#### DOCUMENT RESUMB

ED 203 501

EA 013 693

AUTHOR TITLE Erickson, Donald A.

Effects of Public Money on Social Climates in Private Schools: A Preliminary Report.

PUB DATE

16 Apr 81 52p.: Paper presented at the Annual Meeting of the American Educational Research Association (Los

Angeles, CA, April 13-17, 1981).

EDRS PRICE DESCRIPTORS

MF01/PC03 Plus Postage.
Catholic Schools: Cluster Analysis: \*Educational
Environment: Educational Research: Elementary
Education: Factor Analysis: Financial Support:
Foreign Countries: \*Parent Attitudes: \*Private School
Aid: Public Support: \*School Attitudes: School
Support: Eocial Environment: State Aid: Statistical
Surveys: \*Student Attitudes: \*Teacher Attitudes,
British Columbia

IDENTIFIERS

#### ABSTRACT

Preliminary results of two surveys of parents, students, and teachers in Catholic elementary schools in British Columbia indicate that public funding for private schools could cause deterioration in the schools' social climates. Data were collected both before and after British Columbia instituted its program of public aid to private schools in August, 1978. Over 20 private schools receiving public aid participated in the two surveys, taken in the spring of 1978 and the spring of 1980. Parents were asked in each survey to assess the schools' financial jeopardy, need of parental help, degree of social cohesion, level of teacher commitment, responsiveness to parents, and academic effectiveness. Differences between the responses to the two surveys indicated that parents felt the levels of all these factors had decreased. Teachers found increases in social cohesion and teacher commitment, a slight decline in teacher autonomy, and no significant change in parent commitment, parent involvement, special school mission, and teacher work rewards. Responses by students indicated shifts toward greater student engagement in work, and decreases in perceptions of school justice, the specialness of the school, student enthusiasm for school work, and the attractiveness of the teacher and the class. TRGDI

to the public aid.

EFFECTS OF PUBLIC MONEY ON SOCIAL CLIMATES IN PRIVATE SCHOOLS: A PRELIMINARY REPORT\*

Donald A. Erickson university of San Francisco

U.S. DEPATMENT OF EDUCATION
NATIONAL INSTITUTE OF EDUCATION
EDUCATIONAL RESOURCES INFORMATION
CENTER (ERIC)

This document has been reproduced as received from the person or organization originating if Minor charities have been made to improve reproduction quality.

Points of view or opinions stated in this document do not necessatily represent official NIE position of policy.

This paper represents a preliminary analysis of the very first longitudinal evidence concerning the social climate effects of aid to private schools. The analysis is much more preliminary than we had planned for this presentation, the reason being that our work has been seriously impeded for more than nine months out of the last twelve by difficulties with our major funding agency, the National Institute of Education.

The analysis presented in preliminary fashion here was made possible by a remarkable "natural experiment" in British Columbia, a new program of public aid to independent schools that was instituted in August, 1978.

Data for the analysis were derived from two surveys of students, teachers, and parents in public and private schools in British Columbia. The first survey (Survey A) was conducted in the spring of 1978, before the public aid began to flow; the second survey (Survey B) was conducted two years later, in the spring of 1980, after nearly two years of experience with the new aid. By comparing data from Survey A with data from Survey B, we can attempt to identify social climate changes that some logically attributable

PERMISSION TO REPRODUCE THIS MATERIAL HAS BEEN GRANTED BY

CATIONAL

TO THE EDUCATIONAL RESOURCES

\*Prepared for presentation at a symposium on "Empirical and Practical Perspectives on Aid to private Schools" at the 1981 Annual Meeting of the American Educational Research Association, Los Angeles, April 16, 1981. The author gratefully acknowledges the assistance of Forest and Marilyn Harrison.

ERIC

Since the schools which are designated as "private" or "nonpublic" in the United States are more often called "independent" in British Columbia, and since extended passages in the Present report were originally prepared for a report in British Columbia, readers should be forwarned of some inconsistency in this regard, since we use "private" and "independent" interchangeably in the pages which follow.

Funds for the data-acquisition phases of the two surveys reported here were provided by grants from the British Columbia Ministry of Education to the Educational Research Institute of British Columbia (ERIBC). ERIBC, in turn, was responsible for data-acquisition in both surveys. The planning and analysis of the surveys was financed by the National Institute of Education (Washington, D.C.) and was executed at the University of San Francisco.

