ABSTRACT

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perceptions of adolescent students toward selected conditions that
characterize the curriculum of sampled alternative schools. Data were
collected from students who were disconnected from alternative school
environments and from students who were involved and productive in
these settings. The perceptions of 1,692 students from thirty-one
alternative schools in six Eastern states toward eleven variables
were reported. Twenty-two percent (353) of the students were
identified as marginal to their learning environments. Black students
were found more likely to be marginal, as were lower class students,
males, and students with below average verbal ability. By
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other learners, the research findings also show that specific aspects
of alternative school environment contribute, in part, to the
persistent problems of students who are forced to the margins of
their schools. (Author)

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VIEWS FROM THE MARGINS:

Student Perceptions of Educational Environments in Public Alternative High Schools

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This study reports similarities and differerces in perceptions of adolescent students toward selected conditions that characterize the curriculum of sampled alternative schools. Data were collected from students who were disconnected from alternative school environments and from students who were involved and productive in these settings. The perceptions of 1,692 students from thirty-one alternative schools in six Eastern states toward eleven variables were reported. Twenty-two percent (353) of the students were identified as marginal to their learning environments. Black students were found more likely to be marginal, as were lower class students, males, and students with below average verbal ability. By highlighting differences between the perceptions of marginal and other learners, the research findings also show that specific aspects of alternative school environment contribute, in part, to the persistent problems of students who are forced to the margins of their schools.

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INTRODUCTION

On the margins of most schools and classrooms, some students consistently perceive the educational environment as blocking or inhibiting them from learning. Since they·disconnect.while others thrive, these learners are typically viewed by the schools as "prob-lem people" or "difficult students." Too often, many such learners internalize this unfortunate and misleading interpretation of the mismatch between the environment and themselves, and start to accept the view that they are not·successful, capable or important persons. Other such learners, who realize more clearly that their marginality is a condition of their·interactions with particular school environ-ments, resolve their dilemma by dropping-out or tuning-out to avoid a full commitment to learning.

Concern for these "marginal learners"[1] served as one important impetus behind the recent movement to create public alternative high schools—separate institutional settings designed, in part, to match the needs of increasing numbers of learners who were discon-nected from or dissatisfied with their regular high schools. Yet, alternative high schools are also pestered by the same institutional mismatch between environmental conditions and the needs of some of their learners.

Alternative schools became a refuge for at least three groups of students: those enthusiastic and ready for a new way of learning; those fleeing an undesirable previous school; and those with little choice about their placement in alternative schools (either as a last-ditch referral from   schools, or as a p

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school system's efforts to avoid school desegregation suit: Too often alternative schools found themselves coping with diverse groups of students by using a new framework of curriculum designed for only one kind of learner—those ready to become self-motivated and self-determining. When students who were not ready for the new orthodoxy joined the alternative school, a new version of the familiar problem of marginal learners emerged. As they once had in conventional schools, again in the alternative school, individuals struggled to find a place in a dominant set of learning conditions not well suited for their diversity.

The persistence of the institutional problem of marginal learners suggests that educators lack adequate data as to what environmental conditions and events are necessary to insure that some pupils are not ineluctably forced to, the edges of their classrooms. The public alternative high school[2] is a particularly appropriate milieu in which to examine this problem because alternative schools must take seriously the creation of environments conducive to individual and group differences presented by learners who were dissatisfied with and disconnected from previous schools. It is this priority to better meet the learner's unique needs that gives reason for the existence of an alternative school, and possibly the total alternative school movement. This paper presents a descriptive study designed to investigate the problem of learners on the margins of school environments, in the context of public alternative high schools. The research is reported in five sections: Purpose of the Study, Theoretical Perspectives, Research Methods, Analysis and Results, and Implications for School Improvement.

Purpose of the Study

The purpose of this study was to analyze the perceptions of

adolescent students toward selected conditions and happenings that

characterize the educational environment or curriculum of sampled

alternative schools. The investigation centered on data from two

groups of learners—those who were disconnected from alternative

school environments and those who were involved and productive in

these settings. Specifically, three major research questions guided

this study.

- What are the perceptions of all learners in sampled alter-
  native schools toward selected variables which are likely
  to influence their interactions with the learning environ-
  ment?

- What are the differences between the perceptions of marginal
  learners and the perceptions of other learners toward selected
  variables of the educational environments of sampled alter-
  native schools?

- What differences exist between marginal learners and other
  learners in sampled alternative schools along selected
  demographic and academic variables?

Theoretical Perspectives

Two theoretical perspectives gave direction to the research

process used to determine student perceptions of alternative school

environments. The first perspective established the appropriateness

of using student perceptions to describe learning environments. The

second perspective described important influences of environmental

conditions on human behavior in school settings. By reviewing the

literature on deviance and achievement in school settings, this latter

perspective was used to identify eleven dimensions of learning environ-

ments which are likely to influence a learner's interactions with school.

Student Perceptions of Learning Environments

The perceptions of students toward learning environments can
be an important source of information about the ways environments
influence student behavior. Specifically, student perceptions pro-
vide clues as to how different environmental dimensions affect the
conduct of various individuals. For example, some learners are
intellectually, socially and physically at home in school environ-
ments. Other learners, however, are uncomfortable strangers housed
in settings that do not connect with their inchoate ways of finding
and producing meaning. Yet, both groups act based on the ways they
perceive their school settings. Thus, when existing environmental
conditions are perceived in a different way by two groups of students,
it is likely that the behaviors of these groups will also differ.

For this reason, educators familiar with student behavior can
better understand the impact of the learning environments they have
created by systematically consulting student perceptions of curricu-
lum conditions. If student perceptions indicate that a learning
environment is not serving them adequately, their perceptions of the
specific environmental conditions which affect them also provide a
starting point for the inquiry into what can be done to correct the
mismatch between the environment and the student. On the basis of
this inquiry, learning environments can be altered to match the
needs and strengths of students. Further, learning environments
that more effectively induce pupils to confront and revise their
limiting perceptions and self-defeating behaviors can be created.
In sum, without student perceptions, educators act mainly on the
basis of the limited information their own percpetions provide.

One major strength of an approach using perceptions to investigate learning environments is that it allows both educators and students to convert environments hindering behavior into settings that encourage learning.

The practical question of how to measure and interpret student perceptions of learning environments has been a subject for empirical research since 1938, when the need-press model of Henry Murray was introduced.[3] Two major research approaches emerged from Murray's conceptualizations of the influence of environment on behavior. These approaches correspond to two categories of environment he named Alpha press and Beta press. Alpha press refers to the actual press that exists, as far as scientific inquiry can determine it. Many noted methods[4] for measuring classroom environments use Alpha press. Beta press may be defined as the participant's own interpretation of the environmental events or conditions that he or she perceives. Beta press was chosen for the present study because of its potential value for reflecting differences between the perceptions of learners on the margins and other learners in an environment.

In 1956, Stern, Stein and Bloom[5] developed a system of interaction constructs based on Murray's need-press taxonomy. From this approach, George Stern[6] constructed the Activities Index (an instrument designed to assess individual needs) and the High School Characteristics Index (measuring aspects of the academic environmental press at the high school level). The purpose for these instruments was to provide a set of parallel devices for measuring person-situation parameters through the use of Beta press.

From these beginnings, parallel series of studies at the college, high school and elementary levels have used the collective perceptions of students to describe the climate of their schools. Robert Pace's research at the college and university level[7] and the research led by Robert Sinclair and his colleagues at the elementary level[8] have demonstrated, among other findings, that research instruments measuring Beta press can be developed for elementary school and college learners with acceptable reliability and validity levels.

