perceived increased student interest in courses as a result of semestering.

Item Thirty-Eight

Compared to last year, the total amount of student school work produced has increased.

The mean is 2.9 and the S.D. is 0.8. Fifty-two percent of teachers responded neutrally about increases in the total amount of student school work produced as a result of semestering.

Item Thirty-Nine

Compared to last year, the school's goals/expectations for students' educational performance has increased.

The mean is 2.9 and the S.D. is 0.9. Forty-seven percent of teachers agreed or strongly agreed that the schools' goals/expectations for students educational performance had increased as a result of semestering, while 37 percent responded neutrally.

Item Forty

Compared to last year, there is greater teacher resistance to students missing classes for other school activities.

The mean is 1.7 and the S.D. is 0.6. Ninety-four percent of teachers agreed or strongly agreed with the statement that there is greater teacher resistance to students missing classes for other school activities in a semester system compared to a non-semestered system.

Summary

The mean and standard deviation of these scores for the cluster of questions in the student academic orientation school climate perception sub-scale were 2.5 and 0.5.

Student - Peer Relations

In this section of the questionnaire, perceptions about student care and respect for one another and their mutual co-operation were examined.

Item Forty-One

Compared to last year, opportunities for students to talk more to each other has increased.

The mean is 2.8 and the S.D. is 0.7. Fifty-two percent of teachers responded neutrally to the statement that there was increased opportunity for students to talk more to each other in a semester system.

Item Forty-Two

Compared to last year, the acceptance of low-achieving students by their peers has increased.

The mean is 2.9 and the S.D. is 0.8. Fifty-two percent of teachers responded neutrally, while 31 percent agreed or strongly agreed that there was increased acceptance of low achieving students by their peers as a result of semestering.

Item Forty-Three

Compared to last year, students' perception of the 'day to day climate' at the school is more positive.

The mean is 3.1 and the S.D. is 1.0. Forty-two percent of teachers responded neutrally, while 31 percent disagreed or strongly disagreed with the statement that students perception of the 'day to day' climate at school was more positive as a result of semestering.

Item Forty-Four

Compared to last year, opportunity to work on projects in class has increased.

The mean is 2.8 and the S.D. is 0.8. Forty-two percent of teachers agreed or strongly agreed that there was increased opportunity to work on projects in class as a result of semestering.

Item Forty-Five

Compared to last year, opportunities for students to make new friends has increased.

The mean is 3.1 and the S.D. is 0.3. Ninety percent of teachers responded neutrally or perceived no change in increased opportunities for students to make new friends as a result of the change to semestering.

Summary

The mean and standard deviation of these scores for the cluster of questions in the student - peer relations school climate perception sub-scale were 2.9 and 0.4.

Student - Behavioral Values

In this section of the questionnaire, perceptions about self-discipline and tolerance for others were examined.

Item Forty-Six

Compared to last year, behaviour problems in class have increased.

The mean is 2.9 and the S.D. is 0.7. Fifty-two percent of teachers responded neutrally or perceived no change, while 26 percent disagreed or strongly disagreed that student behaviour had improved as a result of the change to semestering.

Item Forty-Seven

Compared to last year, there is a greater demand on teachers instructional time to deal with student behaviour.

The mean is 2.9 and the S.D. is 0.7. Fifty-eight percent of teachers responded neutrally or perceived no change, while 26 percent perceived a greater demand on teachers instructional time to deal with student behaviour in a semester system.

Item Forty-Eight

Compared to last year, student behaviour has improved.

The mean is 3.1 and the S.D. is 0.8. Fifty-two percent of teachers responded neutrally or perceived no change, while 26 percent disagreed or strongly disagreed that student behaviour had improved as a result of the change to semestering.

Summary

The mean and standard deviation of these scores for the cluster of questions in the student behavioral values school climate perception sub-scale were 3.0 and 0.3.

Student Activities

In this section of the questionnaire, perceptions about opportunities for actual participation of students in school sponsored activities were examined.

Item Forty-Nine

Compared to last year, student participation in clubs has increased.

The mean is 3.2 and the S.D. is 0.8. Fifty-two percent of teachers responded neutrally, while 31 percent disagreed or strongly disagreed that student participation in school clubs had increased as a result of semestering.

Item Fifty

Compared to last year, student participation in sport teams has increased.

The mean is 3.1 and the S.D. is 0.7. Seventy-three percent of teachers responded neutrally or perceived no change in increased student participation in sport teams as a result of semestering.

Item Fifty-One

Compared to last year, more students stay after school for extra-curricular activities.

The mean is 3.6 and the S.D. is 0.8. Forty-seven percent of teachers responded neutrally, while 47 percent disagreed or strongly disagreed that more students stayed after school for extra curricular activities as a result of semestering.

Summary

The mean and standard deviation of these scores for the cluster of questions in the student activities school climate perception sub-scale were 3.2 and 0.7.

Parent and Community - School Relations

In this section of the questionnaire, perceptions of the amount and quality of involvement in the school of parents and other community members were examined.

Item Fifty-Two

Compared to last year, attendance by parents to school meetings and other activities has increased.

The mean is 3.1 and the S.D. is 0.7. Fifty-two percent of teachers responded neutrally or felt that there was no change in parents attendance at school meetings as a result of semestering.

Item Fifty-Three

Compared to last year, community attendance at school programs has increased.

The mean is 3.0 and the S.D. is 0.9. Fifty-eight percent of teachers responded neutrally or felt that there was no change in community attendance at school programs as a result of semestering.

Item Fifty-Four

Compared to last year, there are more opportunities for parent involvement in school activities.

The mean is 3.1 and the S.D. is 0.7. Sixty-three percent of teachers responded neutrally, while 20 percent disagreed or strongly disagreed that there were more opportunities for parent involvement in school activities as a result of the change to semestering.

Item Fifty-Five

Compared to last year, there is an improved perception of school 'climate' on the part of the parents.

The mean is 2.9 and the S.D. is 1.1. Forty-seven percent of teachers responded neutrally, while 31 percent agreed or strongly agreed that there was an improved perception of the 'school climate' on the part of parents.