#### Background Information

British Columbia's aid, paid directly to independent schools, is allocated on a per-pupil average-attendance basis. Either one of two

levels of aid is available to independent schools that want it and can qualify. "Group 1" schools receive assistance amounting to 9 percent of the per-pupil operating costs of public schools in the districts in which given independent schools are located. This aid involves no provincial regulation to speak of at all. For "Group 2" schools the amount of aid is 30 percent of public school operating expenses in the districts in which given independent schools are located. It entails a little regulation, thus far apparently benign in nature and application. Almost all independent schools applying for the aid have opted for the "Group 2," or 30 percent, level. During the 1978-79 school year, the Group 2 aid averaged approximately \$500 per pupil pen year; during 1979-80, the amount rose to approximately \$625.

Even at the current (30 percent) level, British Columbia's aid to independent schools seems sufficient to have a notable impact on independent schools. For instance, independent schools could reduce their fees now that the province is paying part of their costs. There could be less need for many contributed services. Especially in schools that previously operated on a shoestring, the new money could be used to improve programs. Increasing provincial regulation, if introduced to ensure that the aid was properly used, could obliterate many distinguishing features of independent schools. Patrons of independent schools could become less active in school affairs, tending more and more to view the chools as belonging to government rather than to them. Teachers in independent schools, seeing the source of potential support for independent schools as virtually inexhaustible, could increasingly adopt a "union mentality," focusing on their salaries and

fringe benefits. Schools previously tottering on the brank of insolvency could enjoy a more secure future. Many other possibilities come to mind.

The larger investigation of which the present study is a part is addressed to many possible effects of aid to independent schools, including effects on the taxation structure, public schools, parental choice, and political life in British Columbia. The present report concentrates exclusively on the effects of the aid on social climates in independent schools.

Before it became evident that the British Columbia legislature would seriously consider giving aid to independent schools for the first time in B. C.'s history, the principal author of this study (Erickson), along with Richard Nault, began an investigation, in the five most vesterly provinces in Canada, that concentrated on identifying important differences between publicly supported Catholic elementary schools (then found in Alberta, Saskatchewan, and Ontario) and privately supported Catholic elementary schools (then found in British Columbia and Manitoba). Funded by the Spencer Foundation (and consequently identified here as "the Spencer study"), that study indicated (mostly through interviews with teathers and parents who had experienced both publicly and privately supported Catholic schools) that the latter were dramatically superior to the former with respect to several social climate characteristics, such as commitment, consensus, and community. Though the data were cross-sectional rather than longitudinal, it did not take an unusual leap in logic to suggest two possibilities, at least hypothetically:

(a) The social climate differences suggested by respondents in the Spencer study are produced partially by the differences in school

funding (public versus private)

(b) British Columbia's new program of public aid to independent schools, announced while the Spencer study was in process, has the potential of altering social climates in that province's independent schools along the same general lines.

#### 2. Research Methods

When the present study was planned, we designed it to test, among other things, the possibilities raised by the Spencer study. We began by attempting, both verbally and in diagrams, to make explicit the relation—ships suggested by the Spencer interviews.

Later, we attempted to develop measures of the major concepts in that conceptualization. We adopted this strategy for two basic reasons: First, it appeared that the social climate differences in question might well be the major distinguishing features between public and independent schools, at least when the latter were privately supported. Secondly, we noted evidence that social climate might be a major determinant of student learning and other valued school outcomes.

The best comparisons across a span of time, such as the comparisons made here between data gathered in the spring of 1978 and data gathered in the spring of 1980, involve identical samples. Since our unit of analysis is, for most purposes, the individual school, we limit our across-time comparisons to schools from which we obtained useable data both in Survey A (Spring, 1978) and Survey B (Spring, 1980).

We drew the sample of schools in Survey A (Spring, 1980), by using

from all schools that participated in Survey A. Other schools participated in Survey B, but not for the purposes of the present report.

We defined the intended independent school sample as consisting of all 92 independent schools then operating (according to the most accurate list available) at the southern tip of Vancouver Island, in Greater Vancouver in the Lower Frase, Valley, and in a small hinterland caty, Prince George. Each of these schools was matched against the public school of similar grade level that was the closest geographically, and from the resulting pool of 92 public schools, 45 were selected by means of a probabilistic sample stratified by grade 1 evel and urban-suburban-hinterland. Part19 because the aid program was controlersial, and partly because we were forced to act with great haste in our initial sure, we encountered problems of nonparticipation. Whereas our original plans called for a sample of 92 independent schools and 45 public schools, the actual school sample was Considerably reduced. By the time we completed Survey A (Spring, 1978) and Survey B (Spring, 1980), we discovered that useable data from both surveys had been obtained from 31 independent schools for the student questionned res, 21 independent schools for the parent questionnaires, and 28 independent schools for the teacher questionnaires.

