STUDENT PERCEPTIONS AND PROGRAM ORGANIZATION IN SECONDARY-LEVEL ALTERNATE EDUCATION

by

John Bradley Woudzia

B.A., University of British Columbia, 1980

A THESIS SUBMITTED IN PARTIAL FULFILLMENT OF

THE REQUIREMENTS FOR THE DEGREE OF

MASTER OF ARTS (EDUCATION)

in the faculty

of

Education



John Bradley Woudzia 1986

SIMON FRASER UNIVERSITY

April, 1986

All rights reserved. This thesis may not be reproduced in whole or in part, by photocopy or other means, without permission of the author.

APPROVAL

Name:

John Bradley Woudzia

Degree:

Master of Arts (Education)

Student Perceptions and Program Organization

In Secondary-Level Alternate Education

Title of thesis:

Examining Committee

Chairman:

A. Horvath

R.W. Marx Senior Supervisor

B.A. Hiebert Second Member

B. Borgen Associate Professor Department of Counselling Psychology University of British Columbia External Examiner

Date approved April 10, 1986

PARTIAL COPYRIGHT LICENSE

I hereby grant to Simon Fraser University the right to lend my thesis, project or extended essay (the title of which is shown below) to users of the Simon Fraser University Library, and to make partial or single copies only for such users or in response to a request from the library of any other university, or other educational institution, on its own behalf or for one of its users. I further agree that permission for multiple copying of this work for scholarly purposes may be granted by me or the Dean of Graduate Studies. It is understood that copying or publication of this work for financial gain shall not be allowed without my written permission.

Title of Thesis/Project/Extended Essay

Student Perceptions and Program Organization In

Secondary-Level Alternate Education

Author:

(signature)

John Bradley Woudzia

(name)

April 10, 1986

(date)

ABSTRACT

The present study investigated the relationship between certain aspects of program organization and students' perceptions of their learning environments in secondary-level alternate school programs in British Columbia. Three specific questions guided this inquiry, namely: (a) do alternate school programs differ in terms of their teachers' organizational and instructional practices?, (b) do students' perceptions of their particular learning environments differ across the various school programs involved?, and (c) are there significant relationships between alternate school students' perceptions of their learning environments and the organizational and instructional features that characterize these environments?

To answer these questions, 103 students from seven secondary-level alternate school programs in the Upper, Middle, and Lower Fraser Valley regions of Southwest British Columbia responded to the Learning Environment Inventory which measured students' perceptions of their educational environments along the following 15 dimensions: (a) cohesiveness, (b) diversity, (c) formality, (d) speed, (e) material environment, (f) friction, (g) goal direction, (h) favoritism, (i) cliqueness, (j) satisfaction, (k) disorganization, (l) difficuly, (m) apathy, (n) democracy, and (o) competitiveness. Teachers representing each of the programs responded to the <u>Classroom</u> <u>Characteristics Rating Scale</u>, which measured grouping and evaluation practices, as well as procedures for differentiating instructional tasks among students, and involving students in instructional decisions.

Results revealed that student perceptions of their particular alternate school programs were significantly different across the

iii

seven programs considered for 10 of the 15 climate dimensions under investigation. Differences regarding teachers' organizational and instructional practices in their schools across the four areas were also noted. In addition, a number of statistically significant relationships--both desireable and undesireable--among specific program organizational features and student perception variables were identified. Results are discussed in terms of their implications and importance for teachers, counsellors, curriculum developers, and other personnel involved in secondary-level alternate educational programs.

ACKNOWLEDGEMENTS

I would like to thank Dr. Ron Marx and Dr. Bryan Hiebert for their guidance and direction throughout this entire study. Special thanks also to Margaret Brown, Judy Taylor, and Lisa Woudzia who assisted with the data collection. Finally, sincere thanks to all the alternate school teachers, students, and administrators who agreed to participate and make this study possible.

APPROVAL		
ABSTRACTiii		
ACKNOWLEDGEMENTS		
TABLE OF CONTENTS		
LIST OF TABLESx		
LIST OF FIGURESxi		
CHAPTER 1: INTRODUCTION		
Statement of the Problem2		
Research Questions		
Definition of Terms		
Learning Environment4		
Program Organization4		
Student Perceptions		
Conclusion7		
CHAPTER 11: REVIEW OF RELATED LITERATURE		
Student Perceptions in Alternate Schools8		
Locally Developed Instrumentation		
Standardized Instrumentation		
Summary		
Student Perceptions and the <u>LEI</u>		
Curriculum Evaluation		
Grade Level and Subject Area		
Type of School		
Summary		
Classroom Organization Research		
Shared Perceptions of Ability		

Academic and Social Power
Attitudes Toward School
Summary
Conclusion
CHAPTER 111: METHODS AND PROCEDURES
The Sample
Program One
Program Two
Program Three
Program Four
Program Five40
Program Six
Program Seven
Method of Data Collection
The Instruments
Learning Environment Inventory
Positive Climate Dimensions
Negative Climate Dimensions
<u>Classroom</u> Characteristics
<u>Rating Scale</u> 51
Conclusion
CHAPTER 1V: RESULTS
Characteristics of Program Organization53
Task Structure
Student Autonomy
Organization of Instruction
Teacher Evaluations
Total

	Differences in Student Perceptions
	Formality
	Speed
	Goal Direction
	Favoritism
	Difficulty
	Apathy
	Democracy
	Satisfaction
	Disorganization
	Competition
	Non-significant Variables
	Program Organization and
	Student Perceptions
	Task Structure
	Autonomy
	Organization of Instruction
	Evaluation
	Total
	Shared Variance among Student Perceptions74
	Conclusion
CHAPTER V:	DISCUSSION AND IMPLICATIONS77
	Summary of the Problem,
	Methodology, and Results77
	Findings
	Organizational and Instructional Differences79
	Student Perception Differences
	Goal Direction

.

Democracy
Satisfaction82
Formality
Speed83
Favoritism83
Difficulty83
Apathy84
Disorganization
Competition
Student Perceptions and
Program Organization
Task Structure
Student Autonomy
Grouping
Evaluation
Total
Implications for Educational Personnel
Conclusion
APPENDICES
A. Consent Form for Participants
B. <u>Classroom Characteristics Rating Scale</u>
BIBLIOGRAPHY

.

LIST OF TABLES

Table 1.	Information regarding Program, Program Type, Class Size, and Sex of Alternate School Students Who completed the <u>LEI</u>
Table 2.	Number of Students per Grade Level per Alternate School who completed the <u>LEI</u>
Table 3.	Results of the <u>Classroom Characteristics</u> <u>Rating Scale</u>
Table 4.	Spearman Rank-Difference Correlations for Program Organization Variables
Table 5.	Program Means, Standard Deviations, and Univariate F Ratios from a series of One-Way Analyses of Variance for the 15 Student Perception Variables
Table 6.	Results of Post Hoc Scheffe Tests involving Differences in Students' Perceptions of their Learning Environments
Table 7.	Correlations between Students' Perceptions of their Alternate Learning Environments and Teachers' Organizational and Instructional Practices
Table 8.	Distribution of Correlations of Student Perceptions and Program Organization

х

LIST OF FIGURES

xi

Page

CHAPTER 1

1

INTRODUCTION TO THE STUDY

Alternate education at the secondary level in British Columbia has, to date, been characterized by a great deal of curricular variation in program offerings among schools that specialize in providing instruction for students with socio-emotional problems. One of the primary goals of secondary alternate education has always been to provide a learning environment where students who have been unsuccessful in the traditional school system may experience academic, as well as social and emotional growth. In order to facilitate growth in these areas, educators responsible for planning alternate school curricula in a particular school district frequently design a program they believe will best meet the unique needs of their specific student population. Typically, this practice results in little program consistency from one alternate school to the next with respect to areas such as student autonomy, organization of instruction, and evaluation procedures. An alternate program in one school district might be unidimensional in nature, characterized by little student choice and comparative student evaluations, while a program in a different school district might operate in a multidimensional manner, with the students making the majority of the classroom decisions. One measure of how successful a particular secondary alternate school program has been in facilitating personal student growth, is an indication of the degree of student satisfaction with the program. It is the purpose of this study to investigate the link between student perceptions of schooling and the type of alternate educational program students are currently enrolled in to determine in which types of alternate learning environments student perceptions are most positive.

Statement of the Problem

In February, 1985, a province-wide Special Education Conference for Rehabilitation and Alternate High School Program Personnel was held in Coquitlam, British Columbia. During the conference, it became apparent that no single 'classroom environment' tended to characterize the programs that were represented. Instead, a variety of learning environments appeared to exist among the various alternate school and rehabilitation programs. More importantly, there appeared to be considerable debate concerning whose school--or rather--which learning environment was ultimately the most effective in meeting the special needs of this particular student population. The marked contrast in learning environments of alternate and rehabilitation programs. represented at the conference was surprising, especially considering the fact that; 1) students in all programs appear to be selected on the basis of similar criteria (i.e., unable to cope emotionally, academically, or behaviorally in the regular school system); and 2) representatives from all schools in attendance expressed their basic philosophy or long term goal as one of providing an educational environment where students are able to find enjoyment at school and have greater opportunities for experiencing success. From a curricular perspective, the majority of alternate school and rehabilitation programs are committed to providing a setting where students can earn academic credit up to and including grade ten equivalency, as well as learn skills necessary for the world of work.

Because of the lack of concensus concerning which alternate educational environment is the most effective at meeting these important student needs, the present study was undertaken to investigate the psychosocial classroom processes at work in different alternate school learning environments. The study examines student perceptions in alternate school settings characterized by a variety of different instructional practices. A classroom environment study of this nature provides important feedback for teachers and other educational program personnel regarding students' levels of satisfaction with their particular alternate school programs. This information, in turn, could be taken and used to introduce modifications to existing school programs in hopes of improving the quality of the educational experience for students enrolled in alternate eductional programs at the secondary level.

Research Questions

Based on research indicating that students attending secondary level alternate school programs find it difficult to cope either emotionally or behaviorally in the traditional school system (e.g., Ghory & Sinclair, 1978; Johnson & Faunce, 1972), the following questions were considered:

1. Do alternate schools differ in terms of their organizational and instructional characteristics?

2. Do students' perceptions of educational climate differ in alternate school programs having different curricular organizations?

3. What is the relationship between alternate school students' perceptions of their learning environments and the organizational and instructional features that characterize these environments?

Definition of Terms

A number of specific terms were used throughout the course of the study to describe alternate educational programs, to make categorical decisions regarding classroom organization, and to describe secondary alternate school students' levels of satisfaction with their respective school programs. In order to permit a better understanding of the meaning and significance of the study results, definitions of the terms; learning environment, program organization (i.e., unidimensional and multidimensional), and student perceptions are presented below.

Learning Environment

Throughout the literature dealing with classroom organization, authors use definitions of dimensionality to describe the instructonal aspects of classrooms (Marx, 1985, 1983; Rosenholtz, 1982; Rosenholtz & Rosenholtz, 1981; Rosenholtz & Simpson, 1984a, 1984b; Rosenholtz & Wilson, 1980; Simpson, 1981) rather than instructional or school-wide programs per se. For the purposes of this study, however, the classroom itself was considered but one aspect of a broader unit of study viewed as the 'learning environment'. Since student-teacher interactions in alternate educational programs are not restricted to a specific number of instructional hours spent per week in a particular classroom, the term, 'learning environment' was used in place of 'classroom' to; (a) describe better the true nature of student-teacher relationships, and (b) represent more accurately the entire range of alternate eductional program offerings, including typical components such as leisure and recreational classes, guidance and life skills training, physical and industrial education. Consequently, a unidimensional-multidimensional continuum was used in this study to describe entire alternate school programs or learning environments, rather than singular classrooms.

Program Organization

Rosenholtz and Rosenholtz (1981) used the terms 'unidimensionality' and 'multidimensionality' originally to describe

the organizational aspects of a given classroom according to teachers' reports of their curricular materials and instructional practices. Prior to this time, the terms 'high resolution' and 'low resolution' had been used by Rosenholtz and Wilson (1980) to describe unidimensional and multidimensional classroom characteristics respectively. Within these two classroom categories, four specific characteristics were identified as indices of whether a classroom was unidimensional or multidimensional in nature. These four characteristics are: (a) differentiation of task structure; (b) organization of instruction; (c) student autonomy, and (d) teacher evaluations. It is within this four-part classification system that unidimensional and multidimensional learning environments are described below:

Unidimensional learning environment. Learning environments that were judged in this study to be unidimensional were characterized by: (a) low task differentiation; (b) entire class groupings; (c) low student autonomy, and (d) the use of uniform criteria by teachers for evaluating student progress. That is, students in unidimensional learning environments tended to use the same materials for all subjects, were grouped together as an enire class for the purposes of instruction, were rarely permitted to make decisions regarding type or length of activity, and were frequently evaluated on the basis of comparing one student's progress to that of another.

<u>Multidimensional learning environment.</u> Unlike unidimensional alternate school programs, multidimensional learning environments in this study were characterized by: (a) high task differentiation; (b) individual student work; (c) high student autonomy, and (d) less standardized evaluations. In other words, students in

multidimensional learning environments used different materials in similar subject areas, were instructed individually, rather than as part of a larger group, were permitted a greater range of choices or options, and were evaluated on the basis of individual progress. Measures of program dimensionality were obtained through teacher ratings on an instrument entitled the <u>Classroom Characteristics</u> <u>Rating Scale</u>. This instrument is discussed at length in Chapter Three.

Student Perceptions

In this study, 'student perceptions' of schooling was chosen as the dependent variable. The term 'student perceptions' was selected over 'student satisfaction', since a number of attitude measures were studied of which satisfaction was only one. Specifically, 'student perceptions' of schooling for the purposes of this study consisted of the following fifteen constructs: cohesiveness, diversity, formality, speed, material environment, friction, goal direction, favoritism, difficulty, apathy, democracy, cliqueness, satisfaction, disorganization, and competitiveness. The idea of a simplified, summative definition of 'student perceptions' was rejected in favor of a multivariate conceptualization so that a greater number of important program climate variables could be studied. As such, this definition permits no overall student perception score but instead presents separate dimension scores across different types of learning environments. Student perception measures were gathered through the use of an instrument entitled, the Learning Environment Inventory (Fraser, Anderson, & Walberg, 1982). This instrument and its 15 subscales are discussed at length in Chapter Three.

Conclusion

To summarize, the present study was undertaken to investigate how: (a) alternate school programs differ in terms of their organizational and instructional practices, (b) students' perceptions of their learning environments differ across alternate school programs considered, and (c) these perceptions are related to teachers' organizational and instructional practices. It is hoped that this study will help to clarify issues regarding those organizational features of alternate school programming which are associated directly with positive student perceptions. The remainder of the paper is devoted to a review of the literature regarding student perception and program organization studies, a description of the procedure and methodology employed, as well as a report of the study results. The paper concludes with a discussion of the study results and their implications for educational personnel and future research involving student perceptions in alternate education.

CHAPTER 11

REVIEW OF RELATED LITERATURE

This chapter reviews the literature relevant to student perceptions in secondary-level alternate educational programs. The review is divided into three major areas. First, research addressing the issue of students' attitudes toward their alternate learning environments is examined. Next, studies involving the use of the <u>Learning Environment Inventory</u> (LEI) as an instrument for assessing students' perceptions towards their classroom climates are reviewed: Finally, a review is presented of the instrument used in this study to determine characteristics of program organization.

Student Perceptions in Alternate Schools

This section reports studies that have examined students' perceptions of their alternate learning environments. This discussion is divided into two parts: (a) research studies that have used locally developed student perception instruments, and (b) those that have relied on standardized instruments to study students'attitudes toward, or perceptions of their learning environments.

Locally Developed Instrumentation

A student perception study was conducted by Johnson and Faunce (1971) involving 54 students in three separate alternate high schools in the Minneapolis public school system. The objective of the study was to collect information that would assist in the development of programs that would meet the needs of the alternate student population. To this end, a self-developed instrument called the <u>Alternate School Student Questionnaire</u> was used. The instrument examined students' attitudes toward their previous school, attitudes toward their present alternate school, reasons for wishing to attend

their current school, and self-concepts and values. Results indicated that, relative to their previous public school year, students perceived their current alternate schools as providing: (a) more positive and intimate relationships with staff and other students, (b) courses that were interesting and easier to understand, (c) more student input and freedom. (d) more relevant curricular offerings, and (e) greater opportunities to improve basic skills. Students also reported having strong self-concepts in general, and positive concepts of themselves as learners since attending their particular alternate schools. While the study indicates that students attending the three alternate high schools in the district felt more positive about their present learning evironment than their previous one, no data was gathered concerning how each of the three alternate schools differed with respect to program organization and teachers' instructional practices. Instead, similarity among alternate school programs appears to be assumed. The absence of this type of information does not permit an inspection of the relationship between students' perceptions of their alternate learning environments and the organizational aspects of these environments.