However, several attempts to describe high schools using one or both of the Stern Indexes have proved less convincing. It has been suggested that the instruments may lack independence, and may be inappropriate for use in descriptive studies of today's youth and high schools.[9] In particular, the High School Characteristics Index is long (three hundred items and thirty scales) and has been plagued by low reliability.[10] In fact, one study estimated that only 172 items (or 52% of the total number of items) could be considered effective indicators of environmental press in the schools studied.[11] In addition to these apparent weaknesses, the High School Characteristics Index was also considered inappropriate for the present study because no attempt was made in the current research to match a student's perceptions to his/her individual personality.

Instead, an instrument entitled the Alternative School Environment Survey (ASES) was developed to collect student perceptions toward environmental conditions that are likely to influence a learner's involvement in public alternative high schools. The derivation of the environmental dimensions is the subject of the second theoretical perspective.

The Influence of Educational Environments

A review of curriculum research and of sociological literature about deviance in social settings resulted in the identification of five conditions likely to influence marginality in school settings. Next, five additional conditions likely to influence achievement in school environments were identified. Both sets of conditions were used to generate the selected environmental variables. Finally, eleven specific variables of school environment to be measured in the present study were identified and defined.

Conditions Associated With
Deviation in School Settings

In every industrial country, students are taught in groups in such a way that some students learn well while others learn less well. Benjamin Bloom has argued that one of the most significant elements accounting for individual differences in school learning is the centrality of group instruction in most learning environments.[12] As students move haphazardly from one teacher to another on an hourly, daily, term and yearly basis, the errors, gaps and strengths developed in the student's learning in one setting are compounded with the errors and progress made in subsequent classrooms. Because group instruction is such a persistent given, too often educators learn to accept this fact of their environment and learn to rationalize their inability to reach some students. As a consequence, the low achievement and incomplete skill development of many students is tolerated and accepted, instead of remedied. This resulting academic deficiency is one prime motivation for the "deviant" behavior of some students.

Second, schools use multiple and ongoing ways to evaluate
learning performance, ranging from teacher comments, peer reactions
and self-reflection to report card grades and parent/teacher con-
ferences. These devices and procedures, whether expressed in the
curriculum or latent in the classroom environment, combine to con-
tribute to the development of each individuals self-concept as a
learner. Student responses to learning environments depend, in part,
on the ways they are being judged or evaluated by the institution
and on their own developing academic self-concept. Necessarily,
some young people judged negatively by the school begin to develop
"deviant" perceptions and habits designed to reduce the amount of pain
the institution can give them.

Third, research on conceptual systems suggests that learners
employ two kinds of interpretive maneuvers and two sets of behavioral
reactions to minimize the impact of environmental events which they
perceive as threatening to their goals and self-concepts.[13] The first
interpretive maneuver is called "neutralizing," whereby an event is
restructured in perception to directly minimize its impact (What's
so bad about that?", or, "It wasn't my fault."). A second general
interpretive maneuver is called "bolstering," whereby the positive
elements of one's own conceptual system are reaffirmed to minimize a
problem situation ("I had to do it.", or, "My friends know the
difference.").

Further, learners whose accumulating experiences at school teach
them their own relative inadequacy also act to resolve painful situ-
ations in two general behavioral ways. First, they attempt to dull

the sharp edges of insensitive events (by leaving the classroom or losing homework). Second, they reorganize their conceptual system so the events will not be so refuting (by submitting to authority or acting hypocritically). Thus, learning environments that are unresponsive to students can lead to a variety of self-protective behaviors often deemed deviant by the refuting institutions.

Fourth, drawings on Talcott Parson's taxonomy of deviance in social systems,[14] Hagstrom and Gardner[15] have proposed a tentative typology of student deviation that stresses the variety of forms in which deviance occurs. This typology suggests that marginal student perceptions and behavior toward important school norms, authority figures and learning groups will differ from the perceptions and behavior of their classmates.

Fifth, the way that teachers label the behavior of individual students contributes to whether their marginal behavior is a temporary or a more intransigent phenomenon. Marginal status in a school is a matter of social definition. It does not arise when a person commits certain acts, but when other people define these acts and their agent as deviant. An act committed by one may be viewed as a transient episode that does not merit a response and certainly does not justify an outright condemnation of the actor. Yet, if the same act were committed by another, it might be viewed as a more serious matter. Thus, when a group's authorities—its "moral entrepreneurs" in Becker's phrase[16]—consistently react to a person's behavior by

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labeling it deviant, and when this individual comes to accept the labeling by acting to maintain this identity, the marginal behavior will become a more stable aspect of his/her role and personality in the group. Certainly, the weight of evidence concerning high school dropouts establishes that more permanent marginal behavior has its roots in early school failure and long-standing negative labeling by the school.[17] The labeling of individuals in terms of temporary or permanent deviation is another powerful way that schools create marginal behavior.

In sum, while the presence of marginal learners in schools is frequently visualized as a product of organizational failure, there is a sense in which learners on the margins are a product of the school organization itself—through its system of group instruction, through its absorption of and failure to correct a multitude of learning errors, through its insensitive evaluation and labeling of learners, through its norms, and through the overall impact of a powerful latent curriculum.

Conditions for Achievement in School Settings

Benjamin Bloom and his associates at the University of Chicago have constructed and tested a model of school learning used to predict and explain variation in achievement.[18] In brief, this model proposes three interdependent variables as key to determining learning outcomes: (1) cognitive entry behaviors, (2) affective entry characteristics, and (3) quality of instruction. Cognitive entry behaviors, which determine the extent to which a specific task can be learned, are estimated by

Bloom to account for as much as 50% of the variation in school achieve-
ment. Next, affective entry characteristics (including interests,
attitudes, academic self-concept) determine the conditions under which
a learner will engage in a learning task. Finally, the quality of
instruction (involving learning cues, degree of participation, rein-
forcement, feedback and corrective techniques) is seen as determining
the efficiency with which a learner will accomplish a learning task.
Together, these three conditions are estimated by Bloom to account for
as much as 90% of the variation in school achievement.[19]

Two additional extenuating conditions must also be considered in
an accounting of the environment that might influence a student's
achievement and marginal status in school: peer influence and extra-
school priorities. The relationship of the adolescent peer culture to
achievement and involvement in school has been extensively examined.[20]
Broadly speaking, the adolescent society in a high school, often using
a more meaningful set of sacntions than the schools have to impose, can
either divert participants' behavior into activities which conflict with
educational goals, or can hold achievement in school as a prime path to
peer recognition. Nevertheless, no matter how a youngster's peer
reference group views achievement, pressing extra-school responsibil-
ities can take priority over school work for many students.[21] Obser-
vations of high school students who are marginal in schools indicates
that adolescents who have been denied positive assurances of their worth
in school seek positive assurances for that worth in interests and
activities centered outside school walls. Further, students from
homes with fewer material resources often have a major responsibility

for jobs around the house or for paid employmenc.   These responsibil-
ities drain the time and energy needed for school work.

Environmental Variables Measured in the Study

The personal, instructional, and social conditions which are
likely to influence achievement in school settings are considered
together with the conditions which might affect deviation in school
when developing a framework for identifying variables which influence
learner involvement in high school settings.   Figure 1 shows the con-
ceptual framework used to identify relationships among conditions
influencing marginality and achievement in school and the selected
environmental variables measured in the present study.   Eleven specific
variables were conceptualized.   As defined below, the environmental
variables of Outreach, Problem-Solving, Limits, Communication, Discri-
mination, Clarity, Difficulty, Teacher Effectiveness, Mis-Schooling,
Peer Influence, and Extra-School Priorities provided direction for the
construction of the Alternative School Environment Survey.