Summary

The mean and standard deviation of these scores for the cluster of questions in the parent and community - school relations school climate perception sub-scale were 3.0 and 0.7.

Table 1 summarizes meaningful relationships derived from the simple correlation analysis employed. Simple correlation coefficients are provided for interpretable relationships derived from the analysis.

Relationship of Staff Sex to Perceptions

The first analysis utilized the category variable sex and the 55 items (questions) of the School Climate Change Survey (SCCS) as independent variables. To assess any significant relationships between SCCS factor items and sex, ANOVA was used.

TABLE 1

Correlation Matrix for Category Variables and Questions 1 to 55

	Sex	License	Yrs. Exp.	Yrs. DMHS
Sex	1			
License	0.254	1		
Yrs. Exp.	0.132	0.294	1	
Yrs. DMHS	0.329	0.335	0.81	1
Quest. #1	0.326	-0.272	-0.056	0.339
2	-0.344	0.317	0.024	-0.303
3	0.502 *	-0.077	0.039	0.367
4	0.531 *	-0.155	0.094	0.454 *
5	0.325	-0.19	-0.066	0.303
6	0.167	-0.223	0.134	0.431
7	0.389	-0.305	0.081	0.419
8	0.33	0.145	-0.171	0.03
9	-0.498 *	-0.036	0.208	-0.06
10	0.17	-0.334	0.042	0.034
11	0.234	-0.548 *	0.106	0.104
12	0.408	-0.229	0.133	0.395
13	0.365	-0.026	0.03	0.404
14	0.196	-0.005	-0.224	0.12
15	0.312	-0.054	-0.16	0.229
16	0.234	-0.009	0.089	0.381
17	0.432	-0.249	0.096	0.149
18	0.259	-0.543 *	-0.071	-0.004
19	0.314	-0.142	-0.005	0.077
20	0.262	-0.316	0.001	0.165
21	0.531	-0.121	0.06	0.431
22	0.453	-0.252	-0.002	0.214
23	0.266	-0.37	0.16	0.322
24	-0.123	-0.352	0.039	0.038
25	-0.082	-0.638 *	0.143	0.158
26	0.38	-0.261	0.052	0.204
27	0.122	-0.421	0.028	0.223
28	-0.704 *	-0.024	0.212	0.128

* R > .456, p < .05

TABLE 1 (continued)
Correlation Matrix for Category Variables and Questions 1 to 55

	Sex	License	Yrs. Exp.	Yrs. DMHS
29	0.142	-0.003	0.101	0.2
30	-0.122	-0.308	0.046	0.094
31	0.091	-0.466 *	0.076	0.215
32	-0.266	-0.138	0.016	0.072
33	-0.42	-0.257	-0.025	-0.035
34	-0.352	-0.23	-0.015	-0.141
35	0.224	-0.358	0.087	0.294
36	-0.435	-0.244	-0.219	-0.242
37	-0.227	-0.245	0.142	0.187
38	-0.127	-0.644 *	-0.145	-0.013
39	0.078	-0.257	-0.134	-0.044
40	-0.528 *	-0.505 *	0.002	-0.125
41	-0.066	-0.029	0.417	0.363
42	0.007	-0.252	-0.077	-0.013
43	0.276	-0.189	0.105	0.27
44	0.335	-0.024	0.093	0.178
45	0.325	-0.159	-0.013	0.086
46	0.234	0.531 *	-0.052	0.082
47	0.009	0.076	-0.111	0.036
48	-0.007	-0.376	0.158	0.148
49	0.398	-0.127	0.074	0.357
50	0.321	0.117	0.161	0.489 *
51	0.415	0.012	0.322	0.444
52	0.38	-0.441	0.005	0.156
53	0.123	-0.576 *	0.087	0.181
54	0.119	-0.154	0.009	0.162
55	0.3	-0.416	0.004	0.136

* $R > .456$, $p < .05$

Administrator - Teacher Relations

Among the administrator - teacher relations climate factor, question three ($r = .502$) and question four ($r = .531$) were positively related to sex. No additional items were significantly related to sex. These questions were concerned with teacher perception of there being increased administrative attempts to help with problems and opportunity to discuss school matters in a semester system

An analysis of variance (ANOVA) was done to determine the strength of the relationship between question three and question four and the category variable sex.

Item Three

Male teachers generally perceived more increased administrative attempts to help them with their problems in a semester system than did female teachers ($F = 5.73$, $p = .0285$).

Item Four

Male teachers generally perceived more increase in opportunity to discuss school matters with administration in a semester system than did female teachers ($F = 6.66$, $p = .0194$).

Teacher - Teacher Relations

In the teacher - teacher relations climate factor, it is interesting to note that question nine was negatively related to sex ($r = -.498$). No additional items were significantly related to sex.

This question was concerned with teachers perceptions of having stronger feelings of being pushed in a semester system.

An ANOVA was done to determine the strength of the relationship between question nine and the category variable sex.

Item Nine

Female teachers generally perceived stronger feelings of being 'pushed' in a semester system than did male teachers ($F = 5.59, p = .0301$).

Instructional Effectiveness

In the instructional effectiveness climate factor, question twenty-eight was negatively related to sex ($r = -.704$). This question was concerned with teachers perception of the increased work demand outside of school in a semester system.

An ANOVA was done to determine the strength of the relationship between question twenty-eight and the category variable sex.

Item Twenty-Eight

Female teachers more generally perceived that the total amount of work outside of school has increased in a semester system than did male teachers ($F = 16.68, p = .0008$).

Student Academic Orientation

In the student academic orientation climate factors, question forty was negatively related to sex ($r = -.528$). This question was concerned with teachers perceptions of missed school time by students due to extra-curricular activities in a semester system. An ANOVA was done to determine the strength of the relationship between question forty and the category variable sex.

Item Forty

Female teachers generally perceived greater resistance to students missing classes for other activities in a semester system than did male teachers ($F = 6.59, p = .02$).

Relationship of Staff Teaching License Level to Perceptions

A second analysis utilized the category variable license and the 55 items (questions) of the SCCS as independent variables. To assess any significant relationships between SCCS factor items and license, regression analysis was used.