Johnson (1975) designed an evaluation study involving three secondary alternate schools in the Federation of Alternate Schools with the assistance of the Minneapolis Public Schools Research and Evaluation Department. The study was conducted to determine if students who attended alternate schools had positive school-related attitudes. A 66-item questionnaire was developed specifically for the purposes of the study and was divided into the follwing nine scales: (a) curriculum relevance, (b) general liking of school, (c) the student-teacher relationship, (d) instructional quality, (e) student

input, (f) individual freedom and responsibility, (g) individuality of learning experiences, (h) general progress in learning, and (i) specific progress in learning. The questionnaire was completed by 78% of the sample. The results revealed that the majority of the students felt that the curriculum at their alternate shools was useful, relevant to the world at large, and helped them in cognitive and affective learning areas. Furthermore, 90% of the respondents felt that their teachers understood them, were fair to them, and showed an interest in them, while two-thirds said they would feel comfortable sharing personal concerns with their teachers. Although these results are encouraging, again no method is used to differentiate among teachers' instructional practices at any of the three schools. This information is of vital importance to determine whether differences in program organization could, in part, be responsible for differences in student perceptions across the three schools.

A comparative study examining students' attitudes toward school, career expectations, and aspirations in alternate and traditional high schools was designed by Shaw, Tomcala, Middleton, Rudee, Jones, and Smith (1975). The sample consisted of 390 students attending two alternate and two regular high schools. One of the major questions guiding the study was if alternate school students hold more positive attitudes toward school in general than do students attending regular public schools. A 50 item attitude scale was developed and divided into the following five subscales: (a) attitude toward school, (b) career expectation, (c) career aspiration, (d) career self-esteem, and (e) career risk. Students were administered the scale, and their scores were compared using a series of one way analyses of variance tests across different school groups. Results indicated that alternate school students' atttidues toward school were significantly more positive than their conventional counterparts. No other significant differences emerged for the other four areas, except career self-esteem and career risk which were attributed directly to differences in grade level. An obvious limitation of this study was the insufficient nature of the instrument used to assess students' attitudes toward schooling. Only 10 items included in the student perception instrument are directly concerned with students' attitudes toward their particular learning environments. The primary assessment focus of this instrument appears, rather, to be on student attitudes regarding career expectations, career aspirations, career self-esteem, and career risk.

In an investigation comparing the effects of regular and alternate school curriculum on students. Groobman, Forward, and Peterson (1976) obtained measures of attitudes, expectations, self-esteem, and learning transfer from 151 sixth grade students in three regular schools and 68 sixth grade students in three alternate schools. Three assessment procedures were used in the data collection for the study. An attitude scale was designed for the project and consisted of the following scales: (a) student attitudes toward school and learning, (b) student perceptions of roles and academic expectations, (c) self-esteem, (d) student attitudes toward teachers and authorities, and (e) transfer of learning to non-school settings. The second procedure used was a student essay. Students were asked to write an essay on the topic, "How I Would Change My School", which was later coded using a four-point scale for spelling, grammar, and creativity. The third technique employed was an eight-dimension version of the <u>Open Education Scale</u> (Walberg & Thomas, 1972). This

instrument was used by trained observers to rate teacher behavior and classroom interaction. Both the attitude scale and the essay were administered twice within a six-month period. The Open Education <u>Scale</u> was completed by observers and teachers three months after the first student administration. Results revealed that, relative to formal school students, informal school students demonstrated more positive attitudes toward school and teachers, and greater transfer of learning to non-school settings. No significant differences were found for academic expectations, performance, or self-esteem. Although the locally developed scale does address a number of important student perception variables, the main focus of the Open Education Scale appears to be on studying differences in teacher behaviors during interactve teaching across the various school programs, rather than on the instructional practices that define a particular program. As such, it does not provide a measure of the specific instructional aspects per se that distinguish one alternate school program from another.

An attitude study was designed by Ghory and Sinclair (1978) to explore alternate school students' perceptions of selected program conditions likely to influence their interactions with their learning environment. In all, 1,692 students from 15 urban, 10 suburban, and five rural alternate schools in six states in the United States were used in the study. A locally developed instrument called the <u>Alternate School Environment Survey</u> was administered to the sample. The instrument consisted of 88 statements relevant to instruction, norms, and curricular aspects of alternate high schools and was divided into the following 11 scales: (a) outreach, (b) problem solving, (c) limits, (d) communication, (e) discrimination, (f)

clarity, (g) difficulty, (h) teacher-effectiveness, (i) missed schooling, (j) peer influence, and (k) extra-school priorities. Results revealed that in general, alternate school students perceived their school as: (a) making special efforts to help them learn, (b) clear on academic policy, (c) low in levels of discrimination as well as interference of outside priorities with academics,(d) moderately high in clarity of school rules and policies, and problem-solving and communication, and (e) moderatley low in academic diffculty.

Analysis of variance was also used to examine differences in student perceptions among sampled alternate schools. These results revealed that alternate schools differed the most in regard to: (a) students' abilities to confront and solve organizational problems that affect them, (b) the restrictiveness of their rules for acceptable student behavior, (c) capabilties of staff to communicate needed information to students, and (d) the academic difficulty of the curricula. By contrast, schools varied the least with regard to the clarity of academic expectations and level of perceived discrimination. While the instrument used to measure students' perceptions of their alternate school programs is comprehensive, the study does not attempt to identify specifically those alternate school environments (i.e., urban, rural, suburban) in which student perceptions were similar as well as different. Rather, general similarities and differences concerning students' perceptions of selected program conditions are reported. However, specific information linking these student perceptions to their particular school environments is necessary, especially since students' perceptions across the three types of alternate schools investgated revealed that programs differed dramatically with respect to rules

regarding student discipline, as well as the overall difficulty of academic demands.

Reddy, Langmeyer, and Steichen Asch (1978) designed a study to investigate psychological correlates of student adjustment to an alternate high school program. Specifically, they hypothesized that alternate school students would have high general self-concepts, school self-image, satisfaction, and involvement. They further hypothesized that self-concept would be higher for those students high in school adjustment, and a positive relationship would exist between school self-image, satisfaction, and involvement. Forty male and thirty female students enrolled in a single alternate school in Cincinnati were selected for the sample. Students responded to the <u>Tennessee Self-Concept Scale</u> as well as a locally designed attitude instrument called the <u>New Morning Student Questionnaire</u>. This instrument was developed jointly by the Community Psychology Institute of the University of Cincinnati and members of the New Morning Community. It consisted of 182 items that measured student self-image in relation to satisfaction with their alternate school program.

Results indicated that students were psychologically well adjusted, and had somewhat higher self-concepts than the norm for regular high school students. Furthermore, self-concept proved to be a good predictor of school self-image and satisfaction, and a positive relationship did exist between school self-image, satisfaction and involvement. This study is limited in two ways. First, the self-image-satisfaction questionnaire was administered to a single school, whose operational and curricular organization is never described. Second, the primary purpose of the study was to investigate various factors concerning students' psychological adjustment to their alternate learning environment. As such, the study is more concerned with the relationship between overall adjustment and student satisfaction than it is with the link between satisfaction and the organizational aspects of the school program per se.

Standardized Instrumentation

Gaite and Rankin (1974) conducted a comprehensive evaluation of the characteristics of students attending a public alternate school in Oregon. The attitude, behavior, and achievement patterns of 28 male and 22 female alternate school subjects from grades 8 to 10 were compared to those of a group of similar aged students enrolled in the regular school system. The <u>California Mental Maturity Test</u> and the Stanford Achievement Tests were used to measure achievement, while the Brown and Holtzman Survey of study habits and attitudes was used to examine students' attitudes toward school. No other instrument was used to provide more specific measures of students' perceptions regarding their classroom climates beyond this survey, which addressed students' attitudes toward their teachers only. Controlled systematic observations and student file information of alternate school students only was also used in the data collection. Survey results indicatedthat alternate school students had greater approval of their teachers, perceived their environment as more study oriented, and had better aptitudes for studying than did control subjects in regular 🧷 classrooms. However, the inability of the instrument to gather data regarding a sufficient number of classroom climate variables, as well as the absence of student file and observational data for regular school subjects limits the conclusions regarding student perceptions that can be drawn from this study.

A program evaluation study of 10 independent alternate schools serving a population of 2,750 students in New York City was reported by Wohl (1974). Three types of alternate schools were involved in the study. These were: (a) remediation programs with an emphasis on basic skills in reading, mathematics, and English as a second language; (b) full academic programs directed toward qualification for a city-wide school diploma, and (c) experiential programs offering a work-study component where students spent alternate weeks in school and working in the community. A modified, 30 item version of the Nash-Wolfson "Who Decides?" Questionnaire (1974) was used to examine students' attitudes toward their learning environments in remediation and basic skills programs only. The instrument also was administered to a control group of students enrolled in regular high school English classes. Only the issue of perceived student autonomy, or the power to make decisions in the classroom was addressed by this instrument. . In this regard, there was no statistically significant difference between alternate school and control students' perceptions of power to make classroom decisions. No further attempts, however, were made to investigate this or any other student perception toward schooling variable. Furthermore, the study investigated the perceptions of students enrolled in the remedial academic and basic skills programs only, whereas the diploma and experiential work-study programs are discriptively more representative of the types of alternate school programs used in the present study.

Gardner and Farnsworth (1977) designed a study to analyze the attitudes and academic achievement in reading, spelling, and arithmetic of students enrolled in an alternate high school program in Salt Lake City, Utah. Data for attitude and achievement variables

were gathered through Remmer's <u>A Scale For Measuring Attitudes</u> and the Wide Range Achievement Test respectively. Both instruments were administered to a sample of 50 students in October, 1975, and again six months later. During the first administration, students were asked to relate the statements of the attitude scale to their traditional high school experiences. Six months later, the same instrument was given with students asked to relate the statements to their current alternate high school. Analysis of variance revealed a positive difference in attitudes toward school, although no significant correlation was later found to exist between school attitudes and gains in academic achievement. The most obvious limitation of this study is the methodology used to compare students' perceptions of their previous learning environments with perceptions of their current alternate school programs. Students were required to recall mentally and remember their experiences in the regular school system, of which they were no longer a part. Moveover, the study focused primarily upon the difference in students' perceptions across the two types of learning environments rather than on those perceptions that could be related directly to various instructional aspects of the alternate school programs.

Trickett (1978) compared and contrasted students' perceptions of their classroom environments in urban, rural, suburban, vocational, and alternate public high schools. The data set for the study was taken from a series of previous studies conducted over a four year period ranging from 1972 to 1976 in Connecticut. The total sample included 409 high school classes with 6,142 students in 30 different high schools. The alternate school portion of the sample consisted of 42 classrooms. Students were given a 9 scale 90-item instrument

intended to measure perceived classroom climate called the Classroom Environment Scale (Moos & Trickett, 1974). Classroom scores were grouped according to type of school, and a series of one way analyses of variance were performed for each of the nine dimensions. Resultsrevealed that, relative to the four other types of learning environments, alternate schools scored highest on five of the nine dimensions including involvement, affiliation, teacher support, order and organization, and innovation. In addition, alternate school environments scored lowest on competition and teacher control dimensions. Only urban schools were more task oriented, and rural and vocational schools more clear about classroom rules than alternate schools. The results of this study are important, since a widely recognized instrument is used to assess students' perceptions of their various learning environments. Furthermore, the results of the assessent indicate strongly the superiority of alternate school programs over regular educational programs in establishing positively perceived classroom climates. However, diffrences among the various school programs with respect to teachers' instructional practices and curricular offerings appear to be assumed. No method is used to determine whether differences actually do exist in these areas, or whether a relationship does exist between student perceptions and the organizational features of their school programs.

A study investigating teachers' and students' perceptions of instructional practices in alternate and conventional public high schools was conducted by Parret (1981) to determine if actual differences in teaching practices did exist. In all, 596 alternate and 809 regular school students in 10 high schools were tested using a modified 27-item version of the Baker and Thomas (1970) <u>Inventory of</u>

<u>Teacher Functions</u> . In addition, teachers representing both alternate and regular school classes included in the sample completed a 36-item version of the same inventory. Both instruments contained items dealing with a variety of traditional and non-traditional teaching functions. Results indicated that alternate school teachers were viewed by both students and teachers as more likely to assist individual students with personal concerns, become involved in out-of-school experiences, encourage students to express their feelings, write evaluations of their students' work, and have students sign learning contracts. While the study purports to measure student and staff perceptions of teacher practices, the primary focus of the instrument appears to be upon assessing students' perceptions of their teachers' interpersonal behaviors, rather than upon their classroom organizational and instructional practices.

Wedman (1983) designed a study to determine whether students attending alternate high schools experience changes in attitudes toward school, self and others, and if change is related to an improvement in reading ability. The sample consisted of 20 male and 20 female students ranging from grades 8 to 10 in an alternate high school in central Oklahoma. The attitude instrument used in the study was <u>The Oklahoma Scales</u>, which consists of 120 items across three dimensions of attitude toward school, self, and others. The <u>Gates-MacGintie Reading Survey</u> was administered to determine students' reading vocabulary and reading comprehension levels. Both instruments were given to students in September and again during the final month of the school term. A t-test for correlated data was performed to compare mean differences for each dimension of the attitude scale, as well as for reading vocabulary and achievement

scores. A chi-square procedure was used to determine the relationship between attitude and gains in reading achievement. Results indicated that females improved significantly on attitudes toward school, self, and others, while only the attitude toward self measure produced a significant difference for male subjects. In addition, significant increases were found for both groups in reading comprehension but not reading vocabulary. Finally, no significant differences for either male or female subjects were found between changes in attitudes toward self, school, or others and the relationship to improvement in reading comprehension and vocabulary. While this study points to the effectiveness of alternate school programs in strengthening students' self-images over a short period of time, it does not describe directly how students feel about, or perceive their particular alternate learning environment, or how the alternate school program.

Perhaps the study that most closely resembles the present study's attempt to examine alternate school students' perceptions of their learning environments and their relationship to various program organization variables is presented by Stevens (1985). Stevens found that students' perceptions of their learning environments were, in fact, related to their alternate school programs' organizational structure. A number of similarities exist between Stevens' study and the present investigation. First, the identical instrument was used in a similar fashion to assess students' perceptions of their alternate school programs (i.e., the LEI). Second, the method used to gather program organizational data in Stevens' study also included a procedure for assessing teachers' instuctional practices across different alternate school programs. However, several other variables

in addition to 'instructional practices' were also used in Steven's study to make categorical decisons regarding alternate school programs. such as: (a) school goals, (b) size, (c) source of funding, and (d) target student population. Taken together, these organizational data were used to place alternate school programs into either district, grant, or composite school categories, rather than to conceptualize them as functioning along a continuum based primarily upon teachers' organizational and instructional practices. Furthermore, instructional practices for the purposes of Stevens' study were merely described as either: (a) representative of the regular school district's curriculum and testing policy for District schools, (b) characterized by frequent tutoring and small group instruction for Grant schools, and (c) characterized by extensive out-of-classroom, independent, and self-directed experiences for Composite schools. As such, this level of aggregation regarding instructional practices across alternate schools does not permit as specific an examination of critical day-to-day instructional variables such as task differentiation, grouping practices, student autonomy, or evaluation pocedures as does the present study.

Summary

To summarize, the most obvious limitation of the majority of the student perception studies using either locally developed or standardized instrumentation is the absence of any method or instrument used to distinguish among alternate school programs with regard to teachers' organizational and instructional practices. Second, many of the instruments used to measure students' perceptions of their learning environments tend to measure an overall or general level of satisfaction with their alternate school programs, rather

than a collection of specific school climate variables per se. No study could be located that included a systematic procedure for assessing both students' perceptions of their learning environments, as well as the specific instructional aspects of the alternate school programs being considered. The present study attempts to satisfy both of these conditions by employing a systematic method for assessing the instructional practices of teachers representing different alternate school programs, as well as an instrument that captures a variety of students' perceptions of their learning environments.