OUTREACH

This variable describes student perceptions of the degree to
which the school makes special efforts to involve a pupil in learning.
Outreach attempts in a school include:

   1. affirmative actions to identify student needs;

Figure 1

Relationships Among Conditions Influencing
Marginality and Achievement in School and
Selected Environmental Variables Measured By
The Alternative School Environment Survey

	Environmental Variables	OUTREACH	PROBLEM-SOLVING	LIMITS	COMMUNICATION	DISCRIMINATION	CLARITY	DIFFICULTY	TEACHER EFFECTIVENESS	MIS-SCHOOLING	PEER INFLUENCE	EXTRA-SCHOOL PRIORITIES
	Group Instruction and Learning Errors	x	x			o	x	x	x	x		x
Conditions	Institutional and Self-evaluation of	x	x		o	x		x	x	x	x	x
Influencing	Academic Adequacy											
Marginality	Student Responses to Unproductive Learn-	x	x	x	x	x	x	x	x	x	x	x
In School	ing Environments											
	Ambivalence Toward Social Objects' and School Norms	x	x	x	x	x	o	x	x	x	x	x
	Labelling in terms of Primary and Secondary Deviation	x	x	x	o	x	o	o	x	x	x	x
	Cognitive Entry Behaviors	x				o	x	x	x	x		o
Conditions	Affective Entry Characteristics	x		x	o	x	x	x	x	x	o	o
Influencing	Quality of Instruction	x	o	o	o		x	x	x	x	o	o
Achievement	Peer Influence	o	o	x	x	o		x	x	o	x	x
In School	Extra-School Priorities	o	o	o	o		o	x	o	o	x	x

x = direct relationship
o = indirect relationship

2. the practice of seeking information useful in altering

   existing learning conditions to better respond to pupils;

3. the practice of noticing and determining reasons for

   fluctuations in a pupil's involvement with the school.

PROBLEM-SOLVING

This variable describes student perceptions of the school's ability to resolve its own organizational problems, particularly those which contribute to the school-related problems of its individual members. To problem-solve, a school must be effective at:

1. defining, concerning situations as problems;

2. organizing to analyze the situation and to propose

   alternative approaches to solve the problem;

3. choosing possible solutions, implementing them and

   assessing their impact.

LIMITS

This variable considers student perceptions of the clarity of the norms for acceptable personal conduct in a school. Specifically, Limits includes:

1. the clarity of unwritten rules and stated policy guide-

   lines for appropriate pupil behavior;

2. consistency among teachers and administrators in the

   application and enforcement of rules and guidelines.

COMMUNICATION

This variable describes student perceptions of the degree to which the school provides pupils with information necessary to full and satisfying involvement in school. An effective school communication network includes:

1. well-planned communication structures which directly reach the intended audience;

2. efforts to carefully identify and stress he most necessary information;

3. multiple opportunities for receiving and clarifying important information, aimed especially to accommodate groups or individuals who are likely to miss or need the information the most.

DISCRIMINATION

This variable describes student perceptions of school conditions where individuals or groups receive negative treatment from people who respond unfavorably to a person's social class, cultural background, gender or academic ability. Discrimination may exist when:

1. school groups are closed to new members on the basis of class, race or sex;

2. ability groupings, once set, make vertical or lateral movement between levels difficult;

3. disproportionate numbers of one social group cluster into a school/program;

4. pupils drop out or accumulate discipline referrals disproportionately from an identifiable social group.

CLARITY

This variable considers student perceptions of the clarity of academic standards and expectations. In particular, the Clarity variable assesses the general information students possess concerning the new requirements and procedures of the academic process in an alternative school. Specifically, Clarity includes:

1. knowledge of procedures and criteria for earning credit;

2. knowledge of procedures for making and changing class schedules;

3. knowledge of policies governing attendance.

DIFFICULTY

This variable considers student perceptions of the difficulty of the academic content and process. Difficulty can be further described as the match between the student's skills and the level of challenge or press for excellence inherent in the curriculum. Sᵢ cifically, the Difficulty variable includes:

1. the amount of reading, writing and homework in classes;

2. the appropriateness of the pace of the classes;

3. the amount of participation and attention required in classes.

TEACHER EFFECTIVENESS

This variable considers the student perceptions of the effectiveness of the instructional and group management styles of their alternative school teachers. Specifically, Teacher Effectiveness in the present study includes:

1. the group management abilities of teachers;

2. the personal/social counseling role of teachers;

3. the influence of the heavy work load on teachers in alternative schools.   19

MIS-SCHOOLING

This variable describes learner perceptions of the current degree of learning handicap stemming from previous schooling. Mis-Schooling considers:

1. the level of skill attainment of the pupil;

2. the sophistication or familiarity of the pupils with the types of learning environments in which they will be expected to function;

3. the gaps or deficiencies in a pupil's information base;

4. the presence of negative learning and school behavior habits and attitudes.

PEER INFLUENCE

This variable considers student perceptions of the degree to which peer group pressures encourage positive participation in learning at school. In particular, the peer influence variable includes:

1. peer expectations for regular attendance and high achievement;

2. peer influence on disciplinary difficulties of students.

EXTRA-SCHOOL PRIORITIES

This variable considers student perceptions of the impact of responsibilities, difficulties and interests outside school which might conflict with and prevent full involvement in school. In particular, Extra-School Priorities include:

1. pupil-responsibilities at home or at work;

2. pupil relationships with parents;

3. pupil interests that cannot be adequately pursued during school.

Research Procedures

The purpose of this section is to present the processes involved
in the selection of the sample, the description of the instrument, and
the specific research questions.

Selection of the Sample

The data base for the present study includes the survey responses
of 1,692 students in thirty-one public high schools in six eastern
states. The school sample was selected on the basis of five criteria:

1. Location of School: A balance in the sample between urban,
   suburban and rural sch...s was sought.

   Mul ultural Mix: A balance in the sample between predomi-
   nantly white (white student population
   >80%); predominately Black or Puerto
   Rican (Black and Puerto Rican student
   population >80%); and multicultural stu-
   dent population (<80% majority group) was
   desired.

3. Size: No school larger than 250 students was selected.

4. Interest in the Problem: School Directors who were concerned
   about the problem of marginal learners in
   their schools and likely to use this re-
   search were selected.

5. Programmatic Diversity: A range of school philosophies and
   program designs was sought.

In all, fifteen urban schools, ten suburban schools and six rural
schools were selected. Among these, seventeen schools were classified

as predominantly white; eight schools as multicultural; and six schools

as predominantly Black and Puerto Rican. Finally, eleven alternative

programs were labelled small (<75 students); thirteen schools were

medium (between 75 students and 120 students); and seven schools were

relatively large (>120 students). In order to protect the identity of

the sampled institutions, the schools were listed according to a

numerical coding system corresponding to the order in which they were

visited. Appendix A presents the Location, Size, Racial Mix, Program

Design, and Curriculum Emphasis of the sampled schools.

A stratified sample was created to represent the diverse demo-

graphic and academic features of public alternative high schools. Data

collection was limited to thirty-one selected schools, and the immediate

results of the study are directed to these institutions. Yet, the sample

of schools is intended to be representative enough to provide important

information concerning similar schools on the East Coast, and, to a lesser

degree, to schools participating in the alternative school movement

across the country.

Responses toward the educational environment were taken from a

universal sample of students attending the selected alternative schools.