Teacher - Teacher Relations

Among the teacher - teacher relations climate factors, question eleven was negatively related to teaching license level ($r = -.548$). No additional items were significantly related to license. This question was concerned with teachers perceptions of increased enjoyment of teaching school in a semester system.

A simple regression was done to determine the strength of the relationship between question eleven and the category variable license.

Item Eleven

Teachers with a higher license generally perceived more increased enjoyment of teaching in a semestered system than did teachers with a lower license ($F = 7.29$, $p = .0152$).

Teacher - Student Relations

In the teacher - student relations climate factor, question eighteen was negatively related to license ($r = -.543$). No additional items were significantly related to license. This question was concerned with teachers perception of increased student understanding of course concepts in a semester system.

A simple regression was done to determine the strength of the relationship between question eighteen and the category variable license.

Item Eighteen

Teachers with a higher license generally perceived more increased student understanding of course concepts in a semestered system than did teachers with a lower license ($F = 7.095$, $p = .0164$).

Instructional Effectiveness

In the instructional effectiveness climate factor, question twenty-five ($r = -.638$) and question thirty-one ($r = -.466$) were negatively related to license. No additional items were significantly related to license. Question twenty-five was concerned with teachers perceptions of increased variety in class activity for students in a semester system. Question thirty-one was concerned with teachers perceptions of increased student understanding of course concepts in a semester system.

A simple regression was done to determine the strength of the relationship between questions twenty-five and thirty-one and the category variable license.

Item Twenty-Five

Teachers with a higher license generally perceived more increased variety in class activity for students in a semester system than did teachers with a lower license. ($F = 11.658, p = .0033$).

Item Thirty-One

Teachers with a higher license generally perceived more increased student understanding of course concepts in a semester system than did teachers with a lower license ($F = 4.724, p = .0442$).

Student - Academic Orientation

In the student academic orientation climate factor, question thirty-eight ($r = -.644$) and question forty ($r = -.505$) were negatively related to license. No additional items were significantly related to license. Question thirty-eight was concerned with teachers perceptions of increased total amount of student school work produced in a semester system. Question forty was concerned with teacher perceptions of there being greater teacher resistance to students missing classes for other school activities in a semester system. A simple regression was done to determine the strength of the relationship between questions thirty-eight and forty and the category variable license.

Item Thirty-Eight

Teachers with a higher license generally perceived more increase in the total amount of student school work in a semester system than did teachers with a lower license ($F = 12.043$, $p. = .0029$).

Item Forty

Teachers with a higher license generally perceived greater resistance to students missing classes for other school activities in a semester system than did teachers with a lower license. ($F = 5.813$, $p. = .0275$).

Student - Behavioral Values

In the student - behavioral values climate factor, question forty-six was positively related to license ($r = .531$). No additional items were significantly related to license. This question was concerned with teacher perceptions of increased behavior problems in classes in a semester system.

A simple regression was done to determine the strength of the relationship between question forty-six and the category variable license.

Item Forty-Six

Teachers with a lower license generally perceived more increase in behaviour problems in class in a semester system than did teachers with a higher license ($F = 6.665$, $p. = .0194$).

Parents and Community - School Relations

In the parent and community - school relations climate factor, question fifty-three was negatively related to license ($r = - .576$). No additional items were significantly related to license. This question was concerned with teacher perception of increased community attendance at school programs.

A simple regression was done to determine the strength of the relationship between question fifty-three and the category variable license.

Item Fifty-Three

Teachers with a higher license generally perceived more increased community attendance at school programs in a semester system than did teachers with a lower license ($F = 4.216$, $p = .0238$).

Relationship of Staff Years Teaching Experience D.M.H.S. To Perceptions

Lastly, a correlation analysis utilized the category variable years teaching experience at D.M.H.S. and the fifty-five items (questions) of the SCCS as independent variables. To assess any significant relationship between SCCS factor items and years experience at D.M.H.S., regression analysis was used.

Administrator - Teacher Relations

In the administrator - teacher relations climate factor, question four was positively related to years at D.M.H.S. ($r = .454$). This question was concerned with teacher perception of their being more opportunity to discuss school matters with administration in a semester system. A simple regression was done to determine the strength of the relationship between question four and the category variable years teaching at D.M.H.S.

Item Four

Teachers with less than twenty years service at D.M.H.S. generally perceived more increase in opportunity to discuss school matters with administration in a semester system than did teachers with twenty years or more service ($F = 4.406$, $p = .051$).

Student Activities

In the student activities climate factor, question fifty was positively related to years teaching at D.M.H.S. ($r = .489$). This question was concerned with teachers perceptions of increased student participation in sport teams in a semester system.

A simple regression was done to determine the strength of the relationship between question fifty and the category variable years teaching at D.M.H.S.

Item Fifty

Teachers with less than twenty years service at D.M.H.S. more generally perceived increased student participation in sport teams in a semester system than did teachers with twenty or more years service ($F = 5.343, p = .0336$).

SUMMARY

In this chapter a description of the perceptions or reactions of teachers from D.M.H.S. to fifty-five statements on the School Climate Change Survey (SCCS) measuring any change to semestering according to selected school climate perception sub-scales were presented. Also presented in this chapter was a correlation matrix comparing various category variables to questions one through fifty-five of the SCCS. Comparative statistics were further utilized to determine if significant relationships existed between selected category variables and survey questions.

The data analysis showed that the category variable sex was significantly related to questions in the following school climate perception sub-scales: administration - teacher relations, teacher - teacher relations, instructional effectiveness, and student academic orientation. The category variable teaching license was significantly related to questions in the following school climate perception sub-scales: teacher - teacher relations, teacher - student relations, instructional effectiveness, student academic orientation, student behavioral values, and parent and community - school relations. Lastly, the category variable years teaching experience at D.M.H.S. was significantly related to questions in the following school climate sub-scales: administrator - teacher relations and student activities.

It was interesting to note that question four in the administrator - teacher relations cluster was significantly related to the category variables sex and years teaching at

D.M.H.S. Also, question forty in the student academic orientation cluster was significantly related to the category variables sex and teaching license.