7

Except for schools with 50 students or fewer, where all students above the third grade were included in the sample, the odd and even grades were/alternated from school to school and one entire classroom of students at each of the selected grade levels (above the third grade) was chosen at random for the student sample. The questionnaires were administered to the students in their regular classrooms, with strong assurances of anonymity In smaller schools, all teachers were included in the intended sample, and in some larger schools, fifteen teachers selected at random. The teacher questionnaires were personally handed to the teachers, along with an explanation concerning the study, and were either collected in person or (if teachers preferred) mailed in later. Thirty parents were selected at random in each school, using a procedure that avoided over-selection of parents with large families. Parent questionnaires were administered by mail, with three follow-ups in Survey A (Spring, 1978) and four in Survey B (Spring, 1980). Response rates for parents were 68 percent in Survey A and 75 percant in Survey B. There was virtually no nonparticipation by students, except for absences. The response rate for teachers is known to be low, but was not calculated by the survey agency in British Columbia.

When the data were available from Survey (Spring, 1978), the items designed to form the various scales were examined empirically by means of cluster and factor analyses. Items were included in scales only when to do so was deemed defensible on both conceptual and empirical grounds.

J8 71

were identical in Survey A and Survey B, and to identical schools.

that follow. All schools involved in these comparisons had been participating in the public aid since its inception. The individual responses of parents have been aggregated to create a mean for all Parents in a specific school, the individual responses of teachers have been aggregated to create a mean for all teachers in a given school, and the individual responses of students have been aggregated to create a mean for all teachers in a given school, and the individual responses of students have been aggregated to create a mean for all students in a given school.

We have adopted a particularly straightforward approach in these comparisons. We compare the means for all independent schools in Survey a (Spring, 1978) with the means for all independent schools in Survey B correlated and uncharacteristical Many additional analyses can and will be performed. We can examine the data by means of multivariate statistical procedures. We can compare private schools of all types. We can compare public and private schools. Much work can be done on the psychometric properties of the items. We can introduce numerous controls to assess the possibility that comparisons between Survey A and Survey B are a function of sampling error. But these and many other additional analyses must await a future report.

Readers should remember that we have not developed our measure of change by asking respondents whether they have noticed changes., Rather,

9

we have asked them, in Survey A and Survey B, to respond to identical items describing social Climate in their schools, and we have examined differences in these reports to assess change from Survey A (Spring, 1978) to Survey B (Spring, 1980).

### A Parenthesis on Findings Reported Earlier

In an earlier report, findings from a comparison of Public and private schools on the basis of data exclusively from survey A (Spring, 1978) were delineated and discussed in considerable detail. These findings echo many of the results of the Spencer study mentioned earlier. In both instances, publicly funded schools seem notably inferior to privately funded schools with respect to such social climate characteristics as consensus, commitment, and sense of community. On the basis of these findings, we fact we had even more reason to hypothesize that British Columbia's aid to independent schools would have a deleterious effect on several social climate characteristics of independent schools.

Current Findings: Private School Climates Compared Across Time: Spring, 1978, versus Spring, 1980

#### 1. Changes in Parents' Reports

In Survey A (Spring, 1978), differences between public and independent and pronounced schools were more frequent in the reports of parents than in the reports of teachers and students. We begin, then, with an attempt to see whether parents' reports of independent school climates evidence any change between Survey A and Survey B.

a. Jeopardy. In Survey A, parents were acutely aware that independent schools were in jeopardy account of fiscal shortages. In both Survey A and Survey B, jeopardy was assessed in terms of parents' responses to the following items:

I have often thought that this school might close for lack of money.

I wish this school could afford a better building.

This school seems to have all the equipment it really needs. (Negatively worded)

If parents hadn't helped out in many ways at this school, the school would have closed a long time ago.

Teacher salaries in this school are lower than they ought to be.

Many parents feel that they are responsible for keeping this school. from collapsing.

This school has all the money it really needs to run a good program. (Negatively worded)

Except for the negatively worked items, the response choices were

originally valued as follows duced): 5

refinements later intro-

- O no opinion
- 1 strongly agree
- 2 tend to agree
- 3 tend to disagree
- 4 strongly disagree

Quite obviously, high scores indicate less perceived jeopardy.

As Table 4 indicates, the mean of school means was 15.67 in Survey a and 18.15 in Survey B, indicating an upward shift of 2.48, or 1.74 standard deviations, with a statistical significance beyond the .001 level.