Learners who were considered marginal to the school environment were

identified by the teaching staff using specific criteria based on at-

tendance, teacher-student relations, disciplinary actions and expressed

dissatisfaction with the school. Students also responded to a series of

questions based on the same criteria, and could self-select themselves

for the marginal learner status by identifying with at least three of

the four criteria. If a student were identified as marginal by either

of these methods, that student was considered to be marginal for pur-
poses of the present study. Students identified as marginal learners
were in no way singled out for special treatment during survey admin-
istration and were treated anonymously throughout the research. Three
hundred and fifty-three (or 22%) of the sampled students were identified
as marginal to their learning environments by these methods.

Description of the Instrument

The Alternative School Environment Survey consists of eighty-eight
statements about the instruction, norms and curriculum in
alternative high schools. In particular, this research instrument col-
lects student perceptions concerning eleven selected variables of an
alternative school environment that are likely to influence the involve-
ment of learners who experience difficulty or dissatisfaction in school.
The research instrument also collects information concerning the gender,
cultural background and social class of students, and can be used to
describe the alternative school environment as viewed by different stu-
dent groups.

A school score is given on each of the eleven environmental vari-
ables. The technique used for obtaining variable scores has been
adopted from the work of Pace,[23] Stern,[24] and Sinclair.[25] The scoring
technique was based on two assumptions: first, that the perceptions of
individuals working in an environment were a useful source for describ-
ing that environment; and second, that if two-thirds or more of the
student participants perceived a particular condition in the same way,
then it could be considered an existing characteristic of the environ-
ment. Specifically, if sixty-six percent or more of the students answer

a survey item in the keyed direction, the statement is scored +1, in-
dicating strong agreement among students as to the presence of this
condition in the school. On the other hand, if less than thirty-three
percent of the students answer a statement in the keyed direction, that
statement is scored -1, indicating strong agreement as to the absence
of the condition in the school environment. Each variable score repre-
sents the sum of scores for the eight items that make up the variable
scale. A constant of eight points is added to all scores to eliminate
the possibility of negative numbers. This scoring approach is called
the "66 plus 33 minus" method of scoring because it takes into account
a two to one level of student consensus in both directions from the
keyed answer, and thus, gives some measure of the intensity of the
environment. In this fashion, collective perceptions were used to
characterize the learning environments.

This initial, exploratory study sought to begin the long process
of developing and improving a research instrument. For this reason,
the research results must be treated as tentative until further instru-
ment development occurs. Yet, the initial validity findings from this
study were promising. In terms of construct validity, the research
findings revealed clear differences in the predicted direction between
the perceptions of marginal and non-marginal learners in alternative
schools. Further, inter-correlations among measured environmental vari-
ables are in a direction that corresponds to the meaning of the con-
structs measured by the instrument. Finally, the Alternative School
Environment Survey was judged to have adequate face validity based on
its review by alternative school directors, staffs, and students. In

particular, the readability of the survey instrument was estimated at

the 6.2 reading grade level by the Fry Readability Formula.

The reliability measures for the eleven variable scales based

on several approaches to reliability estimation involving the internal

consistency method (Kuder-Richardson 21) and the split-half method

(Spearman-Brown Reliability Coefficient) ranged from moderate to low.

One major factor contributing to these generally moderate to low reli-

ability scores is the limited number of items that make up the variable

scales. Reliability was estimated based on variable scales consisting

of only eight items. In sum, the reliability of this instrument re-

quires improvement through further research. Both validity and reli-

ability should be issues of continuous concern before the instrument

can be used with a high level of confidence.[27]

Research Questions

Student reports of their environments were quantitatively analyzed

by means of the t-test and the analysis of variance methods to provide

answers to three major and eight related research questions. The follow-

ing research questions, which guided the study, will form the basis for

the analysis and interpretation of the research findings.

QUESTION 1. What are the perceptions of all learners in sampled
alternative schools toward selected conditions which
are likely to influence their interactions with the
learning environment?

   A. Do student perceptions toward selected environmental
variables differ across the sampled schools?

   B. Which environmental conditions are characteristic of
schools scoring highest on each survey variable, and not
characteristic of schools scoring lowest on each variable?

C. Which environmental conditions are characteristic of schools scoring lowest on each survey variable, and not characteristic of schools scoring highest on each variable?

D. Which survey items produce the greatest agreement among the views of all sampled students?

QUESTION 2. What are the differences between the perceptions of marginal learners and the perceptions of other learners toward selected variables of the educational environments of sampled alternative schools?

A. Do the pooled perceptions of all marginal learners differ from the pooled perceptions of all other learners toward each environmental variable?

B. Do the perceptions of marginal learners toward each environmental variable differ from the perceptions of other learners across selected schools?

QUESTION 3. What differences exist between marginal learners and other learners in sampled alternative schools along selected demographic and academic variables?

A. What are selected demographic and academic characteristics of learners attending sampled alternative schools?

B. Is the percentage of marginal learners who have particular demographic or academic characteristics greater or less than the percentage of sampled students with the same characteristics?

Before presenting the research results, it is important to note that the findings of exploratory investigations are tenuous and must be treated as such. The twin purposes for exploratory research like the present study are to identify potentially fertile topics for on-going investigation and to begin the development of valid and reliable research instruments. An inquiry of this nature into the educational environments of alternative schools requires follow-up research on a large scale basis before any of the following findings can be considered more than tentative. Nevertheless, this study presents systematic

information that can be used by educational practitioners to better
understand what environmental condition: ght force students to the
margins.

Analysis and Results

The first major research question focuses on the nature of alter-
native educational environments, as perceived by students. Examination
of student perceptions toward selected environmental conditions likely
to influence involvement in school learning provides information about
the similarities and differences among alternative schools.

Overview of Alternative Educational Environments.

To set the stage for a closer examination of the similarities and
differences among alternative schools, a composite picture of communal-
ities among sampled alternative schools is presented.

In general, alternative schools were perceived by their students
as making special efforts to help students learn. The academic policies
and procedures were clear to students, and teachers were generally ranked
as effective group leaders. Further, the level of discrimination against
students was perceived to be low, as was the degree of interference of
outside priorities and interests of students with academic work. The
rules and policies of the schools were viewed as moderately clear, and
the communication and problem-solving processes in alternative school
organizations were ranked as moderately effective. The academic diffi-
culty level was ranked as moderately low. Finally, students reported
relatively low academic handicaps stemming from previous mis-schooling.

Environmental Differences Among Sampled
Alternative Schools

It has been widely assumed that alternative schools differ from one another, since these institutions are designed as flexible responses to the divergent needs of their clients. Student reports tended to confirm this assumption. Student perceptions of all eleven environmental variables clearly differed along each of the eleven variables. The differences between schools were estimated by the analysis of variance method to be significant at the level of $p<.001$. Table 1 presents the analysis of variance results. The largest F ratios were found for the Problem-Solving, Limits, Communication and Difficulty variables. In plain words, alternative schools differed the most in their abilities to confront and solve organizational problems that affected students, in the restrictiveness of their norms for acceptable student behavior, in their capability to communicate needed information to students, and in the academic difficulty of their curricula. By contrast, sampled alternative schools varied the least in terms of the high clarity of their academic expectations, and the low levels of perceived discrimination.

It was also possible to determine what specific environmental characteristics seemed to contribute to high or low variable press across selected schools. To accomplish this analysis, schools scoring highest on each variable were identified. Next, an item analysis was conducted for each variable scale to isolate items that were perceived in the same way by at least two-thirds of the students in all schools scoring highest on the variable. The selected items also could not be common to both the highest and lowest scoring schools.