CHAPTER V

DISCUSSION OF THE FINDINGS

In this chapter the findings of the study presented in chapter four will be discussed in greater detail. This chapter has been arranged according to the questionnaire climate sub-sections. Integrated with the discussion are appropriate references to the literature review along with comments of the respondents who were informally interviewed.

Administrator - Teacher Relations

Teachers responded neutrally or felt that there was 'no change' (average score of '3' on questionnaire items) when compared to a non-semestered year on the opportunities to discuss school matters and level of trust. Teachers perceived moderate change on all other questionnaire items.

Teachers (42%) perceived increased administrative attempts to help with problems in a semester system. Further analysis indicated a gender difference in that male teachers perceived more increased administrative attempts to help them with their problems than did female teachers. This comment by a female teacher is an illustration of how some staff view administrative - teacher relations.

I don't know about improved, its probably pretty much the same ... I think staff appreciate it when administration get involved and lend support to whatever activity that staff generate ... it's important. I think the perception is that administration could participate more ... semestering is a factor ... it is important to show staff that they are valued as well and I'm not saying that administration doesn't do that ... I'm saying that more visibility and more support would go a long way to improving administrative - staff relations.

Teachers (53%) perceived no change in opportunities to discuss school matters with administration. Further analysis indicated a gender difference in that male teachers generally perceived more increase in opportunity to discuss school matters with administration than did female teachers. In addition teachers with less than twenty years

experience at D.M.H.S. generally perceived more increase in opportunity to discuss school matters than did teachers with twenty years or more experience.

The actions of the principal of D.M.H.S. at the time appear to be consistent with the study findings and with the elements considered by Keefe et al., (1985) in that for a school to be productive and satisfying, a positive climate must exist where people respect, trust, help one another and by a principal who supports the establishment and maintenance of the climate.

Overall, teachers generally perceived moderately improved administrative - staff relations as a result of a change to a semester system (mean for cluster of questions in this sub scale is 2.8).

Teacher - Teacher Relations

Teachers (63%) perceived stronger feelings of being 'pushed' in a semestered year. They also perceived that as a staff, there were improved efforts and team-work attempts to accomplish school goals. The finding that staff had increased feelings of being 'pushed' is consistent with those of Bramwell and Mann (1973) who also reported that staff felt that the quality and effectiveness of their teaching had increased. This comment by a male teacher is an illustration of how staff felt 'pushed' in a semestered environment.

As a teacher, I don't like the fact that I can't do as good a job as I would like to ... there is pressure to keep the 'pace' going ...

The findings of the study indicated that only 37 percent of the staff perceived that the quality of their teaching increased. Further analysis performed, indicated a gender difference in that female teachers generally perceived stronger feelings of being 'pushed' in a semester system than did male teachers. Also of interest is that while 42 percent of teachers disagreed that their enjoyment of teaching had increased, further analysis

indicated that teachers with a higher license generally perceived more increased enjoyment of teaching in a semester system than did teachers with a lower license.

Fifty percent or more of teachers responded neutrally or perceived 'no change' in communication among staff about school matters as a result of the semestered system.

The following comment by a female teacher further illustrates how staff felt pressured in a semestered environment, but also clarifies how semestering has affected staff morale.

No, generally no ... I think there are other things that are contributing to stress or whatever ... like back a few years ... when they discontinued smoking ... it seemed to make two groups or whatever ... you know it seemed to cut back on the amount of time that we might be together ... but I don't think it's a direct result of semestering ... it's just that everything has become more fast paced and other things ... its not a decline ... its just that a few years back at noon hour the staff used to be together in the staff room and one teacher would make-up word games and stuff like that and we would sit around and ... and Friday noon hour was the one ... and everybody would be there ... and it would be really positive and jovial ... you could always tell it was Friday because everybody left the staff room in fits of laughter ... that's the way it used to be ... but it hasn't happened for I'd say for about five years or something like that ... but, I don't think it's changed because of semestering.

Teacher - teacher relationships seem to be negatively viewed and the findings of this study appear to support those of Kalis (1980) in that teacher perceptions and feelings of school climate appear to become more negative with more years of experience at the school. However, such negativism may suggest a need for better communication among staff.

Overall, teachers generally perceived no change in teacher-teacher relations as a result of a change to a semester system (mean for cluster of questions in the sub-scale is 2.9).

Teacher-Student Relations

When compared to a non-semestered year, teachers said that the opportunity to get to know students better hadn't changed much, but the slight change was negative. One

of the most frequently cited motives for implementing semestering is the belief that this form of organizational change improves the quality of interpersonal relationships in the school (Ducharme and Ross, 1974; Davis et al., 1977 and Brophy, 1978).

Although semestering advocates claim that semestering gives teachers the opportunity to know their students better and improve teacher-student relationships, the findings of this study do not support this claim or those similarly reported by Bramwell and Mann (1973). This following comment by a female teacher helps to illustrate this finding.

No ... I don't think there is any more interaction between teacher and student because you're still accomplishing the same kinds of things ... for example some courses like H_____ was hurried before ... it's still hurried ... no change that way. I don't think there is any increase in interaction unless the teacher had changed their methods in the classroom.

This result is surprising, because considering the obvious benefit from semestering where the teacher is able to spend more time with students due to the seventy minute period, there is more opportunity to work together on subject material and develop a positive working relationship. Consequently, opportunities for dialogue and the growth of understanding between teachers and students increase.

When compared to a non-semestered year, staff perceived 'no change' or they disagreed that students received extra help as individuals and that there were more informal chats between teachers and students. However, this finding was consistent with Ireland et al., (1989) in which teachers did not believe that they addressed student individual needs better in a semester system. This comment was made by a female teacher concerning teacher - student relations in a semester system.

I have a negative opinion of semestering ... it has increased the speed or acceleration of the school atmosphere and in the classroom ... teachers are much busier than they used to be ... the day to day 'pace' has increased to such a higher level ... you don't have time to enjoy the kids like you used to.

Overall, teachers indicated a slight negative change in teacher-student relations as a result of a change to a semester system (mean for cluster of questions in this sub-scale is 3.3).

Instructional Effectiveness

Teachers perceived that there had been an increase in the following due to semestering: the 'pace' of the school day (95%), the total amount of work outside of school (84%) and variety in class activities for students (74%). Teachers perceived that the amount of talking they do in class to students had decreased (53%) compared to a non-semestered year.