Student Perceptions and the LEI

In this study, the instrument used to measure students' perceptions of their alternate school climates was the Learning Evironment Inventory . The actual development of this instrument is discussed in the following chapter. A number of excellent reviews have been written recently describing prior research involving the LEI (Chavez, 1984; Fraser, 1985; Fraser et. al., 1982). To date, the strongest focus of this research has been upon investigating the link between students' perceptions of their classrooms and various learning outcomes. Studies of this kind have been carried out in the United States (Cort, 1979; Lawrenz, 1976; Walberg, 1969a, 1969b, 1972), Canada (O'Reilly, 1975; Walberg & Anderson, 1972), Australia (Fraser, 1979; Power & Tisher, 1979), Isreal (Hofstein, Gluzman, Ben-Zvi, & Samuel, 1979), and India (Walberg, Singh, & Rasher, 1977). A second area which has received less attention involves the use of the LEI scales as criterion variables. Since the present study is concerned with viewing student perceptions of their learning environments as dependent variables, a review of the research involving the use of the LEI in this manner is presented. The review is divided into areas of

curriculum evaluation, grade level and subject area, and type of school.

Curriculum Evaluation

The LEI has been used for curriculum evaluation purposes in a number of studies. Anderson, Walberg, and Welsh (1969) used the instrument to investigate differences in students' perceptions among classrooms using Harvard Project Physics and other physics classrooms using alternative curricular materials. The sample consisted of 3,264 senior high school students in 150 physics classes. Multiple discriminant analysis using the class means as the unit of analysis indicated that the Harvard Project Physics students perceived their classrooms as characterized by more diversity and democracy, less difficulty, friction, and goal direction, and a better material environment than did students in control classrooms. Welsh and Walberg (1972) conducted a similar study using 53 randomly selected classes from the original Harvard Project Physics sample. The analysis revealed that students in the experimental physics program perceived their classes as having greater diversity, and less favoritism and difficulty than did students enrolled in the regular physics course.

Student perceptions as indicated by LEI subscales have also been used as criterion variables to evaluate the success of science materials designed for a special program. Fraser (1978, 1979), used a modified nine-scale version of the LEI with 541 seventh grade students in Melbourne, Australia, to compare student perceptions in an experimental science course designed by the Australian Science Education Project with the perceptions of students in regular science classrooms. This study was conducted six months after the beginning of the school year. Multiple regression analyses revealed that students in experimental classrooms perceived their learning environments as more satisfying, more individualized, and as having a better material environment than did students in regular classrooms.

Tisher and Power (1976, 1978) also used student perceptions on a full scale version of the LEI to evaluate the effectiveness of an Australian Science Education Project unit in 20 junior high classrooms. Their investigation revealed that students in experimental classrooms percieved their learning environments as possessing more cohesiveness, diversity, goal direction, satisfaction, and cliqueness, and less speed, favoritism, disorganization, and apathy relative to control science classrooms.

Classroom climate data furnished by the LEI has also been used as criteria for evaluating individualized instruction in primary classrooms in Isreal. Levin (1980) used an observational instrument and a 45-item modified version of the LEI in 43 experimental and 14 regular first to third grade classrooms to determine whether an individualized instructional strategy would enhance students' perceptions of their learning environments. The results revealed a significant difference for only one climate dimension among individualized instructional classrooms perceived themselves as having more autonomy (i.e., democracy) than did students in regular classrooms.

Grade Level and Subject Area

Learning Environment Inventory climate dimensions have also been used to explore student perceptions across different grade levels. Welsh (1979) used a 10-scale version of the LEI with a stratified
sample of 1,121 science and mathematics classes in 15 American states. His analysis indicated that, relative to senior high school students, junior high school students perceived their learning environments as less difficult, satisfying and democratic, with more disorganization, diversity, formality, cliqueness and favoritism. Welsh (1979) also used this sample to investigate classroom climate differences between science and other subjects. Multivariate analysis of variance revealed that science classes were perceived as having more diversity, disorganization, formality, friction, cliqueness, and favoritism, and less goal direction, difficulty, and democracy than mathematics classes.

Anderson (1971) also used subscales from the LEI with a sample of 62 science, mathematics, humanities, and French classes in secondary schools in Montreal, Quebec, to explore classroom climate differences between science and other subjects. He employed a discriminant function analysis using class means as the unit of analysis: Three findings emerged from this analysis. First, relative to other classes, mathematics classes were seen as high in friction, favoritism, difficulty, disorganization, and cliqueness, and low on formality and goal direction. Second, science classes were perceived as quicker and more formal than humanities classes, but lower on friction, favoritism, cliqueness, and disorganization variables. Third, French classes were perceived as having more goal direction, and less friction and disorganization than other classes.

Type of School

The LEI has also been used to compare students' perceptions of their learning environments in different types of schools. Randhawa and Michayluk (1975) investigated the perceptions of 8th and 11th grade students from 47 rural and 49 urban secondary schools in Saskatchewan. Students were asked about their classroom climates in English, social studies, mathematics, and science subjects. The results indicated that students in rural settings percieved their learning environments as having more cohesiveness, cliqueness, disorganization, and competitiveness, less difficulty and satisfaction, and a worse material environment than did students in urban settings.

Randhawa and Hunt (1981) investigated students' perceptions of their learning environments in parochial and secular schools with a sample of 317 grade 10 students. They discovered that girls' parochial school classrooms were characterized by more cohesiveness and cliqueness, a poorer material environment, and less apathy, democracy, and competitiveness than secular school classrooms. In addition, the learning environments of boys' parochial schools had more cohesiveness, friction, favoritism, and competitiveness, and less goal direction, and democracy than those of the secular schools.

In a study involving 350 eleventh grade classes in Isreal, Hofstein, Gluzman, Ben-Zvi, and Samuel (1980) compared chemistry students' perceptions of their classroom climate in high schools and vocational schools. Results revealed that vocational students perceived their environment as having more speed, goal direction, satisfaction, difficulty, and democracy, and less disorganization, apathy, and competitiveness than did regular high school students.

In a similar study, Sharan and Yaakobi (1981) used a modified version of the LEI with 572 students in tenth grade biology classes in urban and Kibbutz school districts in Isreal. Fourteen classes were in urban schools, and six in Kibbutz district schools. Virtually all

classes were taught using the identical curriculum. An analysis of variance using class means as the unit of analysis revealed that, relative to urban classrooms, kibbutz classrooms were perceived as having significantly more satisfaction and cohesiveness, and less cliqueness and favoritism.

Summary

To summarize, the LEI subscales have been used extensively as criterion variables to measure the effectiveness of curricular innovations, and differences in student perceptions across various grade levels and subject areas, as well as across different types of school programs. Although all of the studies demonstrate the effectiveness of the instrument in revealing differences in student perceptions at each of these levels, no concomittant attempt is made at any time to identify those instructional features that might, in part, be responsible for these differences. This type of information seems especially pertinent, since each of the classrooms or school programs investigated operate according to the specific organizational and instuctional preferences of the teachers responsible for them. In particular, data that addresses the distinctive instructional aspects of different program types (e.g., urban v.s. rural, secular v.s. parochial) seems necessary in providing a rationale for why students' perceptions of their learning environments might differ. The present study attempts to address this issue by including a method for examining instructional differences across alternate school programs that might account for differences in students' perceptions.

Classroom Organization Research

Research involving the use of a combined interview-questionnaire instrument developed by Rosenholtz and Rosenholtz (1981) to

investigate characteristics of classroom organization is just beginning to emerge as educators attempt to make distinctions between various instructional practices in educational settings. This review describes the research that has been conducted to date using the instrument and its various forms (e.g., Marx, 1985). Studies examining shared perceptions of academic ability, academic and social power, and attitudes toward school are considered. A detailed description of the instrument is presented in the next chapter.

Shared Perceptions of Academic Ability

In an early study, Rosenholtz and Wilson (1980) hypothesized that high "resolution" (see Chapter 1, page 5) classrooms would produce greater agreement among classmates, between classmates and self, between teachers and classmates, and between teacher and self concerning academic rankings within the class than would low "resolution" classrooms. A sample of 15 fifth and sixth grade classes from three schools in the San Fransisco Bay Area were selected for use in the study. Teachers completed an interview-guestionnaire regarding curricular materials and instructional practices based on four characteristics: (a) differentiation of task structure, (b) organization of instruction, (c) student autonomy, and (d) teacher evaluation. This instrument was designed to differentiate between high and low resolution classrooms. Student perception data was collected by having students rank order classmates of the same sex according to reading ability. Teachers were then asked to rank order their class on reading ability in order to permit an investigation of the degree of student-teacher agreement on the variable. Results indicated that high resolution classrooms were characterized by significantly higher levels of agreement among classmates regarding

individual reading abilities copmpared to low resolution classrooms. Furthermore, self-ratings were more alligned with classmates' ratings, and the relationship between teacher and student ratings was stronger in high as compared to low resolution classrooms.

Both Rosenholtz and Rosenholtz (1981) and Simpson (1981) further refined the evolving theory of classroom organization by hypothesizing that organization of classroom instruction shapes student and teacher perceptions of ability by either enlarging or limiting students' opportunities to form performance interpretations. In both studies, the terms high and low resolution were replaced by "unidimensional" and "multidimensional" respectively as descriptors of instructional classroom practices. Data sets used to test hypotheses for both reports were taken from the original study conducted by Rosenholtz and Wilson (1980). The authors hypothesized that self-evaluations, and classmates' and teachers' evaluations of reading ability would be more dispersed in unidimensional, as opposed to multidimenional reading classes. In other words, differences in students' and teachers' perceptions of student reading ability would be significantly greater in unidimensional than multidimensional classrooms. In addition, they theorized that greater dimensionality in reading instruction would lead to a lesser impact of teacher evaluations on peer evaluations of individual reading ability, as well as teacher and peer evaluations on individuals' self-evaluations of reading ability. The results provided support for each hypothesis, thus strengthening the position that organizational aspects of classrooms produce variations in the stratification of perceived ability levels which influence students', classmates', and teachers' evaluations of each other.

Academic and Social Power

Rosenholtz (1982) also used the original data set to investigate the relationship between perceived academic ability and social power in unidimensional and multidimensional classrooms. She believed that perceived academic ability was linked to the acquisition of social power in classrooms, and that the relationship between the two variables was determined by classroom organization. Specifically, it was hypothesized that the association between perceived academic ability and attributed social power, as well as the distribution of this power would be stronger and more centralized in unidimenional than in multidimensional classrooms. Results partially confirmed these hypotheses. For girls, the correlation between reading rank and attributed social power was significantly higher under unidimensional than multidimensional conditions, although the same was not true for boys. In unidimensional classrooms both groups produced significantly higher dispersions of social power than in multidimesional classrooms, although the difference was again weaker for boys.

In a similar study regarding the relationship between academic ability and social power, Marx (1985) investigated the link between social and academic status and listeners' reports of peer speech in classrooms. The study also explored the relationship between teachers' reported classroom organizational practices and listeners' reports of peer speech. It was expected that characteristics of academic status in unidimensional classrooms would influence more strongly reports of peer speech than in multidimensional classrooms. The sample consisted of 197 students from grades 5 to 7 in 8 schools located in a large suburban district in metropolitan Vancouver. Teachers' classroom organizational practices were measured by a version of the interview-questionnaire developed by Rosenholtz and Rosenholtz (1981). Student perception data regarding social status were gathered through a six-item paper and pencil measure dealing with friendship, physical attraction, and social power. Students were asked to rank order their classmates according to these criteria. Teachers also responded to the same instrument in order to provide a measure of their perceptions of the social status hierarchy in the classroom. Both teacher and peer academic status were measured using a similar instrument containing items related to oral reading fluency, reading comprehenson, and spelling ability. Finally, percentile ranks on the reading subtest of the Canadian Test of Basic Skills and teachers' rankings of their students according to their abilty to read difficult material silently were also used as academic status measures. Results revealed that only one social status variable was directly related to reports of speech in seven of the eight classrooms. Furthermore, there were no significant differences in either unidimensional or multidimensional classrooms regarding the relationship between academic status and reports of peer speech.

Attitudes Toward School

Recently, findings from an earlier study (Rosenholtz, 1982), involving a measure of attitude toward school were published by Rosenholtz and Simpson (1984). In this study, fifth and sixth grade students were asked how much importance they placed on being a good student. Approximately two-thirds of the sample felt it was "very important" to be a good student. Student responses were evenly divided among unidimensional and multidimensional classrooms, with girls feeling a greater sense of importance than boys. The remaining third of the sample were divided equally between "somewhat important"

and "somewhat unimportant", and were also equally split by classroom organization. Again, boys placed less importance on being a good student than did girls.

The second study, again reported by Rosenholtz and Simpson (1984) involved data from a previously published report (Simpson, 1981). In this study, third grade students were asked how much they liked "school work", arithmetic, reading, and social studies. Approximately three-fourths of the sample reported liking school. The proportion of responses was almost identically split in unidimensional and multidimensional classes for all four measures. Results indicated that specific aspects of unidimensional classrooms did not, as expected affect net liking for school. Furthermore, neither increases in student autonomy, easier access to multiple adults, in open or team-teaching situations, nor the presence or absence of grading affected students' nee levels of satisfaction. The only aspects of classroom organization found related to students' liking of school were the freqency of teacher feedback regarding student performance, and teacher movement around the room resulting in direct contact with students. Neither of these factors were related to differing characteristics of classroom organization.

Summary

To summarize, the combined interview-questionnaire developed by Rosenholtz and Rosenholtz (1981), as well as its derivatives, have been successful in identifying and measuring those instructional practices that distinguish one classroom, subject area, or program from another along a unidimensional-multidimensional continuum. The two studies reported by Rosenholtz and Simpson (1984) regarding students' attitudes toward school come closest to addressing the

relationship between program organization variables and students' perceptions of their classroom climates. However, their "liking of school" variable is a limited one, and does not permit as extensive an analysis of students' perceptions as does the present study, which utilizes the <u>Learning Environment Inventory</u>. Furthermore, this instrument permits a more comprehensive exploration of social status within particular learning environments than does the 6-item paper and pencil instrument employed by Marx (1985) to examine friendship and social power in various classrooms.

<u>Conclusion</u>

In the present chapter, I have reviewed literature relevant to students' perceptions of their classroom climates in regular, as well as alternate school programs. Specifically, this review has focused on student attitude studies conducted in alternate educational settings, studies involving the LEI as an assessment tool for investigating students' perceptions across a variety of different subject, grade, and program levels, and studies using the combined interview-questionnaire to investigate instructional differences among classrooms and programs being compared. The most serious limitation of the majority of the studies reviewed is the absence of either a satisfactory instrument for measuring students' perceptions of their classroom climates, or a systematic method of assessing instructional variation across different classrooms or programs. The present study represents an attempt to respond to these shortcomings by utilizing a widely recognized instrument to investigate students' perceptions of their alternate school climates, as well as an instrument proven successful in a variety of classroom organization studies to measure teachers' reports of their instructional practices.

CHAPTER 111

METHODS AND PROCEDURES

This chapter includes a discussion of the sample, procedures, and instruments used for the data collection.

The Sample

Alternate educational programs were selected for inclusion in the study on the basis of instructional organization and similar curricular offerings. The sample was selected in this manner in order to permit an exploration of student perceptions across program types. In all, seven junior high secondary alternate schools with a total of 145 students were selected for use in the study. Taken together, these schools covered the entire range of dimensionality characterisitics along the unidimensional-multidimensional continuum. Schools from the Upper, Central, and Lower Fraser Valley regions of southwest British Columbia were selected. Of the 145 students selected for the study, 125 of these returned the signed parent consent forms provided 4 weeks prior to the administration of the instrument. Parents of 112 students gave permission for their son or daughter to participate in the study, while 13 parents refused permission. Eight students were absent from the total consenting sample during the data gathering period. In total, 104 students, ranging from grades seven to ten participated in the study. The sample consisted of 71 boys and 33 girls. One student questionaire was lost, thereby reducing the total number of returned forms to 103. This information is provided in Table 1 and Table 2. Each of the seven alternate school programs used in the study is described below. Since characteristics of program organization are discussed in detail in Chapter Four, programs are discussed presently only in terms of

Table 1

<u>Information regarding Program, Program Type, Class Size, and Sex of Alternate</u> <u>School Students who completed the Learning Environment Inventory</u>.