Table 1

Analysis of Variance Results: The ASES Variables
Related to the Schools of Responding Students

Variable	Source of Variation	D.F.	Sum of Squares	Mean Squares	F Ratio	Significance of F
OUTREACH	Between Schools	30	396.47	13.22	5.815*	.001
	Within Schools	1660	3772.88	2.27		
	Total	1690	4169.35			
PROBLEM-SOLVING	Between Schools	30	1233.02	41.10	15.450*	.001
	Within Schools	1660	4416.13	2.66		
	Total	1690	5649.15			
LIMITS	Between Schools	30	599.30	19.98	11.495*	.001
	Within Schools	1660	2884.73	1.74		
	Total	1690	3484.03			
COMMUNICATION	Between Schools	30	748.62	24.95	11.408*	.001
	Within Schools	1660	3631.16	1.19		
	Total	1690	4379.78			
DISCRIMINATION	Between Schools	30	297.93	9.93	6.640*	.001
	Within Schools	1660	2482.60	1.50		
	Total	1690	2780.53			
CLARITY	Between Schools	30	207.09	6.90	4.282*	.001
	Within Schools	1660	2676.02	1.61		
	Total	1690	2883.11			
DIFFICULTY	Between Schools	30	907.13	30.24	11.263*	.001
	Within Schools	1660	4456.45	2.68		
	Total	1690	5363.58			
TEACHER EFFECTIVENESS	Between Schools	30	311.96	10.40	7.410*	.001
	Within Schools	1660	2329.38	1.40		
	Total	1690	2641.34			
MIS-SCHOOLING	Between Schools	30	247.40	8.25	3.658*	.001
	Within Schools	1660	3742.65	2.25		
	Total	1690	3990.05			
PEER INFLUENCE	Between Schools	30	492.81	16.43	7.105*	.001
	Within Schools	1660	3837.70	2.31		
	Total	1690	4330.51			
EXTRA-SCHOOL PRIORITIES	Between Schools	30	335.33	11.18	3.322*	.001
	Within Schools	1660	5585.60	3.36		
	Total	1690	5920.93			

*F Ratio was significant at $p < .001$.

Environmental Conditions Characteristic
of High Variable Press

In brief, the following specific environmental attributes from selected variable scales were judged by students to encourage involvement in learning. High Outreach schools were responsive to learner needs and interests because teachers sought to identify student suggestions and difficulties. Next, schools effective at solving organizational problems systematically confronted identified problems unitl changes in school organization and individual behavior occurred. Further, the boundaries defining what students were permitted to do were clearly defined and consistently enforced in schools with high Limits scores. In schools with high Communication scores, students could get their questions answered, while effective orientation programs provided pupils with the information they needed to succeed. In schools rated high in Clarity academic expectations and procedures were direct and easy to understand. In schools rated high in Difficulty, the instructional pace challenged students to active participation in classwork and homework. Teachers in schools ranked high on Teacher Effectiveness were perceived as humane leaders of learning groups. Finally, in schools where Peer Influence was high, peer groups encouraged attendance and achievement in class, and discouraged misbehavior at school. If verified by further research, these environmental attributes considered relatively effective at promoting learning could serve as benchmarks for consideration by other school staffs seeking to encourage greater involvement in learning.

Environmental Conditions Characteristic
of Low Variable Press

Next, the following specific environmental attributes were judged
by students to discourage involvement in learning. Schools with unclear
or inconsistent Limits created conditions where class cuts received
no serious response and students could spend a great deal of unstructured
time socializing with friends. In schools with low Communication scores,
students were especially confused by the large group meetings that had
been a trademark of alternative schools in their early stages. Also,
teachers reportedly did not make students "work hard" in schools per-
ceived as having low Difficulty scores. These findings are important
information for alternative schools that are judged by the general public
to be loosely structured and weak academically, for the message from
student perceptions was clear that such conditions, when they do in
fact exist, are not conducive to high involvement in learning.

Environmental Conditions Common
to All Sampled Schools

Ten survey items generating agreement among ninety percent or
more of all sampled students indicate the existence of three general
similarities among alternative school environments. First, alternative
school teachers received the consistent support of their students, in
part because of the friendly and helpful relationships they developed
with students. Secondly, basic curriculum practices and policies in
alternative schools were understood clearly by most students. Third,
the scholarship demanded in alternative schools was not overly difficult
for most students. However, a limited but important number of students--
at least 6% to 10%--were being challenged beyond their abilities.

Knowledge of the nature of educational environments perceived to be effective and ineffective by students can be used by educators to create school settings more conducive to learning. However, no single environmental condition produces equally effective learning for all students across all schools. Rather, methods for measuring perceived educational environment are most useful for matching specific learning conditions to the needs of specific student groups. Thus, these findings based on the views of all students across sampled schools provided necessary background information for considering the differences between the perceptions of marginal and non-marginal learners, which is the subject of the second major research question.

Marginal Status and Student Perceptions

To identify differences between the perceptions of marginal learners and other learners, two general approaches were adopted. First, it was important to analyze whether marginal status contributed to the differences among student perceptions, by comparing the pooled perceptions of all marginal and all non-marginal learners in sampled schools. Based on analysis of variance results, marginal and other learners differed in a statistically significant way (p<.001) in their perceptions toward nine variables describing alternative school environments. On eight of these nine environmental dimensions, the differences between marginal and non-marginal learners were consistent, regardless of the cultural background, social class or sex of the students. In statistical terms, no significant interaction effects were noted. In sum, although these findings should be regarded as tentative, they can be interpreted as clear evidence that marginal

status is a powerful descriptive category for understanding learner

perceptions of school environment. Further, since the variables were

derived as environmental conditions likely to influence student in-

volvement, examination of those specific environmental dimensions

that were perceived in a different way can provide important infor-

mation that could be used to create academic environments likely to

promote improved learning for students who are on the margins of schools.

Environmental Conditions Perceived Differently
by Marginal and Other Learners

The second approach to determining the differences in marginal

and non-marginal perceptions inquired whether differences were

statistically significant when the variance among the students' schools

were also taken into account. In other words, this approach determined

whether certain environmental dimensions were consistently perceived

differently by marginal and other learners, regardless of the alter-

native schools they attended. To accomplish this analysis, the t-test

method was used with data from a sample of fifteen schools where the

number of surveyed students identified as marginal was greater than

or equal to ten.[28]

According to t-test results, the greatest and most consistent

differences between the perceptions of marginal and non-marginal

learners occurred on the Clarity, Discrimination, Extra-School Prior-

ities, Outreach and Communication variables of alternative school

environments. Table 2 shows that the statistical significance of the

differences between groups across schools on these five variables

ranged from p<.02 to p<.001. The academic expectations, standards and

Table 2

t-Test Results: Differences Between Marginal and Non-marginal Perceptions of ASES Variables Across Selected Schools

Variable	Number of Cases	Mean	Standard Deviation	F-Value	T-Value	One-tail Probability
Outreach/Marginal	15	13.47	2.13	4.27	-2.40*	.013
Non-Marginal	15	14.93	1.03			
Problem-Solving/						
Marginal	15	11.13	2.88	1.07	-.94	.179
Non-Marginal	15	12.13	2.97			
Limits/Marginal	15	10.93	1.91	1.07	-.38	.355
Non-Marginal	15	11.20	1.97			
Communication/Marginal	15	11.27	1.34	1.67	-2.25*	.017
Non-Marginal	15	12.53	1.73			
Discrimination/Marginal	15	1.93	1.49	4.07	3.11**	.003
Non-Marginal	15	.60	.74			
Clarity/Marginal	15	14.00	1.60	7.30	-3.93***	.001
Non-Marginal	15	15.73	.59			
Difficulty/Marginal	15	8.60	2.20	1.49	-.22	.413
Non-Marginal	15	8.80	2.68			
Teacher Effectiveness/						
Marginal	15	13.33	1.45	1.40	-1.50	.073
Non-Marginal	15	14.07	1.22			
Mis-Schooling/Marginal	15	5.67	1.72	1.18	1.22	.117
Non-Marginal	15	4.93	1.58			
Peer Influence/Marginal	15	10.13	2.17	1.43	-1.19	.123
Non-Marginal	15	11.00	1.81			
Extra-School Priorities/						
Marginal	15	6.40	2.75	2.33	2.44*	.011
Non-Marginal	15	4.33	1.80			