Teachers (84%) disagreed that they covered more course content in a semestered year. Teachers indicated that the understanding of course concepts had moderately decreased. Teachers responded neutrally about increase in time for students to think in class. The following comment by a male teacher helps to illustrate this finding.

The quality of courses I teach aren't as good ... from a variety of angles - one, you can't cover as much, secondly, you don't have time for enrichment as the year before because of the 'pressure' to proceed and students don't have time for assimilation of work, time to practice it and apply it ... if those things aren't there ... then your course quality is not the same.

The study findings on increased teacher workload outside of school and increased variety in class activity are consistent with the findings of Bramwell and Mann (1973). Further analysis indicated a gender difference for amount of work outside of school. Female teachers generally perceived that the amount of work outside of school had increased in a semester system compared to male teachers.

At D.M.H.S. there was a cross-over of certain teachers from one subject or one grade level of the school to another. More female teachers appear to be effected by this cross-over which may account for this perception.

The study findings on increased variety in class activity and decreased coverage of course content are consistent with the findings of Brophy (1978). Teachers must be flexible and adjust their teaching methods to the longer periods. Further analysis indicated that teachers with a higher license generally perceived more increased variety in class activity for students in a semester system than did teachers with a lower license. It appears that those teachers that have altered their methods of presentation are more successful in making learning experiences more rewarding for students. This comment was made by a male teacher and helps emphasize the study findings.

Semestering has resulted in some improvements in our instructional strategies because it has forced some teachers hand to try new things and to accommodate the longer period ... but once again that instructional improvement is linked to the school climate and to how people feel about their job and so on ... interestingly, an improvement in instruction or a change in the way people do things in the classroom - even though there is an improvement in the student ... may in fact cause an inconvenience to the teacher and they may feel negatively about what they're forced into trying and doing - even though it results in a positive change.

Overall, teachers indicated a positive change in instructional effectiveness as a result of a change to a semester system (mean for cluster of questions in this sub-scale is 1.7).

Student Academic Achievement

Teachers perceived greater teacher resistance to students missing classes for other school activities (95%), that students felt 'pushed' to complete work (90%) and that homework, exams and tests had increased for students (52%). Teachers responded neutrally about increased student interest in classes and the total amount of student school work produced. This comment was made by a male teacher and helps illustrate these findings.

The fact that you miss a day is more meaningful ... it's like missing two days. I don't think it's a positive thing (semestering) ... I think some of the better academic students are finding that 'pressure' now ... they're finding they don't like a test coming as frequently as they did ... the pressure to leave one topic and go to another ... before, they may have felt comfortable about mastering the previous topic ... I'm sure I see that ...

In semestered schools, student and teacher absence had a more detrimental effect on student achievement versus non-semestered (Davis et al., 1977). The study findings on absence from class are perceived to be a problem. The study findings are consistent with those of Ireland et al., (1989) in which teachers felt that student absence from class had more effect in semestering.

Further analysis indicated that female teachers generally perceived greater resistance to students missing classes for other activities in a semester system than did male teachers and teachers with higher license generally perceived greater resistance than did teachers with a lower license. Staff clearly see a greater risk for students who fall behind for whatever reason in a semestered system, whether because of absence or because of failure to understand a key concept. Moreover, it is perceived that, in the compressed time frame, students are more likely to fail to grasp a concept.

The study findings on increased student feelings of being 'pushed' are consistent with Bramwell and Mann (1973) where teachers perceived a slight increase. Another finding consistent with Bramwell and Mann (1973) was that staff reported a slight increase in the number of projects and the amount of homework. Teachers in Ireland et al.'s, (1989) study thought it had stayed the same.

Teachers perceived no change in student interest in classes and the total amount of school work produced. Teachers may have thought the interest level of the longer periods was not any different from shorter periods. This finding was consistent with Ireland et al., (1989) in which teachers felt students did not produce better work as a result of the longer periods. Overall, teachers indicated a positive change in student academic achievement as

a result of a change to a semester system (mean for cluster of questions in this sub-scale is 2.5).

Student-Peer Relations

Teachers responded neutrally to whether there was opportunity to make new friends, whether the acceptance of low achieving students had increased and whether students had a more positive perception of 'day to day' climate at school.

Bramwell and Mann (1973) noted improvement in students' well being resulting from relationships that were initiated and developed under the semester plan resulting from fewer class changes. Teachers agreed it was motivational for students to meet new friends at semester changes.

The study findings on increased student opportunity to work on projects and homework in class, are comparable to the findings of Ireland et al., (1989) in which teachers comment on students referring to the possibility of doing their homework in class time.

Overall, teachers indicated generally no change in student-peer relations as a result of a change to a semester system (mean for cluster of questions in this sub-scale is 2.9).

Student - Behavioral Values

Teachers, fifty percent or more responding neutrally, perceived no change in behaviour problems in class as a result of semestering. Improved behaviour and demand on teacher instructional time to deal with discipline had also not changed. The following comment by a male teacher lends support to the study finding.

I don't think it had any effect on it whatsoever. I haven't noticed any significant improvement ... for example in discipline referrals or anything like that ... there's been no change.

Stennett (1992) reports that there are fewer discipline problems in semestered schools. Students are unlikely to miss a class because it takes on more importance to them in view of the long classes and short term. They realize the shortened term requires more concentrated effort on their part.

Although this study's findings indicated no change in attendance and discipline, further analysis indicated that teachers with the lower license generally perceived more increase in behaviour problems in class in a semester system than did teachers with a higher license. Teachers experiencing problems may not find it easy to sustain student interest and motivation over the longer period of time due to semestering.

Overall, teachers indicated no change in student - behavioral values as a result of a change to a semester system (mean for cluster of questions in this sub-scale is 3.0).

Student Activities

Teachers reported decreased student participation in clubs, sports teams or extra - curricular activities in a semester system. The study findings are consistent with the findings of Ireland et al., (1989) in which staff felt that students were not more involved in extra - curricular activities as a result of semestering. Although an ambiguous finding, it is apparent that semestering has caused problems in this aspect of school life. This comment by a female teacher is an illustration of how staff view student activities in a semester system.