			Sex	
Program	Program Type ¹	Class Size	Male	Fenale
One	Unidimensional	15	11	4
Тωο	Unidimensional	12	9	3
Three	Uni/Multidimensional	10	6	4
Four	Uni/Multidimensional	13	9	4
Five	Uni/Multidimensional	20	12	8
Six	Multidimensional	10	7	3
Seven	Multidimensional	23	17	6

1. 'Uni/multidimensional' is used to describe programs that were neither predominantly unidimensional nor multidimensional in character.

Table 2

Number of Students per Grade Level per Alternate School who completed the

Learning Environment Inventory .

	Grade Level					
Programs	Seven	Eight	Nine	Ten	Unspecified ¹	
One	0	3	10	2	0	
Τωο	0	4	6	2	0	
Three	1	5	2	2	0	
Four	0	5	3	4	1	
Five	1	2	11	4	2	
Six	0	3	5	1	1	
Seven	0	3	12	5	3	
Total	2	25	49	20	7	

 Students who either circled more than one grade or did not circle a specific grade at all.

their orientation, goals, size, referral procedures, and curricular offerings. Programs are addressed by number, rather than by name or geographic locale.

Program One

The first alternate school program to be described is essentially a secondary-level behavior management-academic program. The goals of the program are twofold: (a) to prepare students academically and socially for re-entry into the regular school system, and (b) to provide students with the academic and life skills necessary for successful entry into the workforce. The program consists of one full-time teacher and a child-care worker, and serves a maximum of 15 students at any given time. Students are typically referred by the other junior high schools in the district, as well as by the Ministry of Human Resources. The curriculum closely resembles that of the regular junior high school in the district to which the program is attached administratively. Core subjects such as English, social studies, mathematics, science, and physical education are compulsory and comprise approximately 70% of the school program. Elective courses such as woodwork, guitar, and arts and crafts are also offered on a group basis. Guidance and life skills training courses are also taught at this school and are compulsory for all students. A work experience component is available for those students who are 15 years or older and wish to work for a local employer one day per week on a voluntary basis. Virtually all students sign a behavior contract upon entry into the program, and are expected to fulfill its specific conditions.

Program Two

The second alternate school program is also academic-behavior management in orientation. Its goals are to: (a) provide a learning environment where students can earn up to and including grade ten academic equivalency, (b) provide students with vocational skills necessary for entry into the workforce, (c) help students develop basic social and communication skills, and (d) assist students to acquire effective coping skills and strategies to facilitate healthier interactions at school and elsewhere. The program consists of one fulltime teacher and a child care worker, and serves a maximum of 12 students. Unlike the majority of alternate school programs, this program does not accept referrals from other secondary schools in the district. Instead, the teacher is provided with a list of students who failed to complete the previous school year, and invites these students to attend the alternate school program. Other non-attending students whose names do not appear on the list, but are the appropriate age for junior high school, are invited to attend as well. Only those students who express a sincere willingness to attend and take the program seriously are admitted. The subject areas of English, mathematics, social studies, science, and physical education are cumpulsory and form the basis of the school program. Life skills training is also taught as a core aspect of the curriculum, although a work experience component is not offered as part of the program. Students who wish to reenter the regular school system and have proven themselves capable are permitted to do so at the beginning of the following school year in September.

Program Three

The third alternate school program consists of one full-time teacher and a child care worker, and serves a maximum of ten students. Similar to the other two programs, its focus is academic-beavioral. and its goals are to prepare students for reentry into either the regular school system or the world of work. Students are referred to/ the program by other secondary schools in the district as well as by the Ministry of Human Resources. All students are required to sign a behavioral contract upon entry into the program. The school program operates on an eight day cycle, with each subject reoccurring five times throughout the cycle. In addition to core subjects such as English, mathematics, social studies, science and physical education, students also study French as a compulsory part of the regular academic component. Like the previous program, no work experience component is offered in this alternate school. An interesting and unique aspect of this program is that students take many of their elective courses such as metalwork, art, and guidance at the regular high school in the district. In this respect, the alternate school program in this district differs from most others, in that interaction is arranged with staff and students at schools where these students were previously unsuccessful.

Program Four

The fourth alternate school program is approximately twice the size of the alternate schools previously described. The school consists of two fulltime teachers and two child care workers, and serves a maximum of 24 students. The orientation of the program is academic-behavioral and its goals are to: (a) help students acquire the means for communicating and coping in healthy, responsible ways;

(b) enable students to earn academic credit for courses parallel to those offered at the regular school, and (c) teach vocational skills that will increase the likelihood of student success in the workforce. Students are referred to the program by various secondary schools in> the district as well as by the Ministry of Human Resources. (Although students are required to take similar core subjects as offered by most other alternate schools, the academic component at this school represents only 50% of the overall curriculum. Academic subjects are conducted in the mornings, while the afternoons are devoted to leisure and recreational activities such as swimming, gym class, arts and crafts, and outdoor education. This time allotment differs from those schools already discussed, whose academic component represents approximately 70% of the entire curriculum. As such, this program is characterized by a balance of academic and non-academic activities. Work experience is also an important aspect of the program, with approximately half the students taking advantage of the opportunity to work in the community on a voluntary basis.

Program Five

Like the previous program,, the alternate school program in this district is roughly twice the size of the first three schools, and is the only one of its kind in the district. The school consists of two full-time teachers and two child care workers, and serves a maximum of 28 students. Students are referred to the program by various secondary schools in the district and by the Ministry of Human Resources. The specific orientation and goals of this program are similar to those of the programs described so far. These include providing a setting where students can: (a) earn credit for academic subjects, (b) learn vocational skills, and (c) learn personal coping

skills and strategies. The academic component of the program consists of the four core classroom subjects plus daily life skills classes. An additional teacher from outside of the program is brought in to teach physical education activities three times a week. Special program facilities include a woodwork-metalwork shop, kitchen, and a portable counselling classroom. An optional work experience program also exists for those students who qualify and wish to develop occupational skills working in the community. Approximately 50% of the students take advantage of the work experience component. Staff meetings are held on a daily basis to review student progress and plan activities for the following day.

Program Six

The sixth alternate school program consists of three fulltime teachers and three child care workers, and serves a maximum of 30 students. While the orientation of the program is academic-behavioral, its overall stated goal is to provide éducational opportunities for students who have severe needs in "affective" areas. That is, students who have difficulty coping socially or emotionally are given placement priority over students with strictly academic concerns. The academic component of the program includes English, mathematics, social studies, and science, as well as several "mini-courses" in which each student must enroll. These courses are taught two hours per week for one month and involve topics such as nutrition and cooking, alcohol and drug abuse, automotives, and family life education. Although guidance is not taught as a subject per se, individual and small group counselling is conducted frequently and is considered an important aspect of the program. Work experience opportunities are also made available through the School Board's Work

Experience Program for interested students.

Program Seven

The seventh alternate school program is directed primarily toward behavior management and social skill training, although the opportunity for students to pursue academic coursework also exists. The program consists of two full-time teachers, four full-time child care workers, and serves a maximum of 28 students. Students are referred to the progam by various secondary schools in the district, the Ministry of Human Resources, and the Department of Corrections. The overall goal of the program is to provide a learning environment where students can acquire social, emotional, academic, and technical skills that will permit them to become responsible, functioning members of their community. A unique feature of this program that sets it apart from the others is that the academic component is not compulsory for students. Instead, students design their own daily timetables consisting of activites drawn from the following optional areas: (a) academics, (b) industial education, (c) arts and crafts, and life skills, and (d) physical education. Program facilities include two academic classrooms, two arts and crafts rooms, a woodwork-metalwork shop, a gymnasium, and outdoor playing fields. A breakfast program run by the students operates daily and is free. A lunch program is also available to students who wish to purchase a hot meal. At present, a work experence component is not offered as part of the program.

Method of Data Collection

The <u>Learning Environment Inventory</u> (Fraser et. al., 1982) was administered to the sample in June, 1985. A single morning was required to complete the data collection for four of the schools, while the remaining three schools required two consecutive mornings. Teachers representing each of the schools completed an instrument entitled the <u>Classroom Characteristics Rating Scale</u> two weeks following the student administration.

One month prior to the administration of the inventory, letters of consent (see Appendix A) were sent out to parents explaining the objectives of the study, demands on student time, and procedures for its completion. Parents were requested to check the appropriate space for approval or disapproval, sign the consent form, and ensure that their son or daughter return it to their program teacher. Teachers and child care workers at each school were presented with an overview of the study, explaining its purpose, the nature of the instrument to be used, and its procedure for administration. This overview was essentially a review, since each staff had been informed previously about the purpose of the study when they were invited to participate.

The data collection for the seven schools was performed by the principal investigator and two research assistants. The research assistants were assigned to the five schools located in the Central and Lower Fraser Valley. The first research assistant was responsible for administering the inventory at programs One and Four, while the second one supervised administrations at programs Two, Three, and Five. The initial phase of data collection for these five schools took two mornings to complete. Virtually all students in attendance completed the inventory in a single morning. Absenteeism on the initial morning was high for programs Four and Five, thus requiring that an additional morning be spent to complete the data collection at these schools. All students from the remaining three schools completed the inventory in a single morning. The principal

investigator administered the inventory to students attending programs Six and Seven. Program Six also required an extra morning of data collecting due to first day absences. No further attempts were made to administer the inventory to students absent at any of the schools beyond this point.

For the purposes of testing, students at all schools were divided into small groups to reduce the level of confusion generally associated with large group administrations. Most teachers agreed that the potential for confusion and disorganization would be high if all students were tested at once. Groups consisting of a maximum of five students each were administered the inventory at each school. In a school where 12 students were enrolled, three groups of four students were tested. Each student was given a copy of the Learning Environment Inventory and a soft leaded pencil. Students were first asked to turn to the last page of the inventory and circle the appropriate number that corresponded to their sex and grade. No other identifying information was requested. Students were told that their responses on the inventory would in no way affect their academic or social status in the future. Researchers then reviewed the instructions for completing the inventory specified on the cover of the test booklets. Instructions were modified slightly from those described in the original inventory due to the fact that the student response sheet was omitted in this particular study. This was undertaken in an effort to reduce the potential for careless student error when the task of transfering a response to a separate sheet has to be performed. Instead, students were instructed to record their responses in a corresponding space to the extreme right of the page. Students were told to ask the researchers for assistance if they had

diffculties reading or understanding certain items.

During the time that the inventory was administered to students in the Fraser Valley, the <u>Classroom Characteristics Rating Scale</u> (see Appendix B) was undergoing some modifications and was not ready for use. Two weeks later, teachers from each of the five Central and Lower Fraser Valley schools completed the scale and the attached <u>Alternate School Time Allocation Data</u> sheet at their monthly Alternate Education Association meeting. Teachers from programs Six and Seven filled in the rating scale on the same day that their students completed the <u>Learning Environment Inventory</u>.

The Lastruments

Learning Environment Inventory

Initially, instruments that were considered for use in the present study were the <u>Learning Environment Inventory</u> (Fraser et. al., 1982), and the <u>Classroom Environment Scale</u> (Trickett & Moos, 1974). After careful consideration, the <u>Learning Environment</u> <u>Inventory</u> was selected over the other instrument for the following reasons:

1. Previous research involving the use of the LEI climate dimensions as criterion variables is far more extensive than is reported for the Classroom Environment Scale.

2. The LEI consists of 15 climate dimensions or scales, thus providing more specificity regarding student perceptions of their learning environments than does the Classroom Environment Scale, which is divided into nine subscales.

3. The response format for the LEI consists of a four-point Likert scale, where respondents express their agreement or disagreement with each item as either strongly agree, agree, disagree, or strongly disagree. This procedure permits a more precise measure of respondents' actual perceptions regarding their classroom climates than does the Classroom Environment Scale, which employs a true-false response format (Marx & Winne, 1978).

4. Items on the LEI have been written in such a way that the teacher is never mentioned. Therefore, this instrument will appear less threatening to some educators than the Classroom Environment Scale, which mentions the teacher frequently.

Fraser. Anderson, and Walberg (1982) provide extensive data regarding reliability and validity for the LEI climate dimensions. Alpha coefficients for individuals, intraclass correlations for groups, and test-retest reliabilities for individuals based on samples of senior high school students in North America are provided in Assessment of Learning Environments: Manual for Learning Environment Inventory (LEI) and My Class Inventory (MCI) (Fraser et. al., 1982). Test-retest reliability estimates for individuals are reported as ranging from a low of .43 for diversity to a high of .73 for friction. Since the inventory can be used either to assess the perceptions of the individual student or the class as a whole, both alpha reliabilities and intraclass correlations are required. Normative data including scale means and standard deviations are also presented in the manual for two grade 11 and 12 classes using the Harvard Project Physics program in the United States, as well as six grade 10 and 11 classes across various subject areas in Montreal.

Initial development of the LEI began in the late 1960s in conjunction with a series of research and evaluation studies designed to determine the effectiveness of a national experimental physics course called Harvard Project Physics. For this purpose, Walberg

(1968) designed an instrument called the <u>Classroom Climate</u> <u>Questionnaire</u> which consisted of 18 scales intended to measure the characteristics of classroom groups. The first version of the Learning Environment Inventory appeared in 1968 and contained 14 scales. This inventory was essentially an improved form of the initial questionnaire. In 1969, a second revision of the inventory was made and a fifteenth scale was added. Walberg (1969) based the design of the instrument on Getzels and Thelen's (1960) theory, which asserts that personality needs and role expectations interact in classrooms to form a climate where group behavior and learning can be predicted. In selecting the 15 climate dimenions, only those concepts previously considered valid predictors of learning, concepts believed relevant to social psychology and educational theory and research, and concepts considered relevant to the social psychology of classrooms were used (Fraser, 1985; Fraser et. al., 1982). The climate dimensions selected were: (a) cohesiveness, (b) diversity, (c) formality, (d) speed, (e) material environment, (f) friction, (g) goal direction, (h) favoritism, (i) cliqueness, (j) satisfaction, (k) disorganization, (1) difficulty, (m) apathy, (n) democracy, and (o) competitiveness.

One serious limitation with the development of the inventory is the absence of specific information regarding which climate dimensions should be construed as either 'positive' or 'negative' once they have been identified in specific learning environments. While the relationship between each of the climate dimensions and patterns of student acheivement is described in the manual for the <u>Learning</u> <u>Environment Inventory</u> (Fraser eet. al., 1982), no qualitative information regarding the 'desirability' of characteristics relating

to each of the dimensions in the classroom is presented. In order that the student perception data obtained in the present study be better understood, the fifteen climate dimensions have been separated into 'positive' and 'negative' classifications below. The decision to place a dimension in one of the two particular categories was based on the degree to which characteristics of each dimension could be considered 'desirable' or 'undesirable' if observed.

Positive Climate Dimensions

<u>Cohesiveness</u>. In most classrooms, when several students interact for a certain period of time, feelings of intimacy or cohesiveness usually develop among members. This scale, previously entitled Intimacy, separates student members of a group from non-members in the class, and has been found in research to be positively related to small class size.

<u>Diversity</u>. This scale addresses the extent to which the learning environment provides opportunities for a variety of different student interests and instructional activities. For example, Anderson, Walberg, and Welch (1969) found that students enrolled in the Harvard Project Physics course perceived their classrooms as possessing significantly more diversity than did students enrolled in regular physics classes.

<u>Material Environment</u>. The amount of space, the type of equipment available, and the attractiveness of the learning environment influences students' perceptions of and attitudes toward their school programs. This scale measures students' perceptions of the physical or material aspects of schools they are attending. <u>Goal Direction</u> . This scale investigates the extent to which students recognize and accept the specific program goals as established by either the teacher, both the students and teacher, or some other responsible authority.

<u>Democracy</u>. This scale examines the extent to which students perceive themselves as sharing in the decision-making process as it relates to the functional and curricular aspects of their school program.

<u>Satisfaction</u>. This scale measures students' liking of or satisfaction with their school subjects, teachers, and classmates. Whether or not students actually find school pleasant and enjoyable likely influences their desire to learn.