* = p<.02   ** = p<.01   *** = p<.001   N = 15 Schools

procedures were usually not as clear to marginal learners as they were to other learners. Second, marginal learners usually perceived greater discrimination against themselves and others in alternative school environments. Third, learners identified as marginal generally perceived more responsibiliites and difficulties from outside the school that interfered with the successful accomplishment of their school work. Fourth, marginal learners generally perceived that their teachers did not make as many special efforts to help them learn. Finally, the communication processes used in sampled alternative schools were often not as effective at providing marginal learners with the information they needed to succeed. In sum, these consistent gaps between marginal and other learner perceptions across selected schools may indicate environmental conditions that directly contributed to marginal behavior in school settings.

To examine which specific school conditions most often showed the greatest differences between marginal and non-marginal perceptions of alternative school environments, an item analysis was conducted with the following results. First, to a greater degree than other learners, marginal students reported their teachers were too busy to help them. They were also generally less satisfied with the variety in the curriculum or the actual process of many classes. Further, they did not feel as able as other learners to have an impact on curriculum decision-making. This evidence suggests that the responsiveness of teachers and school curriculum was often perceived differently by marginal and other learners.

Next, marginal learners perceived their teachers as less motivated to improve the school. In a related way, these learners were more

skeptical of the alternative school's ability to solve organizational problems. For example, marginal learners saw large group meetings as more confusing and less important than other students did. On other communication issues, marginal learners reported more often that their parents desired additional information about their progress at school. In addition, marginal learners perceived greater difficulty getting clear feedback about their own progress in classes. School work also tended to be perceived as more difficult by the marginal group, and they tended to take longer than other students to become oriented to scheduling and credit-earning procedures in the alternative school.

In light of these multiple perceptions of alternative school environments, it is not surprising that marginal learners reported more negative attitudes toward school than did their classmates. Finding themselves in alien school environments not well suited to their needs, they placed a higher priority on extra-school interests and responsibilities, and acknowledged greater difficulties in finding time for school work. Finally, marginal students were less likely than other students to see relevant connections between their school work and their present and future problems.

In sum, the perceptions of marginal learners toward environmental variables were found to differ in consistent and statistically significant ways from the perceptions of other learners across selected schools. Although these findings must be considered tentative, the data suggest that specific environmental conditions in sampled alternative schools contributed, in part, to the difficulties of learners on the margins. In plain words, the evidence suggests that school

environments were responsible, in part, for the ongoing troubles of some learners. While school environment is not likely to be the only factor which influences the behavior of individuals on the margins, this study suggests it is one powerful force the school must redesign to promote improved involvement that results in learning for these youths.

Demographic and Academic Characteristics
of Alternative School Students

The third major research question concerning the demographic and academic characteristics of marginal and other learners was answered in two parts. First, the cultural backgrounds, social classes, genders and verbal ability levels of students from all thirty-one sampled schools were summarized. Second, the demographic and academic characteristics of marginal learners were compared to the characteristics of all learners in the twenty-nine schools where marginal learners responded to the survey.

Table 3 presents the cultural backgrounds, social class levels and genders of the 1,692 students who responded to the ASES survey in thirty-one alternative schools. It also includes the verbal ability levels of students from the sixteen alternative schools where verbal ability data were available. Alternative school populations were found to mirror national percentages of different cultural groups, but to generally serve these students in culturally segregated environments. In fact, seventeen of thirty-one schools were predominantly white (white student population >80%), and six other schools were predominantly Black and Puerto Rican (Black and Puerto Rican student population

Table 3

The Cultural Background, Social Class,
Gender, and Verbal Ability of Sampled Students

Category	Number of Students	Percent of Students
CULTURAL BACKGROUND		
Black	368	21.7%
White	1178	69.6%
Puerto Rican & other Backgrounds	129	7.7%
Not Reported	17	1.0%
Totals	1692	100.0%
SOCIAL CLASS		
Upper Middle Class	487	28.8%
Middle Class	818	48.3%
Lower Class	182	10.8%
Not Reported	205	12.1%
Totals	1692	100.0%
GENDER		
Male	756	44.7%
Female	934	55.2%
Not Reported	2	0.1%
Totals	1692	100.0%
VERBAL ABILITY		
Above Average Verbal Ability	246	34.6%
Average Verbal Ability	232	32.6%
Below Average Verbal Ability	234	32.9%
Totals	712	100.0%

>80%). Next, at least two-thirds of the students served by sampled alternative schools were classified as middle or upper-middle class. In particular, the trend in the reported data indicates that, even within each cultural group, students from a slightly higher than average social class level attended alternative schools. Finally, sampled alternative schools served more, female than male students, and approximately equal percentages of students from various verbal ability levels.

Next, the characteristics of marginal and other learners were compared. Twenty-two percent of sampled students were identified by their teachers or by self-selection as marginal to their learning environments. Black students were proportionately more likely to be marginal, as were lower class students, males and below average verbal ability level students. According to an analysis of variance, both the cultural background and gender of students were found to be related to marginal status in a statistically significant way (p<.02). However, the marginal status of students from different cultural backgrounds varied depending on their social class levels. In this interaction, the contribution of cultural background was the more influential factor. Finally, marginal status was quite likely to be related to the verbal ability level's of students. Nearly twice as many below-average students were marginal in their schools, when compared to above-average level students. Still, nearly, one-quarter of marginal students were reported as above average ability in schools where these data were available.

In sum, the selected demographic and academic characteristics of marginal students were different in important ways from those of other learners. These tentative results target the social groups who,

in general, were best and least served by sampled alternative schools.
The data suggest that these schools seemed to work best for students
with the same social characteristics as those who tended to succeed
in traditional high schools. On the other hand, the sampled alter-
native schools seemed to work least well for students with the same
social and academic characteristics as those who tended to disconnect
from regular high schools. This interpretation, if verified by further
research, implies that alternative school environments have yet to
resolve the persistent problem of learners being on the margins of
schools.

Implications for School Improvement

If learning environments are to improve in ways that connect with
all learners, the alternative school approach of creating a separate
institution with a new, relatively monolithic learning environment
will have to be reexamined. In particular, the serious gaps between
the perceptions of marginal and other learners across selected alter-
native schools raise compelling issues for the future of the alternative
school movement. In this context, the present study is important for
three reasons. First, this study analyzes the ability of the alter-
native school to meet the needs of learners who were disconnected or
dissatisfied with their high schools. Second, the instrument and
analytic procedures developed in this research suggest a possible pro-
cess for school improvement. Third, the findings of the study imply a
different approach to schooling and education, one in which existing
schools develop within that single institution a multiple set of clearly

defined learning environments that are carefully matched and rematched
to the evolving needs, interests and characteristics of all learners.