The kids seem quite happy and enjoy most activities ... they find the time a little bit long ... a few have mentioned that there is not much to do ... if you're not inclined to sports or go to the gym ... there are not a lot of things available to them...

Further analysis indicates that teachers with less than twenty years service at D.M.H.S. more generally perceived increased student participation in sport teams in a semester system than did teachers with twenty or more years service. Although

significant, this difference in teacher perception may not be related to semestering but, the fact that younger teachers are more apt to be supervisors or coach sport teams after school hours.

Overall, teachers indicated a slight negative change in student activities as a result of a change to a semester system (mean for cluster of questions in this sub-scale is 3.2).

Parent and Community - School Relations

Teachers responded neutrally or perceived that there was no change in parent attendance at school meetings, school programs and parental involvement in school activities as a result of adopting semestering.

Further analysis indicated that teachers with a higher license generally perceived more increased community attendance at school programs in a semester system than did teachers with a lower license.

This may be due to steps taken to increase communications between home and school, i.e., school newsletter and student newspaper. It would also be perceived that parents are aware of the major characteristics that differentiate the semester system from the traditional system. Lastly, there could be perceived positive and supportive parental opinion about the school.

Overall, teachers indicated no change in parent and community - school relations as a result of a change to a semester system (mean for cluster of questions in the sub-scale is 3.0).

SUMMARY

In this chapter, an examination of the congruence of the study's findings with the available literature on semestering and school climate was presented. Also presented were comments from interviewed teachers to supplement and bring to life the quantitative findings.

Overall, teachers perceived moderately improved change in administrator - staff relations (mean 2.8). Teachers, perceived no change in teacher - teacher relations (mean 2.9). Teachers perceived a negative change in teacher - student relations (mean 3.3). Teachers, perceived a positive change in instructional effectiveness (mean 1.7). Teachers, perceived a possible change in student academic orientation (mean 2.5). Teachers, perceived no change in student-peer relations (mean 2.9) Teachers perceived no change in student-behavioral values (mean 3.0). Teachers, perceived a negative change in student activities (mean 3.2). Lastly, teachers perceived no change in parent and community - school relations (mean 3.0) as a result of a change to semestering.

CHAPTER VI
SUMMARY, CONCLUSIONS AND RECOMMENDATIONS
SUMMARY OF THE STUDY

Background and Purpose of the Study

The purpose of the study was to describe and explain any climate change of Duncan MacMillan High School as a result of a change to a semester system. Although research suggests that the majority of teachers tend to view semestering positively, it is useful to explore the relationship between school climate and semestering in a local context as a result of adopting and implementing this organizational change.

Justification of the Study

King et al., (1977) suggest two factors emerge as significant in determining the success of semestering in a school:

1. the method by which semestering is introduced
2. the reason for the implementation of the semestering organization

King et al., (1977) suggests that the second factor can to some extent soften the effects of the first.

The adoption and implementation of semestering at Duncan MacMillan High School was not imposed as a directive from the Board. The staff formed a Semestering Committee where members were given substitute days to visit other schools already employing semestering. They also contacted other provincial education departments. The committee prepared a summary report and presentation of the semester concept which resulted in staff reluctantly supporting and participating in a two year pilot program. The alternatives to semestering which the staff felt would result in a re-structuring of the then present system seemed to be significant in maintaining their approval with the semestering

concept. The period of adjustment was augmented with in-servicing from the Department of Education personnel regarding instructional adaptations and evaluation.

Through staff input, patience, and insight the change to semesters was adopted in an attempt to deal with implementation changes to the Nova Scotia senior high school program.

This study was an attempt to describe and explain any perceived change in school climate as a result of adopting and implementing semestering. In addition to examining the advantages and disadvantages of the semester system in a local context, there were other reasons for conducting the study. There was a need to know if the staff of D.M.H.S. perceived the school climate to be more positive as a result of a change to semestering and if so, which climate variables were related to any perceived change.

Research Design and Methodology

Twenty teachers (staff 27) at Duncan MacMillan High School who were intimately associated with the semester system were chosen for this study. To insure confidentiality, teachers were identified by number. The study was exploratory and descriptive in nature. Permission to conduct the research was obtained from school administration. The research proposal was approved by the Faculty of Education, Saint Mary's University.

Both quantitative and qualitative methods were used to collect the data. The quantitative component consisted of a questionnaire completed by the teachers in the sample. The qualitative component consisted of a taped informal interview with a group of 4 teachers selected from the sample. Both the questionnaire and the interview format were pilot tested prior to the data collector.

A questionnaire grounded in the review of the literature was developed that measured teacher perceptions toward any climate change at Duncan MacMillan High School as a result of a change to a semester system. The questionnaire consisted of 55 items on a 5-point Likert - type scale from strongly agree (1) to strongly disagree (5).

Since the qualitative material was being used to supplement the quantitative data, the interview was constructed in an attempt to be consistent with the types of questions asked in the questionnaire.

The data were then subjected to two statistical techniques to analyze the comparisons within the group.

SUMMARY OF THE FINDINGS

The summary of the findings of the study are presented in relation to the two research questions considered in the study which are as follows:

- 1) Do teachers perceive school climate to be more positive as a result of a change to a semester system?
- 2) Has a change to semestering contributed to the creation and/or maintenance of a positive school climate?

The two research problems can be summarized into one category entitled 'staff response to semestering'.

Staff Response to Semestering

A major portion of the study involved the generation of descriptive statistics that characterize teacher perceptions and reactions about any climate change at D.M.H.S. as a result of a change to semestering.

Before the change to semestering, none of the staff had ever worked with semesters. Teachers faced a period of adjustment and felt the impact of semestering in a number of ways: teachers had to vary instructional strategies and methods more in semestered courses, teachers had more planning and preparation outside of school, teachers realized potential to develop better relationships with students, teachers had difficulty adjusting to longer periods and quicker 'pace', teachers had more time to

concentrate on fewer subjects and the overall atmosphere of the school was seen as one of not being relaxed.