<u>Formality</u>. This scale measures the extent to which students perceive their learning environment as guided by a set of formal rules and regulations. These rules may address areas such as specific daily subject requirements, attendance expectations, and appropriate behavioral conduct.

Negative Climate Dimensions

<u>Speed</u>. This scale examines individual students' perceptions of how fast the teacher covers the required work on a day-to-day basis. Fraser, Anderson, and Walberg (1982) state that, while individuals' perceptions of how fast the teacher covers the work reveals something about the individual, group ratings of speed tells us something about how effectively the teacher is able to adapt to the needs of the entire class.

<u>Friction</u>. This scale measures the extent to which students demonstrate disagreement, tension, or antagonism toward their teachers and classmates while in attendance at their school.

<u>Favoritism</u>. This scale assesses the amount of tension and quarrelling that takes place in a typical classroom setting. The authors point out that this scale is essentially a measure of negative affect that could be used to determine whether a student possesses a low academic self concept (Fraser, Anderson, & Walberg, 1982).

<u>Difficulty</u> . This scale assesses the extent to which students experience difficulty with the work of the class, or at least perceive it as difficult.

<u>Apathy</u>. This scale reveals whether students feel a lack of affinity with, or commitment to the program activities. Students who are apathetic generally demonstrate a 'don't care' attitude toward academic and non-academic school tasks.

<u>Cliqueness</u>. This scale indicates whether subgroups or cliques may exist within a school program. Fraser, Anderson, and Walberg (1982) believe that cliques offer protection to students who are failures in the larger classroom group, but frequently result in lower student productivity among members.

<u>Disorganization</u>. This variable examines the extent to which students consider the curricular aspects of the school confusing and poorly organized. This variable provides a contrast to the variable, Goal Direction.

<u>Competitiveness</u>. This scale measures students' perceptions of the emphasis placed on student competition within their school programs. Since this concept was believed to be central in understanding group dynamics in classrooms, it was added as the fifteenth scale in the 1969 revision of the instrument (Walberg, 1969). In total, the LEI consists of seven items per scale for a total of 105 statements that are intended to measure students' perceptions of their classrooms. Students respond to each item on a four-point Likert scale by selecting eiher strongly disagree, disagree, agree, or strongly agree. The scoring direction is reversed for some items. <u>Classroom Characteristics Rating Scale</u>

The second instrument used in the present study is called the <u>Classroom Characteristics Rating Scale</u> (see Appendix B). This instrument is essentially a simplified version of a combined interview-guestionnaire designed originally by Rosenholtz and Rosenholtz (1981) to measure characteristics of classroom organization. For the purposes of this study, the interview portion of the instrument was omitted, and the questionnaire portion regarding instructional practices was modified to suit alternate educational learning environments. This instrument was used to determine the grouping and evaluation practices of alternate school teachers, as well as their procedures for differentiating instructional tasks among students, and involving students in instructional decisions. Items describing each of these four practices (i.e., task structure, autonomy, grouping, and evaluation) were grouped under English, social studies, mathematics, science, physical education, and elective course headings. Teachers answered each item by selecting among response alternatives of never, seldom, occasionally, frequently, or always. For scoring purposes, responses were given corresponding values ranging from one to five respectively. Like the LEI, scoring was reversed for some items. These scores were then used to determine where a particular alternate school was situated for each of the four instructional practices along the unidimensional-multidimensional

continuum.

Although no normative data or data regarding reliability and validity are available for the original interview-questionnaire, numerous studies have used this instrument to explore the relationship between classroom organization characteristics and shared perceptions of ability (Rosenholtz & Rosenholtz, 1981; Rosenholtz & Wilson, 1980), academic and social power (Marx, 1985; Rosenholtz, 1982), academic self-concept (Simpson, 1981), and attitude toward school (Rosenholtz & Simpson, 1984). Prior successful use of the instrument as evidenced by these studies illustrates the credibility of the instrument, as well as its ability to discriminate among organizational characteristics in classrooms.

Conclusion

The present chapter began with a description of each of the seven alternate school programs used in the present study. These programs were described in terms of their orientation, goals, size, referral procedures and curricular offerings. The method of data collection was then described, and the rationale for using the <u>Learning</u> <u>Environment Inventory</u> and the <u>Classroom Characteristics Rating Scale</u> over other similar instruments was presented.

CHAPTER 1V

RESULTS

This chapter presents the results of the study in three separate sections. First, data regarding program organization are presented and described. Second, a discussion of the differences in student perceptions across alternate learning environments as indicated by the <u>Learning Environment Inventory</u> is presented. Finally, the relationship between both teachers' organizational and instructional practices and students' perceptions of their learning environments is examined.

<u>Characteristics of Program Organization</u>

Data regarding teachers' use of curricular materials and organizational practices were gathered through the Classroom <u>Characteristics Rating Scale</u>. The scale was administered in order to determine how each of the seven alternate schools differed along the following dimensions of program organization: (a) differentiation of task structure, (b) student autonomy, (c) organization of instruction, and (d) teacher evaluations. Only one score for each of the four dimensions per subject area was required from each alternate school program. In schools where two or more teachers were employed, mutual agreement had to be reached concerning the instructional practices for each dimension, and a single response for each item was then recorded. The decision requiring all schools to arrive at a single score for each scale item was made since three of the seven schools used in the study employed only a single teacher. Multiple opinions concerning instructional practices at these schools were, therefore, not possible. As such, these data do not lend themselves to statistical analyses that might indicate significant program differences regarding characteristics of program dimensionality. Rather, the results are simply described in terms of each program's position on the unidimensional-multidimensional continuum in relation to the other programs.

The results of the <u>Classroom Characteristics Rating Scale</u> are presented in Table 3. Theoretically, the lower an individual school's score, the higher its degree of unidimensionality for the organizational dimension under consideration. Conversely, as individual program scores increase across dimensions, the degree of multidimesionality also increases. Since it was possible to earn a total of five points across six subject areas for each dimension, a maximum of 30 points and a minimum of 6 points for each of the 4 dimensions was possible. Figure 1 illustrates how each of the seven schools compared with respect to the four program dimensions. Rank order correlations were also calculated across the four organizational areas using the Spearman rank-difference correlation technique and are presented in Table 4.

Differentiation of Task Structure

As can be seen, the programs cluster below the scale midpoint along this dimension. The difference between the most unidimensional and multidimensional schools is only seven points. For this dimension, teachers were asked to respond to questions concerning how often their students use the same materials, such as texts, workbooks, and teacher-made materials across the different subject areas. Specifically, Program One was the most unidimensional program with a total dimension score of 9. This score reveals that students attending this program "frequently" use the same instructional materials. Similarly, Programs Two, Three, Seven, and Four yielded

Table 3

Results of the Classroom Characteristics Rating Scale

Programs	Task	Student	Instructional	Teacher	Total
N=7	Structure	Autonamy	Organization	Evaluation	(120)
One	9	8	10	18	45
Тио	11	10	11	22	54
Three	12	15	16	30	73
Four	13	17	21	24	75
Five	16	20	17	26	7 9
Six	16	18	25	30	89
Seven	12	25	28	29	94

Program Organization Characteristics¹

Note: Lower scores indicate unidimensionality; higher scores indicate multidimensionality.

--

1. Possible range of scores for each dimension is 6-30.





Table 4

Spearman Rank-Difference Correlations for Program Organization Variables

	Organizational Variables					
Organizational Variables						
	Autonomy	Grouping	Evaluation			
Task Structure	.71*	.65	.61			
Autonomy		.89**	.58			
Grouping			.63			

.

* <u>p</u><.05, ** p<.01

--

total scores of 11, 12, 12, and 13 respectively, also placing them in the "frequently" category for this dimension. Programs Five and Six were the most multidimensional in this area. Both schools yielded identical total dimension scores of 16, thus indicating that their students "occasionally" use similar instructional materials across subject areas. In general, the instructional practices of teachers representing each of the alternate programs appear to be similar with regard to task differentiation. Furthermore, these practices tend to be unidimensional.

Student Autonomy

Unlike differetiation of task structure, there appears to be much variability among alternate school programs' scores regarding student autonomy or decision-making power. For this dimension, teachers were asked how frequently their students were permitted to make their own decisions regarding type and length of activity for each subject area. The most unidimensional program was Program One, with a total score of 8 across subject areas. This score indicates that students attending this school program are "never" permitted to make their own instructional decisions. Similarly, Program Two's dimension score of 10 reveals that it "seldom" allows students to excercise any decision-making power regarding instructional demands. A cluster of similar instructional practices along this dimension emerged among Programs Three, Four, Six, and Five. Total dimension scores for these programs were 15, 17, 18, and 20 respectively, indicating that all 4 schools "occasionally" permit their students to make their own instructional decisions. Program Seven was found to be the most multidimensional program. Its total dimension score of 25 reveals that this program "frequently" allows its students to make their own

decisions regarding type and length of activity.

Organization of Instruction

Similar to student autonomy, there appears to be a great deal of variability regarding alternate school teachers' grouping practices. For this dimension, teachers were asked how often they group the whole class together for instruction in each subject area. Teacher total scores ranged from 10 for Program One, indicating that its classes are "frequently" grouped together for the purposes of instruction, to 28 for Program Seven, pointing out that instruction is highly individualized and rarely conducted along class-as-group lines in this setting. As mentioned, Program One was the most unidimensional program with a total dimension score of 10. Similarly, Program Two's score of 11 also places it in the "frequently" category, indicating unidimensional grouping practices. Program Three's dimension score of 16, and Program Five's score of 17 places both schools in the "occasionally" category for grouping the entire class together for instructional purposes. Programs Four and Six's dimension scores of 21 and 25 respectively reveal that their students are "seldom" instructed as a collective group. Once again, Program Seven appeared to be the most multidimensional program for this particular area. Its total dimension score of 28 indicate that students attending this program are "never" grouped together for the purposes of instruction. Teacher Evaluations

Unlike the preceding dimensions, scores for all seven programs regarding teachers' evaluation practices were uniformly high. For this dimension, teachers were asked how frequently they made comparative evaluations when assessing individual student progress in each subject area. None of the teachers' scores indicated a strong unidimensional program orientation regarding evaluation practices. However, Program One's total score of 18 was the lowest, indicating that its students are "occasionally" evaluated by a process of comparing one individual's work with the work of another. Beyond this finding, two separate clusters consisting of three schools each were identified. Programs Two, Four, and Five yielded scores of 22, 24, and 26 respectively across subject areas, thus revealing that they "seldom" make comparative student evaluations. In addition, Programs Seven, Six, and Three's dimension scores were 29, 30, and 30 respectively, indicating that teachers representing these programs "never" make comparative evaluations when assessing individual student progress. Overall, there appears to be a strong multidimensional tendency among all alternate school programs involved in the study with respect to teacher evaluation practices.

<u>Total</u>

Total scores for each of the seven programs across the four organizational areas reveals that programs One and Two are the most unidimensional. Their scores of 45 and 54 respectively indicate that they "seldom" differentiate task structures, provide individualized instruction, share decision-making with students, or evaluate students on a non-comparative basis. Programs Three, Four, and Five's scores 73, 75, and 79 respectively, indicate that they "occasionally" organize instruction in the manner. Finally, Progam Six and Seven's overall scores of 89 and 94 respectively reveal that their learning environments are "frequently" organized according to these instructional features.

It is important to note that no normative data, or data regarding validity and reliability exists for the instrument developed
originally by Rosenholtz and Rosenholtz (1981) to measure characteristics of classroom dimensionality. Therefore, data provided in the present study regarding program orgnization should not be considered conclusive. Furthermore, it is not possible to determine the extent to which teachers' organizational and instructional practices as described in the present study are representative of, or different from teachers' practices in general.

Differences in Student Perceptions

Data regarding students' perceptions of their alternate learning environments were gathered through the Learning Environment <u>Inventory.</u> These data_weene_subjected to a multivariate one-way analysis of variance which produced a statistically significant result of 3.48 (Wilks-Lambda, p.05). A series of 15 one-way analyses of variance were subsequently performed, and the results are illustrated in Table 5. Program mean scores and standard deviations for each of the fifteen perception variables are also presented in this table. Following this, a series of post hoc Scheffe tests were conducted at an alpha level of 0.05 for each of the 12 student perception variables for which a statistically significant F ratio resulted from the univariate analysis. Results of these post hoc analyses are illustrated in Table 6 and revealed that students' perceptions of their school climates were significantly different for 10 of the 15 perception variables. Specifically, significant differences were found for the following variables: (a) formality (b) speed, (c) goal direction, (d) favoritism, (e) difficulty, (f) apathy, (g) democracy, (h) satisfaction, (i) disorganization, and (j) competition. The results for each of these ten variables is discussed below in detail.

Table 5.

--

Program Means, Standard Deviations, and Univariate F Ratios from a series of

<u>One-Way Analyses of Variance for the 15 Student Perception Variables</u> .

Perception Variable				Program			Univariate F (df = 6, 96)		
		One	Two	Three	Four	Five	Six	Seven	
Cohesive- ness	X: s.D.	21.73 2.15	23.92 2.61	22.20 3.08	22.77 2.20	20.85 2.64	20.50 2.95	20.39 3.26	3.13**
Diversity	∑: s.d.	21.33 2.61	21.92 2.02	20.70 1.56	21.31 2.21	20.80 2.04	21.20 1.20	20.78 2.93	<1
Formality	⊼: s.p.	25.33 2.02	25.25 1.82	21.00 1.94	21.00 2.51	19.73 2.75	19.60 2.01	21.04 2.92	13.80**
Speed	∑: s.D.	18.40 4.08	17.08 2.46	16.20 1.93	13.62 2.63	15.10 2.75	15.35 4.27	14.15 3.48	4.07**
Material Environment	∑: s.D.	21.60 1.92	23.08 2.11	21.90 1.37	20.92 3.28	20.55 2.68	19.40 3.24	20.96 2.79	2.29*
Friction	∀: s.d.	20.73 2.43	19.33 3.14	19.10 2.33	20.23 2.59	20.35 2.46	22.00 2.40	21.74 4.41	<1
Goal Direction	∑: s.D.	23.10 3.43	24.33 2.15	19.80 2.49	19.31 2.75	20.50 2.28	19.10 3.35	20.48 2.39	6.89**
Favoritism	X: s.D.	16.10 3.49	12.67 3.06	16.40 2.59	15.08 3.20	18.33 3.16	17.70 2.87	15.96 2.99	4.89**
Difficulty	X: s.d.	20.93 1.28	19.50 1.73	16.10 2.33	16.15 2.73	17.53 3.12	17.10 3.14	15.96 2.47	8.60**
Apathy	X: s.d.	16.93 2.60	12.42 3.03	15.90 3.28	16.62 3.78	16.40 3.17	21.00 2.62	17.76 3.73	6.88**
Democracy	Х: s.d.	12.80 1.37	14.83 1.53	15.90 2.88	17.69 1.75	16.05 2.26	16.50 2.55	19.83 3.33	14.76**

Cliqueness	∑: s.D.	19.40 2.47	18.17 1.95	18.80 2.53	18.08 1.85	20.00 3.13	20.40 3.20	19.00 2.63	<1
Satisfaction	X : s.D.	17.40 2.13	19.83 2.62	18.70 2.21	18.54 3.13	18.03 1.82	15.00 2.00	17.70 3.42	3.54**
Disorgan- ization	₹: s.D.	12.87 3.27	11.92 2.23	16.00 3.13	14.38 2.43	16.65 4.15	16.65 2.56	15.09 3.50	4.34**
Competition	∑: s.d.	21.27 2.02	20.75 1.54	15.80 3.16	15.00 2.97	16.20 3.78	15.60 2.99	13.04 2.01	19.49**

.

* p<.05, ** p<.01

--

Table 6

Results of Post Hoc Scheffe Tests involving Differences in Students'

Perceptions of their Learning Environments.