Alternative schools have taken an important step toward creating
another choice of learning environments. However, alternative schools,
designed in part to serve learners disconnected from conventional high
schools, seem to have created learning environments in which their own
groups of students are dissatisfied or in difficulty. It is probable
that many of these students had difficulty in previous environments.
Yet, the findings of the present study suggest that the alternative
school environment could very well contribute, in a consistent and
statistically significant way, to the difficulties of these learners.
One tentative conclusion to be drawn here is that no single, monolithic
school environment is appropriate for the variety of needs and strengths
presented by any large group of students.

The present study suggests that an investigative approach to the
connection between pupils and learning environments is a productive
place to begin an ongoing program for school improvement. For example,
school staffs can inquire into the presence or absence of the eleven
environmental variables which contribute to either a temporary or per-
manent state of disconnection from the school. Next, the identification
of learners who are marginal to the school will allow the staff to com-
pare the views of marginal learners to the views of their classmates.
The purpose for examining and comparing the perceptions of marginal and
non-marginal pupils is to identify gaps or differences between the views
of these groups. When the results are discussed, important mismatches
between pupils and the learning environment emerge for further discussion

and definition. Assessment information of this sort allows professional staffs to consider how their students view important environmental influences which affect the accomplishment of school and curriculum objectives. By comparing pupil perceptions to their own standards, teachers can develop new programs and objectives that create or maintain a desirable learning environment. In sum, an investigation of the connections and disconnections between pupils and learning environments reveals strengths and weaknesses of the current environment, and suggests points of departure for ongoing improvement.

The instrument and research processes used in the present study represent an initial attempt to analyze student perceptions of environmental conditions directly influencing marginality and indirectly affecting achievement in secondary alternative schools. The present study revealed the need for further investigation into the relationship between learning environments and marginal learners. Two studies that would extend the meaning of this research are noted. The first proposed study would replicate and extend the present study, while also improving the validity and reliability of the research instrument. Use of a much larger and more representative sample and more rigorous psychometric methods could confirm, deny or expand the tentative findings of this study. The second proposed study would compare established and alternative high schools in terms of the similarities and differences in their treatment of marginal learners. In this study, the similarities and differences in the perceptions and demographic or academic characteristics of marginal students from both groups of schools could be identified. Further, hypothesis testing could be conducted to clarify the ways that school environments contribute to marginal behavior.

Too often, schools simply seek to fit the individuals who are
on the margins into ongoing organizational structures, because to re-
think or fundamentally change basic organizational tenets (like group
instruction of widely divergent individuals) is too difficult.
Typically, instead of creating learning environments that fit the
characteristics of the learners, the school prefers to make efforts
to keep marginal children in school without providing them with appro-
priate services. In short, the maintenance of the institution is the
real end of most attempts to deal with deviance.

Alternative schools have taken one step toward creating another
choice of learning environments. However, the sampled alternative
school environments have not yet resolved the persistent problem of
learners on the margins of a school. If learning environments are to
improve in ways that connect with all learners, the alternative school
approach of creating a separate institution with a new, relatively
monolithic learning environment will have to be reexamined. The find-
ings of the present study are important because they suggest the need
for a different approach to schooling and education, one in which ex-
isting schools develop within single institutions a multiple set of
clearly defined learning environments that are carefully matched and
rematched to the evolving interests and characteristics of all learners.
It is this multi-environment approach[29] within existing institutions
that could reconstruct the school into a more productive setting in-
cluding purposeful choice and deliberate matching between learners and
curricula.

APPENDIX A

LOCATION, SIZE, RACIAL MIX, PROGRAM DESIGN AND
CURRICULUM EMPHASIS OF SAMPLED ALTERNATIVE SCHOOLS

LOCATION, SIZE, RACIAL MIX, PROGRAM DESIGN AND CURRICULUM EMPHASIS OF SAMPLED ALTERNATIVE SCHOOLS

School	Location	Number of Students	Racial Mix	Program Design and Curriculum Emphasis
01.	Urban	100	65% White 25% Black 9% Puerto Rican	School-Without-Walls academic emphasis
03.	Urban	50	75% White 5% Black 20% Puerto Rican	Street Academy basic skills emphasis
04.	Urban	120	65% Black 35% Puerto Rican	School Within a School, basic skills emphasis
05.	Urban	77	65% Black 30% White	"For school-alienated failures" Individualized basic skills curriculum emphasis
06.	Urban	77	71% White 23% Black 5% Puerto Rican	Independent alternative with academic curriculum emphasis
07.	Urban	104	85% White 15% Black	School Within a School emphasizing G.E.D. preparation
08.	Urban	104	60% Black 40% Puerto Rican	School Within a School originally for discipline problem female students, emphasizing "remedial work"
09.	Urban	41	55% Black 40% White 5% Puerto Rican	Mini School, academic emphasis
10.	Urban	83	45% Black 45% Puerto Rican 10% White	School Within a School for 9th and 10th grade boys with attendance problems; behavioral rewards and academic focus
12.	Urban	121	67% White 30% Black 3% Puerto Rican	Independent Alternative emphasizing basic skills, affective education and career preparation

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School	Location	Number of Students	Racial Mix	Program Design and Curriculum Emphasis
12.	Urban	121	67% White 30% Black 3% Puerto Rican	Independent Alternative emphasizing basic skills, affective education and career preparation
19.	Urban	149	70% White 30%	School Without Walls academic and independent learning skills focus
21.	Urban	114	66% White 34% Black	Independent Alternative emphasizing "academic preparation for life"
23.	Urban	105	78% Black 14% Puerto Rican 8% White	Independent Alternative with work/study emphasis
26.	Urban	58	80% Black 12% White 8% Puerto Rican	Independent Alternative with basic skills and affective growth emphasis
29.	Urban	135	70% Black 25% Puerto Rican 5% Other	Career Academy, academic and health careers emphasis
02.	Rural	39	100% Whit	School Within a School, for students who need more structure and adult monitoring. Academic emphasis
14.	Rural	28	97% White 3% Native American	Independent Alternative, emphasizing basic skills and ability grouping in academic subjects
15.	Rural	92	80% White	School Within a School emphasizing affective growth and "realistic preparation for adult life"
17.	Rural	65	100% White	Independent Alternative, highly integrated academic curriculum
24.	Rural	100	100% White	Independent Alternative for dropouts emphasizing individualized progress to diploma

School	Location	Number of Students	Racial Mix	Program Design and Curriculum Emphasis
30.	Rural	17	95% White	Independent Alternative, emphasizing individualized G.E.D. preparation
11.	Suburban	106	100% White	School Within a School for 11th and 12th grades, academic emphasis
13.	Suburban	53	100% White	School Within a School, academic and student decision-making emphasis
16.	Suburban	77	100% White	School Within a School emphasizing action/study projects and independent study
18.	Suburban	54	100% White	School Within a School, academic and student accountability emphases
20.	Suburban	220	80% White 20% Black	Independent Alternative, academic and student decision-making emphases
22.	Suburban	73	97% White 3% Black	School Within a School, academic and affective growth emphases
25.	Suburban	97	85% White 15%	Independent Alternative with academic and student decision-making emphases
27.	Suburban	140	98% White 2% Black	School Within a School with academic emphasis
28.	Suburban	135	98% White 2% Black	School Within a School with academic emphasis
31.	Suburban	73	100% White	Independent Alternative with academic and affective growth emphases

References

[1] In the present study, the term "marginal learner" refers to students who are disconnected from full and satisfying involvement in school. The term is a shorthand substitution for the longer, more precise phrase, "learners on the margin of school environments." In this definition, there is no assumption as to the academic ability of a student, and no pejorative connations for an individual are implied. Rather, the students are considered "marginal"; first, in the sense that they are not fully involved in the mainstream of school life; and, second, in the sense that they are learning and contributing only a fraction of what they are capable and thus working with only a portion of their potential at school. For an elaboration of the concept of marginality as used in the anthropological and sociological literature since its introduction in 1928, see: David O. Arnold, "Subculture Marginality." In David O. Arnold (Ed.), The Sociology of Subcultures. Berkeley: The Glendessary Press, 1970, pp. 81-89.