Teachers identified some aspects of semestering in a negative way: student absenteeism was seen as detrimental to instruction and evaluation, an accelerated 'pace' was required from all students, the needs of slower students were not being met, students don't seem as ambitious compared to a non-semestered year i.e., extra-curricular etc., preparation time at a premium, more administrative work i.e., evaluation, and course changes and the longer periods in semestering were seen as highly draining in terms of energy.

The qualitative data contributed to information relevant to the research question identified. Comments from four selected teachers who were interviewed are presented. The following comments reveal that teachers appear to perceive no change in school climate as a result of a change to semestering and illustrate that any perceived change cannot be directly attributed to semestering.

One example of whether teachers perceive the school climate to be more positive as a result of a change to semestering was illustrated in this comment by a female teacher.

I haven't noticed any definite change ... it seems to be the same.

A male teacher further commented.

I don't see any difference ... it hasn't helped ... I really don't ... some of the problems are still there and haven't changed because of semestering one way or the other.

One example of whether teachers perceived the change to semestering contributing to the creation and/or maintenance of a positive school climate was illustrated in this comment by a female teacher.

There isn't universal approval of the semestering project, but I think there would be general feeling that the climate has improved ... quite independent of semestering.

Lastly, this male teacher commented.

I think the school climate is reasonably good, but, I wouldn't attribute it to semestering ... semestering is really just a delivery program ... the kinds of things that cause teachers to be happy with themselves and feel good about their job are not really related to semestering ... to some extent.

Relationship of Control Variables to Staff Perceptions

Control variables in the study included the demographics of sex, teaching license, years experience and years at D.M.H.S. The researcher was interested in whether or not these variables influenced the perception of teachers under investigation. The following significant relationships were determined in a semester system: (1) male teachers generally perceived more increased administrative attempts to help them with their problems than did female teachers, (2) male teachers generally perceived more increase in opportunity to discuss school matters with administration than did female teachers, (3) female teachers generally perceived stronger feelings of being 'pushed' than did male teachers, (4) female teachers more generally perceived that the total amount of work outside of school has increased than did male teachers, (5) female teachers generally perceived greater resistance to students missing classes for other activities than did male teachers, (6) teachers with a higher license generally perceived more increased enjoyment of teaching than did teachers with a lower license, (7) teachers with a higher license generally perceived more increased student understanding of course concepts than did teachers with a lower license, (8) teachers with a higher license generally perceived more increased variety in class activities for students than did teachers with a lower license, (9) teachers with a higher license generally perceived greater resistance to students missing classes for other school activities than did teachers with a lower licence, (10) teachers with a lower license generally perceived more increase in behaviour problems in class than did teachers

with a higher license, (11) teachers with a higher license generally perceived more increased community attendance at school programs than did teachers with a lower license, (12) teachers with less than twenty years service at D.M.H.S. generally perceived more increase in opportunity to discuss school matters with administration than did teachers with twenty years or more service, and (13) teachers with less than twenty years service at D.M.H.S. more generally perceived increased student participation in sport teams than did teachers with twenty or more years service.

CONCLUSIONS

After one year's experience, the staff of Duncan MacMillan High School appear to be moderately positive with the change to semestering and in their perceptions of the school climate. The quantitative findings from this study show a positive change to school climate particularly in the areas of instructional effectiveness and student academic orientation.

From the qualitative study findings it appears that staff were reluctant to attribute the atmosphere in the school to semestering. Teachers generally perceived a fairly good existing school climate and this perception may have resulted from a general positive school atmosphere versus factors directly related to semestering.

Nevertheless, semestering was an item of controversy and in assessing the situation, staff were attempting to make it educationally viable and willing to work out difficulties inherent rather than dismiss the entire system.

Consequently, it can be concluded that the adoption of semestering, resulted in a small, but significant positive change in school climate at Duncan MacMillan High School. Semestering cannot change a school from unhappy to happy or vice versa, but, this organizational change can and may intensify the features which make up the climate of the school.

RECOMMENDATIONS

Recommendations for Future Study

An important limitation of the study is that the instrument used to measure the perceptions under investigation was developed by the researcher and therefore the validity of the instrument could not be verified by other studies. This limitation does restrict the interpretation of the results. It would be interesting to apply the same instrument to students, school teachers in other semestered schools or to the same school staff after two years of semestering.

Recommendations for Practitioners

This study was concerned only with those teachers at Duncan MacMillan High School who had experienced a semestered year compared to a non-semestered year. It was anticipated that the practical implications from the implementation of this timetable innovation will be relevant to the Halifax County - Bedford District School Board when other high schools semester. It was intended that this study identify any perceived change (positive or negative) arising from the change to semesters and involve in decision making those groups likely to be affected by the change.

This study may provide evidence that educators are concerned about the development and maintenance of a school climate and it was hoped that this form of assessment would help foster rather than frustrate change efforts in a school where stakeholders i.e., teachers and students are concerned.

Most of the data reported herein is descriptive and it cannot be said that the semester system is better than a traditional school year plan. To answer this question, comparison with traditional schools could be planned.

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APPENDICES

APPENDIX A
INFORMAL INTERVIEW GUIDE

**APPENDIX A
INFORMAL INTERVIEW GUIDE**

1. Can you describe the general school climate at D.M.H.S. ?
i.e., friendliness, co-operation, school morale.
2. Do you think the climate at school is more positive as result of semestering ? If so, how? If not, why?
3. Compared to last year, has the change to semestering affected you in any way? If so, would you be willing to describe how?
4. Has the change affected how you feel about
your job?
staff morale?
school morale?
5. Does the change affect how you feel about teaching here?
6. Has the change affected students behavior?
 - student achievement?
 - student learning?
 - Can you describe how?
7. Are you satisfied with the change? Why or why not?
8. What advantages has there been? What disadvantages?
9. How do you thing teachers/students perceive the climate at D.M.H.S.?
10. What changes would you like to see staff make or are they making to improve school climate at D.M.H.S.?