--

			Alternate	School	Programs	· · · · · · · · · · · · · · · · · · ·	
Variables							
Formality		_	-		_		
Mean: Homogeneous groups:	6 19.6 	5 19.7	3 21.0	4 21.0	21.4	25.3	25.3
Speed	4	7	. 5	6	3	2	1
Mean: Homogeneous groups:	13.6	14.2	15.1	15.4	16.2	17.1	18.4
Goal Direction			- <u></u>				
Mean: Homogeneous groups:	6 19.6	4 19.3	3 19.8	7 20.5	5 20.5	1 23.1	2 24.3
			· · · · · · · · · · · · · · · · · · ·				
Favoritism Mean: Homogeneous groups:	2 12.7	4 15.1	7 16.0	1 16.1	3 16.4	6 17.7	5 18.3
Difficulty		<u></u>	<u></u>				
Mean: Homogeneous groups:	7 16.0	3 16.1	4 16.2	6 17.1	5 17.5	2 19.5	1 20.9
Apathy		<u>et</u>					
Mean: Homogeneous groups:	2 12.4	3 15.9	5 16.4	4 16.6	1 16.9	7 17.8	6 21.0

Mean: Homogeneous groups:	1 12.8	2 14.8	3 15.9	5 16.1	6 16.5	4 17.7	7 19.8
Satisfaction Mean: Homogeneous groups:	6 15.0	1 17.4	7 17.7	5 18.0	4 18.5	3 18.7	2 19.8
Disorganization Mean: Homogeneous groups:	2 11.2	1 12.9	4 14.4	7 15.1	3 16.0	5 16.7	6 16.7
Competition Mean: Homogeneous groups:	7 13.0	4 15.0 	6 15.6	3 15.8	5 16.2	2 20.8	1 21.3

- -

Formality

Two distinct clusters among programs emerge for students' perceptions of formality. First, students' perceptions in programs Three through Seven do not differ significantly from one another. Furthermore, perceptions are not significantly different among students attending programs One and Two. However, students' perceptions of formality for these two programs do differ significantly from programs Three through Seven. Thus, on average, students in programs one and two perceive their programs as having significantly greater levels of formality than do students attending any of the other programs.

Speed

For this variable, students attending alternate Program One perceive the pace of instruction as significantly quicker than do students attending programs Four and Seven. As can be seen, neither Programs One nor programs Four and Seven differ significantly from programs Two, Three, Five, or Six with regard to perceived level of instructional pace.

Goal Direction

As can be seen, three different groupings among the seven programs emerge for this variable. First, programs Three through Seven, which are the least goal directed, form a cluster and are not significantly different for each other. Second, Program One is not signifiantly different from programs Three, Five, and Seven, but does differ significantly from programs Four and Six. Finally, Program Two is significantly more goal directed than all other school programs except Program One. Neither programs One nor Two are significantly more goal directed than each other.

Favoritism

Students attending programs Five and Six perceive their schools as possessing significantly more favoritism than do students attending Program Two. Student perceptions in programs Five and Six do not differ significantly from those of any other program in this regard, nor are student perceptions in program Two significantly less oriented toward favoritism than are those of the remaining four programs. Difficulty

For this variable, programs Three through Seven form a cluster and are not significantly different from each other with regard to perceived level of program difficulty. Likewise, neither are programs One nor Two perceived as significantly more difficult than each other. Furthermore, student perceptions in Program Two are not significantly different from those in programs Three through Six, but do differ significantly from perceptions in Program Seven. Finally, Program One, which records the highest score for perceived level of difficulty, is significantly different from all other school programs except Program Two.

Apathy

Students in programs One through Five do not differ significantly regarding perceptions of apathy. Likewise, there are no significant differences along this variable among programs One, Three, Four, Five, and Seven, or among programs One, Four, Six, and Seven. There are significantly higher levels of perceived apathy among students attending Program Seven than there are for students enrolled in Program Two. Furthermore, perceived levels of apathy among students attending Program Six are significantly higher than are those for students in Programs Two, Three, and Five.

Democracy

Programs One, Two, and Three are not significantly different from each other with respect to students' perceptions of democracy. Likewise, programs Two through Six do not differ significantly from one another along this variable. Program One, however, is significantly lower in level of student perceived democracy than programs Four through Seven. Furthermore, Program Seven is perceived by its students as significantly more democratic than programs Two, Three, and Five.

Satisfaction

There is only one significantly different relationship among the seven programs for this variable. Perceived level of satisfaction is significantly higher for students attending Program Two than it is for students attending Program Six. No other significant relationships among programs were recorded for satisfaction.

<u>Disroganization</u>

The relationship among programs regarding perceived level of disorganization is almost entirely opposite to that of satisfaction. Program Six is significantly higher in level of student perceived disorganization than is Program Two. In addition, identical scores for programs Five and Six are significantly higher along this variable than is Program Two's score.

Competition

For this variable, programs One and Two are not significantly different from one another, but are significantly higher in levels of perceived competitiveness than the other five programs. Programs Three, Four, Six, and Seven do not differ significantly from one another, nor do programs Three through Six. However, Program Five is significantly higher in level of student perceived competition than is Program Seven.

Non-significant Variables

Of the 12 perception variables subjected to post-hoc Scheffe tests following the univariate analyses, only two of these failed to produce significant differences across the seven school programs involved. These variables were cohesiveness and liking of the material environment.

Program Organization and Student Perceptions

The relationships among student perceptions and program organization data were explored to determine the extent to which teachers' organizational and instructional practices relate to students' perceptions of their alternate learning environments. Pearson correlation coefficients were computed for each of the four program organizational variables including a total value across each of the 15 climate variables. The program raw score on the respective organizatonal variable was correlated with the 15 mean student perception scores. A number of statistically significant relationships among variables emerged from these analyses. These relationships are illustrated in Table 7 and are described below by program organization variable. The results are described according to both 'positive' and 'negative' relationships that emerged from the analyses. A discussion regarding the amount of shared variance among student perceptions across the four organizational areas is also presented.

Task Structure

<u>Positive</u>. As indicated previously in Table 3, teachers tended to be unidimensional in this area, generally using similar materials

69 ·

Table 7

Correlations between Students' Perceptions of their Alternate Learning

Environments and Teachers' Organizational and Instructional Practices (n=7).

Program	Organization	Areas
---------	--------------	-------

Student Perceptions

	Task Structures	Student Autonomy	Student Grouping	Teacher Evaluations	Total
Cohesiveness	49	68*	65	50	67 *
Diversity	35	67 *	48	64	62
Formality	86**	81**	75 *	83×	89**
Speed	60	85**	82**	59	83**
Material Env.	74*	59	70*	49	70*
Friction	.33	.52	.70*	.25	.55
Goal Direction	67 *	68	75*	75*	80**
Favoritism	. 64	.47	.38	.46	.51
Difficulty	53	81**	79 *	85**	86**
Apathy	.50	.47	.68*	.47	.61
Democracy	.40	.91**	.90**	.68×	.88**
Cliqueness	.57	.25	.25	.30	.34
Satisfaction	47	28	52	34	45
Disorganization	.81**	.69*	.61	.81**	.79*
Competitiveness	56	93**	91**	82**	94**

*P\$05, ***<01

for different students across subject areas. For this variable, only students' perceptions of program formality (-.86) achieved a level of significance that was 'desirable'. None of the other statistically significant correlations could be construed as positive or 'desirable' for this program organizational area. Perceived level of Democracy (.40) and Competition (-.36) came closest to being considered positive. However, neither one of these variables approached a level of statistical significance.

<u>Necative</u>. All of the remaining correlations which reached a level of statistical significance were negative or 'undesirable' with respect to teachers' practices of differentiating task structures. Statistically significant correlations were recorded for students' perceptions of liking of the material environment (-.74), goal direction (-.67), and perceived level of disorganization (.81) along this organizational dimension. In other words, as teachers' structuring of tasks becomes more multidimensional, students like their material environments less, and perceive their programs as less formal, goal directed, and more disorganized.

Autonomy

<u>Positive</u>. As noted previously, there was a considerable amount of dispersion of scores regarding the amount of autonomy or decision-making power teachers typically give their students concerning instructional requirements. Overall, teacher scores along this variable were higher than were scores for differentiation of task structure, but were lower or more unidimensional than were scores for both grouping and evaluation practices. Essentially, as student decision-making power in alternate school programs increases, student perceived levels of formality (-.81), speed (-.85), difficulty (-.81),

and competitiveness (-.93) decrease, while perceived level of democracy (.91) increases.

<u>Negative</u>. Specific negative or 'undesirable' relationships emerged for the amount of autonomy or decision-making power teachers give to students and student perceived level of program cohesiveness (-.68), diversity (-.67), and goal direction (-.68). That is, as student autonomy increases across alternate school programs, students perceive their programs as less cohesive, diverse, or goal directed. <u>Organization of Instruction</u>

<u>Positive</u>. Teachers' grouping practices across the seven school programs were widely dispersed along the unidimensional-multidimensional continuum. Results illustrate that the more individualized the pattern of instruction becomes, the more 'desirable' are student perceived levels of formality (-.75), speed (-.82), difficulty (-.79), competitiveness (-.91), and democracy (.90). In other words, as student grouping practices become more multidimensional, students perceive their programs as less formal, difficult, rushed, or comptetitive, and more democaratic.

<u>Negative</u>. Less desirable relationships existed between alternate school teachers' grouping practices and student perceived liking of the material environment (-.70), goal direction (-.75), friction (.70), and apathy (.68). As instruction becomes more individualized, students like the material environment of the classroom less, and perceive their programs as less goal directed. In addition, they perceive their environments as possessing more friction and apathy.

Evaluation

<u>Positive</u> . As mentioned earlier, teacher scores along this variable were more uniformly multidimensional than they were for the other three program organization variables. In other words, teachers in all programs tended to evaluate students' progress on an individual, rather than comparative basis. The more multidimensional of these evaluation practices were associated with significantly lower levels of student perceived formality (-.83), difficulty (-.85), and competitiveness (-.82), and significantly higher levels of student perceived democracy (.68). In other words, as teacher evaluations become more individualized, students perceive their programs as less formal, difficult, or competitive, and more democratic.

<u>Negative</u>. Less desirable relationships existed between teacher evaluation practices and student perceived level of goal direction (-.75) and disroganization (81). That is, as evaluation practices become more multidimensional, students perceive their programs as less goal directed, and more disorganized.

<u>Total</u>

<u>Positive</u>. When data from all four program organization variables are considered together, a number of significant positive, or 'desirable' relationships emerge. Specifically, correlations between overall program organization and and student perceived levels of formality (-.89), speed (-.83), difficulty (-.86), competition (-.94), and democracy (.88) were positive. In other words, as alternate school programs become more multidimensional across all four organizational areas, students perceive their programs as less formal, rushed, difficult, competitive, and more democratic. <u>Negative</u>. Conversely, less desirable relationships emerged for combined program organizational areas and student perceived levels of cohesiveness (-.67), liking of the material environment (-.70), goal direction (-.80) and disorganization (.79). That is, as multidimensionality across all program organizational areas increases, students like their material environment less, and perceive their school programs as less cohesive, goal directed, and more disorganized.

Shared Variance among Student Peceptions

In the present study, sample size for the number of programs used was relatively small (i.e., n=7). Consequently, the amount of shared variance necessary to produce a statistically significant correlation between various student perception and program organization variables was relatively high. Another way of illustrating the relationship between teachers' organizational and instructional practices and students' perceptions of their learning environments is to examine the amount of variance shared among student perceptions across the four organizational areas regardless of the direction of the relationship. In order to permit such an investigation, the data presented in Table 4 have been reorganized so that the correlations are arranged according to the strength of the relationship between student perception and organizational area under consideration. This new configuration which is illustrated in Table 8, provides information regarding the median value, the percentage of variance shared between the various organizational variables and student perceptions, and the number of statistically significant correlations. The percentage of shared variance was determined by calculating the square of the median value for each of the four program organizational areas. Negative

Table 8

	Program Organization						
	Task Structure	Autonomy	Grouping	Evaluation			
	86	93	91	85			
	81	91	90	83			
	74	85	82	82			
	67	81	79	81			
	64	81	75	75			
	60	69	75	68			
	57	68	70	64			
median value	<u>56</u>	<u>68</u>	<u>70</u>	<u>59</u>			
	53	67	68	50			
	50	59	65	49			
	49	52	61	47			
	47	47	52	46			
	40	47	48	34			
	33	25	25	25			
percentage of	31%	46%	. 49%	35%			
shared variance ¹							
number of statisical	1y 4	9	9	6			
significant correlat	ions						

Distribution of Correlations of Student Perceptions and Program Organization

1. Based on the median correlation.

75

.

values and decimal points have been eliminated in order to illustrate the actual distribution of correlations. As can be seen, the strength of the relationship regarding student perceptions across the areas of grouping practices and autonomy is greater relative to the two other program organizational areas. Thus, these two areas appear to relate more directly to how students enrolled in alternate educational programs at the secondary level perceive their learning environments.

Conclusion

The present chapter began by discussing the results of teachers' organizational and instructional practices as indicated by the <u>Classroom Characteristics Rating Scale</u>. The results were discussed according to differentiation of task structure, student autonomy, grouping, and evaluation practices. A discussion of the differences in student perceptions across the various school programs as indicated by the <u>Learning Environment Inventory</u> was then presented. The chapter concluded with an examination of the relationship between program organization and students' perceptions of their alternate learning environments.

CHAPTER V

DISCUSSION AND IMPLICATIONS

This chapter presents a brief summary of the problem, methodology, and results; a discussion of the findings in the context of previous research; and a discussion of the implications of these findings for school personnel involved in alternate educational programs.

Summary of the Problem, Methodology, and Results

The present study has sought to explore: (a) the organizational and instructional practices of teachers representing different alternate school programs, (b) the differences in perceptions regarding school climate of students attending various alternate school programs, and (c) the relationship between program organizational characteristics and students' perceptions of their learning environments. In all, 103 students enrolled in seven different secondary level alternate eductional programs completed the Learning Environment Inventory, while teachers representing each of the seven programs completed an instrument called the Classroom Characteristics Rating Scale . In programs where two or more teachers were employed, agreement was reached regarding the instructional practice that best typified their program and a single response for each item then recorded. Thus, only one rating scale was received from each of the seven participating schools. Multivariate analyses of variance, followed by univariate analyses of variance and Scheffe post hoc tests were conducted to determine the differences in student perceptions regarding 15 school environment variables across the seven alternate programs. In addition, correlation coefficients were used to investigate the relationship between students' perceptions of their

learning environments and characteristics of program organization. Differences in teachers' organizational and instructional practices as indicated by the <u>Classroom Characteristics Rating Scale</u> were described. Specifically, organizational differences among programs were discussed in terms of task structure, autonomy, grouping practices, and evaluation procedures. Results indicated that programs differed in every organizational area, but most noticeably across grouping practices and autonomy. Univariate analyses of variance revealed that 12 of the 15 student perception variables attained a significant F ratio at the .05 level. Subsequent post hoc Scheffe. tests revealed significant differences for 10 of the 12 variables. Finally, Pearson correlations indicated a number of significant relationships, both positive and negative, between students'perceptions of their alternate learning environments and teachers' organizational and instructional practices. The greatest amount of variance was shared among the organizational areas of grouping practices and autonomy and the various student perception variables.

Findings

The discussion regarding the findings of the present study focuses on (a) organizational and instructional differences among the seven alternate school programs, (b) differences in students' perceptions along the 10 significant school environment variables across the seven programs, and (c) the relationship between program organization and student perceptions of their alternate learning environments.

Organizational and Instructional Differences

As indicated in the previous chapter, the seven school programs differed considerably across the four program organizational areas investigated. Collectively, however, all programs became increasingly more multidimensional as they moved from differentiating task structures, to permitting student autonomy, to student grouping procedures, through to evaluation practices. In other words, teachers' organizational and instructional practices were relatively similar regarding characteristics of dimensionality, but differed significantly regarding the extent to which these practices were either unidimensional or multidimensional.

Individual program differences along the four organizational areas were significant, with a total difference of 49 points separating the most unidimensional program (45 points) from the most multidimensional program (94 points). This difference is important to note, since each of the school programs involved in the present study agreed that they: (a) served the same type of student, (b) used similar screening and admissions procedures, (c) employed similar types of educational personnel to run the programs, (d) offered the same academic coursework, and (e) attached themselves administratively to a larger secondary school in the district. As mentioned earlier, the greatest dispersion of scores along the unidimensional-multidimensional continuum occurred for student autonomy and grouping practices, indicating that there is little program uniformity in these two areas across learning environments. Although there was less dispersion of program scores along task

structure and evaluation areas, differences in scores among the most

unidimensional and multidimensional programs in these areas were large. Only the extent to which teachers required their students to use the same materials across subject areas was similar among all programs, indicating that alternate school programs on the whole prefer to operate in a unidimensional manner regarding differentiation of task structures. While these findings are not conclusive, they do suggest that secondary-level alternate school programs tend to function independently of each other's influence and operate in relative isolation with regard to teachers' specific organizational and instructional practices, even though the direction of dimensionality across some organizational areas such as task structuring and evaluation procedures may be similar.