[2] The difficulty inherent in adequately defining the term "public alternative high school" stems from the failure of most definitions to specify how the school is different and from what the school is different. The label "alternative," as used in the popular literature, remains imprecise, lacking clear differentiation with respect to discrete, identifiable school goals, functions or practices. For further discussion see: John Goodlad, "Alternative Education: Language and Meaning," Today's Education, January-February, 1977, pp. 84-86. For a study which revealed few differences and overwhelming similarity between the organizational relationships among participants in alternative and conventional schools, see: Chris Argyris, "Alternative Schools: A Behavioral Analysis," Teacher's College Record, 75 (May 1974).

Despite this definitional difficulty, the following six criteria proposed by Joe Nathan for defining a public alternative school describe relatively common characteristics of the high school programs termed "alternative" by public school districts:

1. Voluntary admission for both students and staff;
2. Open to all students who fall within normal achievement levels, on an equal basis;
3. Willing to provide opportunities for students, staff and parents to make decisions about the school's policies and procedures;
4. Willing to help students learn in a variety of settings (not just the school building) and from a variety of people (not just those with certification);
5. Moving away from: (1) required courses, (b) subject-centered curriculum toward interdisciplinary curriculum, (c) credit system of graduation toward competency-based graduation, (d) curriculum materials which reflect only one view of historical events and roles of women and men, (e) teacher as lecturer/presenter toward teacher as facilitator;
6. Receives at least some public funds from local, state or federal sources.

See: Joe Nathan, "Let's Be Extremely Frank: A Concise History of Public Alternative Schools," New Schools Exchange Newsletter, No. 132 (March 31, 1976), pp. 4-13.

[3]Henry Murray, Explorations in Personality. New York: Oxford University Press., 1938.

[4]See J. Withall, "The Development of a Technique for the Measure-ment of the Social Emotional Climate in the Classroom," Journal of Experimental Education 17 (March 1949); Ned Flanders, Teacher Influence, Pupil Attitudes and Achievement (Washington, D.C.: U.S. Department of Health, Education and Welfare, Office of Education, 1965); D. Medley and H. Mitzall, "A Technique for Measuring Classroom Behavior," Journal of Educational Psychology 49 (1958).

[5]George Stern, Morris Stein and Benjamin Bloom, Methods in Personality Assessment (Glencoe, Illinois: The Free Press, 1956).

[6]George Stern, People in Context (New York: John Wiley & Sons, 1970).

[7]See C. Robert Pace and George G. Stern, "An Approach to the Measurement of Psychological Characteristics of College Environments," Journal of Educational Psychology 49 (1958:269-277; C. Robert Pace, "Analysis of a National Sample of College Environments," Final Report, Project No. 5-0764 (Washington, D.C.: U.S. Office of Health, Education and Welfare, Office of Education, Bureau of Research, 1967).

[8]See Robert L. Sinclair, "Elementary School Educational Environ-ment: Measurement of Selected Variables of Environmental Press" (Ed.D. dissertation, University of California at Los Angeles, 1968); Alexander B. McKay, "Principals, Teachers, and Elementary Youth: Measurement of Selected Variables of Teacher-Principal Social Interaction and Educa-tional Environment" (Ed.D. dissertation, University of Massachusetts at Amherst, 1971); Robert L. Sinclair and David Sadker, Through the Eyes of Children (Boston: Bureau of Curriculum Services and Institute for Educational Services, 1973); Mark Phillips, "An Exploration of the Relationships between Teacher Conceptual Systems, Student Conceptual Systems, and Educational Environments in Fifth and Sixth Grade at Amherst, 1973); John Browne, "An Investigation of Multi-Cultural Press in Elementary Classrooms" (Ed.D. dissertation, University of Massachusetts at Amherst, 1975); Jon S. Bender, "The Elementary School Environment: Perceptions of Students and Teachers" (Ed.D. dissertation, University of Massachusetts at Amherst, 1971); Laurence H. Kahn, "The Relationship between the Extent of Teacher Use of Behavioral Objectives and Selected Variables of the Educational Environment of Elementary Classrooms" (Ed.D. dissertation, University of Massachusetts at Amherst, 1973).

[9]Georgianna A. Lynn, "The Relationship of Students' Personality Structures, Socioeconomic Background, and Program Placement to their Perceptions of the Organizational Characteristics of Select Public High Schools" (Ed.D. dissertation, New York University, 1972).

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[19]Ibid., p. 169.

[20]See, for example, James Coleman, The Adolescent Society: The Social Life of the Teenager and its Impact on Education (New York: The Free Press, 1961).

[21]Meng-shu Tseng, "Comparisons of High School Students and Dropouts on Selected Familial, Personality and Vocational Variables," a paper presented at the American Educational Research Association annual meeting in 1970.

[22]The most useful systematic research on alternative schools has been produced by the Center for New Schools in Chicago. These studies were used as an important referent in the preliminary stages of instrument development. See Donald Moore, A Multi-Method Study of the Development and Effects of an Alternative High School Learning Environment, 3 vol. (Chicago: Center for New Schools, 1976).

[23]C. Robert Pace, College and University Environment Scales: Technical Manual, 2nd ed. (Princeton, N.J.: Educational Testing Service, 1969).

[24]Stern, People in Context.

[25]Sinclair, "Elementary School Educational Environment."

[26]W. Lloyd Warner et al., Social Class in America (New York: Harper & Row, 1960)...

[27]A technical examination of the reliability and validity of the Alternative School Environment Survey, including analysis and discussion of six types of validity estimation and seven types of reliability estimation, is available in Ward J. Ghory, "Alternative Educational Environments" (Ed.D. dissertation, University of Massachusetts, 1978).

[28]The purpose for this selection was to increa⁓ ⌐   ⌐⌐⌐li⌐⌐ that the differences observed between m.   ' and ⌐   ⌐⌐⌐, ⌐⌐⌐ ⌐ le ⌐⌐rs were not the result of the li⌐⌐'ted numbe⌐ ⌐⌐ ⌐rginal students who were present on the survey administration day in some schools.

[29]For an introduction to the conceptual groundwork defining the multiple environment school, the following works might be useful. First, a redefinition of the meaning of curriculum, can be found in Robert L. Sinclair, "The Meaning of Curriculum," position paper of the Center for Curriculum Studies University of Massachusetts, 1977. Next, for research on the matching of teaching styles to the learning needs and learning characteristics of pupils, consult David Hunt, Matching Models in Education (Toronto: Ontario Institute for Studies in Education, 1971): Bruce Joyce, Alternative Models of Elementary Education (Waltham, Mass.: The Blaisdell Publishing Company, 1969); and Bruce Joyce and M. Weil, Models of Teaching (Englewood Cliffs, N.J.: Prentice-Hall, 1972). Third, the recent work of Benjamin Bloom and colleagues, notably Benjamin Bloom, Human Characteristics and School Learning (New York: McGraw-Hill, 1976); and J. H. Block, Mastery Learning: Theory and Practice (New York: Holt, Rinehart and Winston, 1971) provides one carefully documented approach to creating multiple learning environments whose goal is for all pupils to master defined learning tasks.