APPENDIX B
QUESTIONNAIRE
SCHOOL CLIMATE CHANGE SURVEY

DUNCAN MACMILLAN HIGH SCHOOL

SCHOOL CLIMATE CHANGE SURVEY

PLEASE FILL IN THE FOLLOWING INFORMATION

SEX: M F ___ YEARS TEACHING AT D.M.H.S. ___

LICENCE: ___ AREA OF SPECIALIZATION: ___

YEARS EXPERIENCE: ___

The purpose of this questionnaire is to determine any change in school climate as a result of a change to a semester system.

Thank you for your participation.

DIRECTIONS

You are asked to indicate the degree of change from last year to this year.

Please circle a number from 1 to 5 according to the following criteria.

- No. 1 if you STRONGLY AGREE (SA)
- No. 2 if you AGREE (A)
- No. 3 NEUTRAL or NO CHANGE (N)
- No. 4 if you DISAGREE (D)
- No. 5 if you STRONGLY DISAGREE (SD)

ADMINISTRATOR - TEACHER RELATIONS

	SA	A	N	D	SD
1. Compared to last year, administration sensitivity to teacher problems has increased	1	2	3	4	5
2. Compared to last year, conflicts between teachers and administration have increased	1	2	3	4	5
3. Compared to last year, administrative attempts to help me with my problems have increased	1	2	3	4	5
4. Compared to last year, there is more opportunity to discuss school matters with administration	1	2	3	4	5
5. Compared to last year, the level of trust between teachers and administration has increased	1	2	3	4	5
6. Compared to last year, attempts by administration to give me useful ideas and information has increased	1	2	3	4	5
7. Compared to last year, opportunity for open and candid communication has increased	1	2	3	4	5

TEACHER - TEACHER RELATIONS

8. Compared to last year, there has been more opportunity to meet colleagues during break	1	2	3	4	5
9. Compared to last year, I have stronger feelings of being 'pushed'	1	2	3	4	5
10. Compared to last year, the quality of my teaching has improved	1	2	3	4	5
11. Compared to last year, my enjoyment of teaching school has increased	1	2	3	4	5
12. Compared to last year, the 'day to day climate' at our school has improved	1	2	3	4	5

	SA	A	N	D	SD
13. Compared to last year, communication among teachers about school matters has improved	1	2	3	4	5
14. Compared to last year, co-operation and teamwork in staff efforts to accomplish school goals has improved	1	2	3	4	5
15. Compared to last year, staff members planning together and co-ordinating their efforts has increased	1	2	3	4	5
16. Compared to last year, conflicts among teachers have decreased	1	2	3	4	5

TEACHER -STUDENT RELATIONS

17. Compared to last year, there has been more opportunity to get to know students as individuals	1	2	3	4	5
18. Compared to last year, students understanding of the course concepts has increased	1	2	3	4	5
19. Compared to last year, informal chats with the students have, increased	1	2	3	4	5
20. Compared to last year, class discussions with students has increased	1	2	3	4	5
21. Compared to last year, there is more opportunity to give students extra help	1	2	3	4	5
22. Compared to last year, there is more opportunity to give individual attention to students	1	2	3	4	5
23. Compared to last year, there is more opportunity for student input into curriculum	1	2	3	4	5

INSTRUCTIONAL EFFECTIVENESS

	SA	A	M	D	SD
24. Compared to last year, the amount of talking the teacher does in class to students has decreased	1	2	3	4	5
25. Compared to last year, variety in class activity for students has increased	1	2	3	4	5
26. Compared to last year, the number of topics I have been able to cover in a course has increased	1	2	3	4	5
27. Compared to last year, the number of interesting class periods has increased	1	2	3	4	5
28. Compared to last year, the total amount of work for teachers outside school has increased	1	2	3	4	5
29. Compared to last year, time for students to think has increased	1	2	3	4	5
30. Compared to last year, student participation in class has increased	1	2	3	4	5
31. Compared to last year, student's understanding of the course concepts has increased	1	2	3	4	5
32. Compared to last year, the 'pace' of the school day has increased	1	2	3	4	5

STUDENT ACADEMIC ORIENTATION

33. Compared to last year, student homework has increased	1	2	3	4	5
34. Compared to last year, exams, tests, and quizzes for students have increased	1	2	3	4	5
35. Compared to last year, student enjoyment of classes has increased	1	2	3	4	5
36. Compared to last year, the students' feeling of being 'pushed' to complete work has increased	1	2	3	4	5
37. Compared to last year, student interest in courses has increased	1	2	3	4	5

	SA	A	N	D	SD
38. Compared to last year, the total amount of student school work produced has increased	1	2	3	4	5
39. Compared to last year, the school's goals/expectations for students' educational performance has increased	1	2	3	4	5
40. Compared to last year, there is greater teacher resistance to students missing classes for other school activities	1	2	3	4	5

STUDENT - PEER RELATIONS

41. Compared to last year, opportunity for students to talk more to each other has increased	1	2	3	4	5
42. Compared to last year, the acceptance of low - achieving students by their peers has increased	1	2	3	4	5
43. Compared to last year, students perception of the 'day to day' climate at the school is more positive	1	2	3	4	5
44. Compared to last year, opportunity to work on projects in class has increased	1	2	3	4	5
45. Compared to last year, opportunities for students to make new friends has increased	1	2	3	4	5

STUDENT - BEHAVIORAL VALUES

46. Compared to last year, behavior problems in class have increased	1	2	3	4	5
47. Compared to last year, there is a greater demand on teacher instructional time to deal with student behavior	1	2	3	4	5
48. Compared to last year, student behavior has improved	1	2	3	4	5

STUDENT ACTIVITIES

	SA	A	N	D	SD
49. Compared to last year, student participation in clubs has increased	1	2	3	4	5
50. Compared to last year, student participation in sport teams has increased	1	2	3	4	5
51. Compared to last year, more students stay after school for extra curricular activities	1	2	3	4	5

PARENT AND COMMUNITY - SCHOOL RELATIONS

52. Compared to last year, attendance by parents to school meetings and other activities has increased	1	2	3	4	5
53. Compared to last year, community attendance at school programs has increased	1	2	3	4	5
54. Compared to last year, there are more opportunities for parent involvement in school activities	1	2	3	4	5
55. Compared to last year, there is an improved perception of school 'climate' on the part of parents	1	2	3	4	5

END OF THE SURVEY