Student Perception Differences

Students' perceptions of their particular learning environments differed significantly along 10 of the 15 climate variables. These findings suggest that the organizational and instructional features that distinguish one alternate school program from another do have considerable impact upon the nature of students' perceptions of their particular learning environments. Only three of the six student perception variables previously considered to be positive, or desirable if observed attained levels of statistical significance. These variables were goal direction, democracy, and satisfaction. Student perception variables previously considered to be negative that attained levels of statistical significance were formality, speed, favoritism, difficulty, apathy, disorganization, and competition. Each of these variables is discussed below.

<u>Goal Direction</u> . Along this variable, unidimensional programs were perceived clearly as more goal directed than were

multidimensional programs. Specifically, student perceptions in Program Two for goal direction were higher than were the perceptions of students in any of the other programs and significantly higher than all other programs as well except Program One. Student perceptions in programs Three through seven did not differ significantly at all along this variable. Thus, it appears that goal direction is a more salient characterstic for students attending alternate school programs that are more uniformly unidimensional in nature than for those attending multidimensional programs. Interestingly, Anderson, Walberg, and Welch (1969) also found that goal direction was higher in classes following traditional courses than in classes using an experimental physics program.

Democracy . Significant differences in students' perceptions of democracy across programs were slightly less pronounced. It is not surprising that Program One, which ranked the lowest for autonomy on the <u>Classroom Characteristics Rating Scale</u>, also scored the lowest along this student perception variable, while Program Seven, which recorded the highest score for autonomy, ranked highest on this variable as well. Again, students' perceptions in programs Two through Six did not differ significantly from each other. Perceptions in programs One through Three did not differ either, and recorded the lowest scores for perceived level of democracy. These findings suggest that students perceive a higher degree of democracy in alternate school programs that are multidimensional with respect to student autonomy. Conversely, program democracy is a less salient characteristic in those programs that provide few opportunities for student input and decision-making. Thus, there appears to be a strong relationship between how teachers organize instruction and the degree

81 -

to which students perceive their progam to be democratic. It is interesting that those programs that scored highest in perceived level of goal direction scored lowest for perceived level of autonomy. This suggests that progam goals are more obvious and clearly understood in alternate school programs where the teacher makes the majority of the instructional decisions.

<u>Satisfaction</u>. Students' perceptions of program satisfaction was the least significantly differentiated variable of those considered to be positive. Only Program Six was significantly lower than Program Two regarding perceived level of satisfaction. None of the other programs differed with respect to this variable. It is important to note however, especially in light of the previous discussion, that students' perceptions of satisfaction were highest in Program Two followed by Program Three. In other words, students attending unidimensional alternate school programs were generally more satisfied than were students attending multidimensional programs, even though these differences were not always significant.

<u>Formality</u>. Two distinct clusters were apparent along this variable. Students' perceptions of formality in programs One and Two were highest and did not significantly different from one another. Likewise, perceptions in programs Three through Seven were lower and were not significantly different. Thus, perceived level of formality tended to be higher among students enrolled in unidimensional alternate school programs, while less formality was evident in the perceptions of students attending more multidimensional programs. Those programs that scored highest for perceived level of formality also scored lowest for perceived level of democracy, indicating that alternate school programs that are predominantly teacher controlled are most likely more rule governed as well.

<u>Speed</u>. While Program One was perceived as the most rushed, there was a less distinguishable pattern along this variable for school programs than the previous variables. Perceptions in programs Two through Seven were not significantly different from one another. Furthermore, Program Four was perceived as the least rushed of the seven programs. Thus, it appears that students' perceptions of speed are influenced less systematically by teachers' organizational and instructional practices than are other areas.

<u>Favoritism</u>. Similar to speed, there appears to be little order to students' perceptions of perceived level of favoritism across programs. Only perceived level of favoritism in Program Two was significantly lower than perceived levels in programs Five and Six. In no other programs were students' perceptions significantly different from another along this variable. This non-systematic pattern across programs suggests that student perceived level of favoritism is not strongly related to the organzational features of their alternate school programs.

<u>Difficulty</u>. A more observable pattern was evident regarding students' perceptions of difficulty across programs. However, only Program One's score was significantly higher along this variable than Program Seven's score. Perceptions in programs One and Two were highest and were not significantly different from one another, nor were perceptions in programs Two through Seven significantly different. Thus, perceived level of program difficulty does tend to be higher among students attending unidimensional alternate schools, although not all students attending multidimensional programs perceived their learning environments as significantly less difficult. <u>Apathy</u>. Although there was no clear pattern regarding students' perceptions of apathy across programs, the two most multidimensional programs (i.e., Six and Seven) were perceived as possessing greater apathy than all other programs. However, only Program Six's score was significantly higher for perceived level of apathy than Programs Two's score. While this relationship might suggest that students perceive less apathy among classmates in unidimensional programs than do students in multidimensional programs, the mean scores of the other programs along this variable suggest otherwise. For example, Program One recorded the third highest score for perceived level of apathy followed by Program Four, Five, and Three. Thus, there tends to be less of a relationship between organizational features of alternate school programs and perceived level of apathy.

<u>Disorganization</u>. Similar to apathy, there was no clear pattern regarding students' perceptions of disorganization across programs. Perceptions of disorganization were lowest in Program Two, and were significantly lower than perceptions in programs Five and Six. Beyond this relationship however, there were no significant differences among programs, or any systematic order to programs' scores which might indicate the influence of dimensionality.

<u>Competition</u>. Unlike disorganization, there was a clear pattern among the seven programs regarding student perceived level of competition. Students' perceptions in programs One and Two were highest along this variable, and were significantly different from perceptions of students attending all other programs. In addition, Program flue's score was significantly higher than that of Progam Seven, which was perceived as the least competitive program. Thus, it

appears that competition is a much more salient characteristic for students attending unidimensional alternate school programs than it is for students enrolled in multidimensional programs.

Student Perceptions and Program Organization

Findings regarding the relationship between student perceptions and program organization variables are discussed below according to organizational area.

<u>Task Structure</u>. Alternate school teachers' practices of differentiating task structures among students were asociated with negative student perceptions of their learning environments. Essentially, as teachers' practices of differentiating task structures became more multidimensional across programs, students' perceptions of program formality, attractiveness of the material environment, and goal direction decreased significantly, while their perceptions of disorganization increased. These findings suggest that alternate school teachers' present practices in this instructional area are not effective in creating an educational climate that is perceived as well organized, purposeful, or physically attractive by their students.

<u>Student Autonomy</u>. The degree to which alternate school teachers permitted their students to share in instructional decisions relating to program requirements was both positively and negatively related to students' perceptions of their learning environments. As student autonomy became more multidimensional across programs, perceived level of democracy and disorganization also increased, while perceived level of cohesiveness, diversity, formality, speed, goal direction, difficulty, and competitiveness decreased. While it is encouraging to note that alternate school students perceive their programs as fair, non-competitive, and informal, these findings also suggest that teachers' instructional practices along this variable contribute to programs that are perceived as disorganized, lacking in clear direction, and non-intimate. Thus, the advantages of greater student autonomy are questionable, since it appears to contribute to a lack of student understanding regarding the purpose of their programs, and their reasons for being there.

<u>Grouping</u>. Similar to autonomy, students' perceptions of their learning environments were both positive and negative as instruction became more individualized or multidimensional across programs. On a positive note, students' perceptions of program formality, speed, and competitiveness decreased, while perceptions of program democracy increased. Less encouraging correlations indicated that students perceived their programs as possessing more friction and apathy, and less goal direction as grouping practices became more multidimensional. Thus, while these findings suggest that students perceive their alternate school programs as fair, relaxed, and non-competitive, they are seen as possessing more apathy, friction or animosity, and less purposefulness as instruction becomes more individualized. Essentially, greater multidimensionality across this organizational area appears once again to relate to student confusion regarding the purpose, or overall goal of their alternate program.

<u>Evaluation</u>. As evaluation practices became more individualized or multidimensional among alternate school teachers, students perceived their programs as less formal, difficult, or competitive, and more democratic. Unfortunately, they also perceived their programs as less goal directed and more disorganized. Similar to the previous organizational areas, these findings suggest that the benefits of perceived decmocratic and non-competitive educational climates are possibly offset by an accompanying lack of perceived program organization and direction as evaluation practices become more multidimensional.

Total . Overall, there were roughly an equal number of encouraging and less encouraging relationships as teachers' organizational and instructional practices became more multidimensional. Generally, students perceived their programs as informal, comfortably paced, democratic, not difficult, and non-competitive as multidimensionality increased across organizational areas. Less encouraging were results indicating that students also perceived their learning environments as uncohesive, physically unattractive, lacking goal direction, and disorganized. These findings suggest that multidimensional instructional practices among alternate school teachers have aided in creating learning environments that are perceived as fair in most respects by their students. However, by creating these types of environments, it appears that teachers have sacrificed other equally important characteristics of their alternate school programs such as clearly established program goals, order or organization, and feelings of belonging or affiliation as perceived by their students.

Implications for Educational Personnel

The findings are discussed in terms of their implications for teachers, counsellors, and other educational personnel working in the area of secondary-level alternate education.

Implications for Teachers

One of the most important features of the present investigation is what it reveals to alternate school teachers about the effects of their organizational practices upon their students' perceptions. On the one hand, the results are somewhat encouraging when the generally agreed-upon philosophy of creating an environment for student success is considered (see Chapter 1). It appears that students do not find alternate school coursework difficult, nor do they feel the need to compete for grades as they might have in the regular school system. Furthermore, students' perceptions of favoritism and cliqueness were not significant, and perceptions of both friction and apathy were only marginally significant across one organizational area (i.e., grouping). These findings suggest that alternate school students' special needs for social success perhaps are being met under current program organizational arrangements.

On the other hand, it is clear that teachers' current organizational and instructional practices serve to create alternate school programs that are perceived as poorly organized, unattractive, and operating without a set of clearly defined goals or objectives. These practices, in turn, contribute to a lack of student affiliation, or identification with their programs. These findings suggest that teachers should alter their current instructional practices if they wish to strike a systematic balance between success-oriented school programs, and well organized, goal-oriented, and cohesive learning environments.

Implications for Counsellors

Results of the present study are of potential benefit to counsellors, child care workers, and other school personnel responsible for providing guidance or counselling services to alternate school programs. These findings indicate a need for school or area counsellors to become involved with teachers on a systematic basis in the operation of alternate school programs. Working directly

in the alternate school, counselfors need to use their expertise to identify ways in which teachers can modify their existing instructional practices and behaviors so that their learning environments are perceived as more goal directed, organized, and satisfying by students. Furthermore, counsellors could use their Knowledge and skills to intervene directly at the student level in an effort to reduce high levels of existing friction, cliqueness, and favoritism among program members. If alternate school programs are to become more effective in meeting their students' social and emotional needs, as well a their needs for program clarity and expectations, counsellors will need to become more directly involved in the overall functioning of these programs.

Implications for other Educational Personnel

The results of the present study also have some relevance for administrators and curriculum developers responsible for various aspects of alternate school programs. The present study, which has focused primarily on student perceptions rather than on teacher reports, can be interpreted by administrators as a measure of accountability regarding the extent to which teachers have been successful in creating an environment which is perceived as organizationally and socially effective by their students. Principals could utilize these findings to investigate current teacher practices in their own alternate school programs, and to make recommendations regarding teacher behaviors or organizational practices based on these observations.

Curriculum developers responsible for designing alternate school programs, or for introducing modifications to existing programs can also use the results of the present study to make decisions regarding

the usefulness of various organizational and instructional practices. The findings of the present study enable curriculum developers to identify those aspects of alternate learning environments that are positively and negatively perceived by students, and the relationship between program organization and these perceptions. These data could subsequently enable educators to make decisions regarding which student perceptions need to be increased, maintained, or decreased to an acceptable level commensurate with program philosophy, goals, and objectives.

Conclusion

This chapter began by providing an overview of the problem the present study has sought to explore, the methodology employed, and the results obtained. The findings were then discussed, focussing on differences in teachers' organizational and instructional practices, differences in student perceptions across the seven programs, and the relationship between program organization and student perceptions. Finally, these findings were discussed in terms of their implications for teachers, counsellors, and other educational personnel involved in secondary-level alternate education. Appendix A

Consent Form For Participants

PARENT CONSENT FORM

Alternate education at the secondary level in B.C. is rapidly changing and evolving. In order to keep pace with this change, we feel it is important to find out how the students themselves feel about their particular classrooms. We are requesting that your son/daughter be allowed to respond to a questionnaire that deals with their opinions about their current school. Since all secondary students are under 18 years of age, we require your permission as a parent/guardian to allow your son/daughter to fill out the questionnaire. The questionnaire will take approximately 20 minutes to complete and does not require that the student give his/her name. Students simply read each item and respond by circling either; strongly agree, agree, disagree, or strongly disagree on their answer sheet. Students are under no obligation to complete the entire questionnaire. In order to ensure that all students respond honestly and openly to all items, only the study organizer and the study supervisors will see the individual responses. Classroom teachers and principals will not have access to individual student responses. All response sheets will be destroyed after they have been used.

We sincerely appreciate your cooperation and support in this educational study. Thank you. John Woudzia, Study Organizer.

I agree to allow my son/daughter to complete the questionnaire as described.

Yes _____ No _____

Signature of Parent/Guardian _____

Appendix B

Classroom Characteristics Rating Scale

DIRECTIONS

Place a check directly on the line above the response that best describes your teaching practices for each of the items presented below.

SUBJECT: ENGLISH

1. During English, how often do the students in your school use the same materials (e.g., texts, workbooks, magazines, teacher made activities, etc.)?

never	seldom	occasionally	frequently	always

2. During English, how often is the whole class grouped together for instruction?

*				
never	seldom	occasionally	frequently	always

3. During English, how frequently are students permitted to make their own decisions regarding type of activity, length of activity, etc.?

never	seldom	occasionally	frequently	always

4. When you evaluate your students' progress in English, how often do you make your evaluations by comparing one student's work with the work of another?

				-
never	seldom	occasionally	frequently	always

SUBJECT: SOCIAL STUDIES

з.

 During Social Studies, how often do the students in your school use the same materials (e.g., texts, workbooks, magazines, instructional kits, teacher made activities, etc)?

		ک کاک (کان زیدیار بعدی و دی کار پر بزوی)		و دانی میں بین بروان پر بروان میں میں بروان
never	seldom	occasionally	frequently	always

2. During Social Studies, how often is the whole class grouped together for instruction?

never	seldom	occasionally	frequently	always
During Social Stu	ndies, how frequent	ly are students pe	ermitted to make th	heir own
decisions regardi	ng type of activit	y, length of activ	vity, etc.?	

never	seldom	occasionally	frequently	always
-------	--------	--------------	------------	--------

4. When you evaluate your students' progress in Social Studies, how often do you make your evaluations by comparing one student's work with the work of another?

	never	seldom	occasionally	frequently	always
	SUBJECT: MATHEMAT	TICS			
1.	During Mathematic (e.g., texts, wor	s, how often do kbooks, magazine	students in your sch s, instructional kit	ool use the same r s, teacher made ad	materials ctivities, etc.)
	never	seldom	occasionally	frequently	always
2.	During Mathematic	s, how often is	the whole class grou	ped together for i	instruction?
	never.	seldam	occasionally	frequently	always
3.	During Mathematic regarding type of	s, how frequently activity, length	y are students permi h of activity, etc.?	tted to make their	: own decisions
	never	seldom	occasionally	frequently	always
١.	When you evaluate evaluations by co never	your students' p mparing one stude seldom	progress in Mathemat ent's work with the occasionally	ics, how often do work of another? frequently	you make your always
	When you evaluate evaluations by co never SUBJECT: SCIENCE During Science, h texts, workbooks,	your students' p mparing one stude seldom ow often do stude magazines, inst	orogress in Mathemat ent's work with the occasionally ents in your school o ructional kits, teac	ics, how often do work of another? frequently use the same mater her made activitie	you make your always fials (e.g., s, etc.)?
	When you evaluate evaluations by co never SUBJECT: SCIENCE During Science, h texts, workbooks, never	your students' p mparing one stude seldom ow often do stude magazines, inst seldom	orogress in Mathemat ant's work with the occasionally ents in your school o ructional kits, teach occasionally	ics, how often do work of another? frequently use the same mater her made activitie frequently	you make your always rials (e.g., s, etc.)? always
	When you evaluate evaluations by co never SUBJECT: SCIENCE During Science, h texts, workbooks, never During Science, h	your students' p mparing one stude seldom ow often do stude magazines, inst seldom ow often is the v	orogress in Mathemat ent's work with the occasionally ents in your school o cuctional kits, teach occasionally whole class grouped to	ics, how often do work of another? frequently use the same mater her made activitie frequently together for instr	you make your always rials (e.g., s, etc.)? always nuction?
. .	When you evaluate evaluations by co never SUBJECT: SCIENCE During Science, h texts, workbooks, never During Science, h never	your students' p mparing one stude seldom ow often do stude magazines, inst seldom ow often is the v seldom	orogress in Mathemati ant's work with the or occasionally ents in your school or ructional kits, teach occasionally whole class grouped for occasionally	ics, how often do work of another? frequently use the same mater her made activitie frequently together for instr frequently	you make your always fials (e.g., ss, etc.)? always fuction? always
4.	When you evaluate evaluations by co never SUBJECT: SCIENCE During Science, h texts, workbooks, never During Science, h never During Science, h regarding type of	your students' p mparing one stude seldom ow often do stude magazines, inst seldom ow often is the v seldom ow frequently are activity, length	ents in your school or occasionally whole class grouped for occasionally whole class grouped for occasionally whole class grouped for occasionally	ics, how often do work of another? frequently use the same mater her made activitie frequently together for instr frequently to make their own	you make your always dials (e.g., s, etc.)? always nuction? always always

.

-

4. When you evaluate your students' progress in Science, how often do you make your evaluations by comparing one student's work with the work of another?

never	seldom	occasionally	frequently	always
SUBJECT: PHYSICAL	L EDUCATION/RECRE	ATION		
During P.E./Recre	eation, how often	do students in your	school use the s	ame equipment?
never	seldom	occasionally	frequently	always
During P.E./Recre	eation, how often	is the whole class	grouped together :	for activities
never	seldom	occasionally	frequently	always
During P.E./Recre decisions regardi	eation, how frequing type of activ	ently are students p ity, duration of act	ermitted to make ivity, etc.?	their own
never	seldom	occasionally	frequently	always
	· ·			
When you evaluate make your evaluat	e your students' tions by comparin	progress in P.E./Rec g one student's work	reation, how often with the work of	n do you another?
When you evaluate make your evaluat never	e your students' tions by comparin 	progress in P.E./Rec g one student's work occasionally	reation, how often with the work of 	n do you another? always
When you evaluate make your evaluat never SUBJECTS: ELECTIV	e your students' tions by comparin seldom 7E COURSEWORK (E.	progress in P.E./Rec g one student's work occasionally G., ART, SEWING, TYP	reation, how often with the work of frequently ING, WOODWORK, ET	n do you another?
When you evaluate make your evaluat never SUBJECTS: ELECTIV During the Electi the same material	e your students' tions by comparin 	progress in P.E./Rec g one student's work 	reation, how often with the work of frequently ING, WOODWORK, ETM do students in ye	n do you another? always C.) our school use
When you evaluate make your evaluate never SUBJECTS: ELECITIV During the Electi the same material never	e your students' tions by comparin seldom TE COURSEWORK (E. ive Course seldom	progress in P.E./Rec g one student's work occasionally G., ART, SEWING, TYP , how often 	reation, how often with the work of frequently ING, WOODWORK, ETC do students in you frequently	n do you another?
When you evaluate make your evaluate never SUBJECTS: ELECTIV During the Election the same material never For this particul for instruction?	e your students' tions by comparin 	progress in P.E./Rec g one student's work occasionally G., ART, SEWING, TYP , how often occasionally se, how often is the	reation, how often with the work of frequently ING, WOODWORK, EIN do students in yo frequently whole class group	n do you another? always C.) our school use always ped together
When you evaluate make your evaluate never SUBJECTS: ELECITIV During the Election the same material never For this particul for instruction?	e your students' tions by comparin seldom <u>ZE COURSEWORK (E.</u> ive Course seldom tar elective cour seldom	progress in P.E./Rec g one student's work occasionally G., ART, SEWING, TYP , how often occasionally se, how often is the occasionally	reation, how often with the work of frequently ING, WOODWORK, ETC do students in you frequently whole class group frequently	n do you another?

newer seldom occasionally frequently always		هیں میں اور				
	never	seldom	occasionally	frequently	always	
4. When you evaluate your students' progress in the elective _____, how often _____, how often ______, how often ______,

	never	seldom	occasionally	frequently	always	
	SUBJECTS: ELECTIVE COURSEWORK (CONTINUED)					
1.	During the Electi use the same mate	ive Course rials?	, how often	, how often do students in your school		
	never	seldom	occasionally	frequently	always	
2.	During this parti for instruction?	cular elective co	ourse, how often is	the whole class g	rouped together	
	never	seldom	occasionally	frequently	always	
3.	During this particular elective course, how frequently are students permitted to m their own decisions regarding type of activity, length of activity, etc.?					
	never	seldom	occasionally	frequently	always	
4.	. When you evaluate your students' progress in this elective course, how often do you make your evaluations by comparing one student's work with the work of anot					
	never	seldom	occasionally	frequently	always	
	SUBJECTS: ELECTIVE COURSEWORK (CONTINUED)					
1.	During the Elective Course, how often do students in your school use the same materials?					
	never ·	seldom	occasionally	frequently	always	
2.	During this parti for instruction?	cular elective or	ourse, how often is	the whole class g	rouped together	
	never	seldom	occasionally	frequently	always	
3.	During this parti their own decisio	cular elective or ons regarding type	ourse, how frequently of activity, length	y are students per h of activity, etc	mitted to make c.?	

occasionally

frequently

always

seldom

never

BIBLIOGRAPHY

- Anderson, G. J. (1971). Effects of course content and teacher sex on the social climate of learning. <u>American Educational Research</u> <u>Journal, 8</u>, 649-663.
- Anderson, G. J., Walberg, H. J. & Welch, W. W. (1969). Curriculum effects on the social climate of learning: A new representation of discriminant functions. <u>American Educational Research</u> <u>Journal, 6</u>,315-327.
- Chavez, R. C. (1984). The use of high inference measures to study classroom climates: A review. <u>Review of Educational Research</u>, <u>54</u>, 237-261.
- Cort, H. R., Jr., (1979). A social studies evaluation. In H. J. Walberg (Ed.), <u>Educational Environments and Effects:</u> <u>Evaluation, Policy, and Productivity</u>. Berkeley, California: McCutchan.
- Fraser, B. (1978). Environmental factors affecting attitude toward different sources of scientific information. <u>Journal</u> <u>of Research in Science Teaching</u>, <u>15</u>,491-497.
- Fraser, B. (1979). Evaluation of a science-based curriculum. In H. J. Walberg (ed.), <u>Educational Environments and Effects:</u> <u>Evaluation, Policy, and Productivity</u>. Berkeley, California: McCutchan.
- Fraser, B. (1985). <u>Two decades of research on perceptions of</u> <u>classroom environment</u>. Paper presented at the American Educational Research Association Annual Meeting, Chicago, IL. Fraser, B. J., Anderson, G. J. & Walberg, H. J. (1982).

Assessment of Learning Environments: Manual for Learning Environment Inventory (LEI) and My Class Inventory (MCI) (third version). Perth: Western Australian Institute of Technology.

- Gaite, A. J. H. & Rankin, R. J. (1974). <u>Patterns of achievement</u> <u>attitude, and behavior in a tax-supported alternative school</u>, (Report No. C-74-50). Chicago, IL: Paper presented at the American Educational Research Association Annual Meeting. (ERIC Document Reproduction Service No. ED084288)
- Gardener, J. & Farnsworth, B. (1977). Evaluation of an alternate high school. <u>Reading Improvement</u> <u>14</u>,299-302.
- Getzels, J. W., & Thelen, H. A. (1960). The classroom group as a unique social system. In N. B. Henry (Ed). <u>The dynamics of</u> <u>instructional groups, sociopsychological aspects of teaching</u> <u>and learning. The 59th yearbook of the National Society for</u> <u>the Study of Education</u> Chicago: University of Chicago Press.
- Ghory, W. J. & Sinclair, R. L. (1978). <u>Views from the margins:</u> <u>Student perceptions of educational environments in public</u> <u>alternate high schools</u> (Report No. C-78-58). Toronto, CAN: Paper presented at the National Conference of the American Educational Research Association. (ERIC Document Reproduction Service No. ED160693)
- Groobman, D. E., Forward, J. R. & Peterson, C. (1976). Attitudes, self-esteem, and learning in formal and informal schools.

Journal of Educational Psychology, <u>68</u>,32-35.

Hofstein, A., Gluzman, R., Ben-Zvi, R. & Samuel, D. (1979). Classroom learning environment and attitudes towards chemistry. <u>Studies in Educational Evaluation</u>, <u>5</u>,231-236.

99

Hofstein, A., Gluzman, R., Ben-Zvi, R. & Samuel, D. (1980). A comparative study of chemistry students' perceptions of the learning environment in high schools and vocational schools. <u>Journal of Research in Science Teaching</u>, <u>17</u>,547-552. Johnson, L. (1975). <u>School-related attitudes of students</u> <u>attending secondary alternative schools</u>. (Report No. C-75-45). Minneapolis, MN: Minneapolis Public Schools,

Minneapolis Department of Research and Evaluation. (ERIC Document Reproduction Service No. 118631)

- Johnson, L. & Faunce, R. W. (1972). <u>Alternative schools outside</u> <u>the public school system in Minneapolis 1971: A description</u> <u>of the secondary school students who attended them</u>.(Report No. C-71-76). Minneapolis, MN: Mineapolis Public Schools, Minneapolis Department of Research and Evaluation. (ERIC Document Reproduction Service No. ED084287)
- Lawrenz, F. (1976). The prediction of student attitude toward science from stdent perception of the classroom learning environment. <u>Journal of Research in Science Teaching</u>, <u>21</u>,699-708.
- Levin, T. (1980). Classroom climate as criterion in evaluating individualized instruction in Isreal. <u>Studies in Educational</u> <u>Evaluation</u>, <u>6</u>291-292.

Marx, R. W., (1983). Student perceptions in classrooms. <u>Educational Psychologist, 18,</u> 145-164.

Marx, R. W., (1985). Classroom organization and perceptions of student academic and social status. In I. E. Housego & P. P. Grimmett (Eds.), <u>Teaching and Teacher Education: Generating</u> and Utilizing Valid Knowledge for Professional Socialization.

Vancouver, British Columbia: University of British Columbia.

- Marx, R. W. & Winne, P. H. (1978). Construct interpretations of three self-concept inventories. <u>American Educational Research</u> <u>Journal, 15</u>99-109.
- Moos, R. H. & Trickett, E. J. (1974). <u>Classroom Environment Scale</u> <u>Manual</u> Palo Alto, California: Consulting Psychologists Press.
- O'Reilly, R. O. (1975). Classroom climate and achievement in secondary school mathematics classes. <u>Alberta Journal of</u> <u>Educational Research</u>, <u>21</u>,241-248.
- Parret, W. (1981). <u>Alternative schools: What's really happening</u> <u>in the classrooms</u> (Report No. 143). Los Angeles, CA: Paper presented at the Annual Meeting of the American Educational Research Association. (ERIC Document Reproduction Service No. 207236)
- Power, C. N. & Tisher, R. P. (1979). A self-paced environment. In H. J. Walberg (Ed.), <u>Educational Environments and Effects:</u> <u>Evaluation, Policy, and Productivity</u>. Berkeley, California: McCutchan.
- Randhawa, B. S. & Hunt, D. (1981). <u>Social-psychological</u> <u>environments and cognitive achievement</u>. Paper presented at Annual Meeting of American Educational Research Association, Los Angeles.
- Randhawa, B. S. & Michayluk, J. O. (1975). Learning environment in rural and urban classrooms. <u>American Educational</u> <u>Research Journal</u>, <u>12</u>,265-285.
- Reddy, W. B., Langmeyer, D. & Steichen Asch, P. A. (1978). Self-concept, school self-image, satisfaction, and involvement

in an alternate high school. <u>Psychology in the Schools</u>, <u>15</u>,66-71.

- Rosenholtz, S. J. (1981/1982). Organizational determinants of classroom social power. <u>Journal of Experimental Education</u>, <u>50</u>,83-87.
- Rosenholtz, S. J. & Rosenholtz, S. H. (1981). Classroom organization and the perception of ability. <u>Sociology of</u> <u>Education</u>, <u>54</u>, 132-140.
- Rosenholtz, S. J. & Simpson, C. (1984). Classroom organization and student stratification. <u>Elementary School Journal</u>, <u>85</u>,21-37.
- Rosenholtz, S. J. & Simpson, C. (1984). The formation of ability conceptions: Developmental trend or social construction? <u>Review of Educational Research</u>, <u>54</u>,31-63.
- Rosenholtz, S. J. & Wilson, B. (1980). The effect of classroom structure on shared perceptions of ability. <u>American</u> <u>Educational Research Journal</u>, <u>17</u>,75-82.
- Sharan, S. & Yaakobi, D. (1981). Classroom learning environment of city and Kibbutz biology classrooms in Isreal. <u>European</u> <u>Journal of Science Education</u> <u>3</u>321-328.
- Shaw, C. N., Tomcala, M., Middleton, J., Rudee, B., Jones, E. & Smith, J. (1975). A comparative study of students in alternate and traditional high schools. <u>Education</u>, <u>96</u>, 28-35.
- Simpson, C. (1981). Classroom structure and the organization of ability. <u>Sociology of Education</u>, <u>54</u>,120-132.
- Stevens, M. (1985). Characteristics of alternate schools.

American Educational Research Journal, 22,135-148.

- Tisher, R. P. & Power, C. N. (1976). Variations between ASEP and conventional learning environments. <u>Australian Science</u> <u>Teachers Journal</u>, <u>22</u>, 35-39.
- Tisher, R. P. & Power, C. N. (1978). The learning environment associated with an Australian curriculum innovation.

Journal of Curriculum Studies 10,169-184.

- Trickett, E. J. (1978). Toward a social-ecological conception of adolescent socialization: Normative data on contrasting types of public school classrooms. <u>Child Development</u>, <u>49</u>, 408-414.
- Walberg, H. J. (1968). Structural and affective aspects of classroom climate. <u>Psychology in the Schools</u>, <u>5</u>,247-253.
- Walberg, H. J. (1969). Class size and the social environment of learning. <u>Human Relations</u>, <u>22</u>,465-475. (a)
- Walberg, H. J. (1969). Predicting class learning: An approach to the class as a social system. <u>American Educational</u>

Research Journal, 6,529-542. (b)

- Walberg, H. J. (1972). Social environment and individual learning: A test of the Bloom model. <u>Journal of Educational</u> <u>Psychology</u>, <u>63</u>,69-73.
- Walberg, H. J. & Anderson, G. J. (1972). Properties of the achieving urban class. <u>Journal of Educational Psychology</u> <u>63</u>,381-385.
- Walberg, H. J., Singh, R. & Rasher, S. P. (1977). Predictive Validity of student perceptions: A cross-cultural replication. <u>American Educational Research Journal</u>, <u>14</u>,45-49.

- Walberg, H. J. & Thomas, S. C. (1979). Open education: An operational definition and validation in Great Britain and United States. <u>American Educational Research Journal</u>, 9, 197-208.
- Wedman, J. M. (1983). Attitudes and reading achievement of students in an alternative high school. <u>Reading Psychology</u>, <u>4</u>, 121-127.
- Welch, W. W. & Walberg, H. J. (1972). A national experiment in curriculum evaluation. <u>American Educational Research Journal</u>, <u>9</u> 373-383.
- Welch, W. W. (1979). Curricular and longitudinal effects on learning environments. In H. J. Walberg (Ed.), <u>Educational</u> <u>Enviornments and Effects: Evaluation, Policy, and Productivity</u>. Berkeley, California: McCutchan.