Apparently the inflow of public money (at an average level of 30 percent of public school per-pupil operating expenditures) had been sufficient, as anyone would expect, to diminish the perception by parents that independent schools were in danger of closing because of insufficient financial resources.

b. Need of Parental Help. Veopardy is one influence that seems' likely to generate the perception that the school needs parents' help. Since jeopardy has diminished, has the tendency for parents to perceive the school as needing their help (and to be inclined to respond) declined accordingly?

The following two items were used both in Survey A (Spring, 1978) and Survey B (Spring, 1980) to elicit parent's perceptions in this regard:

(Need of Help)

I get the feeling that they don't really need any help from me at this child's school. (Negstively worded)

You rarely see any parents helping out at this school by dedating their time for various activities. (Negatively worded).

TABLE .4

## COMPARISONS BETWEEN PARENTS IN SURVEY A (1978) AND SURVEY B (1980) ON SIX COMPOSITED SCALES SUMMARIZED ON 21 INDEPENDENT SCHOOLS

Scale	Mean of School Means, Survey A	Mean of School Means, Survey B	Difference	Correlated* t
(1) Parent jeopardy	15.67	18.15	2.48 (s.d.=1.42)	* .8
(2) Parent need of help	3.30	4.94	1.64 (s.d.=.663)	11.35
(3) Responsiveness to parents	6.12 "	10.16	4.04 (s.d.=.762)	24.30
(4) Social cohe sion	7.03	9.02	2.00 (s.d.=.966)	9.47
(5) Perceived school effectiveness	1.88	2.56	.68 (s.d.=.361)	8.65
(6) Teacher commitment	4.31	6.20	1:89 (s.d.=.393)	22.04

<sup>\*</sup>All significant at p < .001.



Responses to these two items were originally assigned the following numerical values, with refinements added later.

- 0 no opinion
- 1 strongly agree
- 2 tend to agree
- 3 tend to disagree
- 4 strongly disagree

Since we reverse values for all negatively worded items, high scores here indicate a perception of less need for parental help.

According to Table 4, the mean of school means was 3.30 in Survey A (Spring, 1978) and 4.94 in Survey B (Spring, 1980), indicating an upward shift of 1.64, or 2.47 standard deviations, with a statistical significance beyond the .001 level. The perception of need of parental help did decline when jeopardy declined.

c. Social Cohe sion. In the conceptualization discussed, social cohesion is not only linked to jeopardy, but also to homogeneity (likewindedness) in a school's clientele. We have encountered casual reports in British Columbia to the effect that some independent schools have become less selective while expanding in apparent response to the public aid. In the light of those reports, we would expect social cohesion to decline.

The following four social cohesion items were used in identical form, in Survey A (Spring, 1978) and Survey B (Spring, 1980):

The school which this child attends often seems much like a big family, people are so friendly and agreeable.

The people who work together to make this school a success are a close-knit, friendly group.

Parents in this school pretty much agree on what the school should be doing.

There seems to be quite a bit of bickering among parents and teachers at this school. (Negatively worded)



Except for the negatively worded item, the responses to the items 9 were assigned the following numerical values (with later refinements):

- 0 /no opinion
- 1. strongly agree
- 2 tend to agree
- 3' tend to disagree
- 4 strongly disagree

Higher scores reflect perceptions of less social cohesion.

Turning to Table 4, we discover that the mean of school means was 7.03 in Survey A (Spring, 1978) and 9.02 in Survey B (Spring, 1980), indicating an upward shift of 2.00, or 2.07 standard deviations, with a significance beyond the .001 level. As perceived by parents, social cohesion in these independent schools was notably lower in Spring, 1980, than in Spring, 1978.

d. <u>Teacher Commitment</u>. In most independent schools, teacher salaries were significantly improved after the incomes of these schools were substantially supplemented by provincial aid in the fall of 1978 and thereafter. Did this financial shot-in-the arm produce greater teacher commitment, in the eyes of parents?

Teacher commitment was probed by means of the following three items in the parent questionnaires in Survey A (Spring, 1978) and Survey B (Spring, 1980):

This child's teacher seems to try very hard to do a good job.

When I see how dedicated many teachers are in this school, I feel I must do my best to help out.

Almost all teachers at this school seem very well trai ad for the jobs they must do.

Response to these items were assigned the following numerical values

#### (with later refinements)

- O no opinion .
- 1 strongly agree
- 2 tend to agree
- 3 tend to disagree
- strongly disagree

Higher scores thus indicate perceptions of less teacher commitment.

We see from Table 4 that the mean of school means was 4.31 in Survey A (Spring, 1978) and 6.20 in Survey B (Spring, 1980), indicating an upward shift of 1.39, or 4.81 standard deviations, with a statistical significance beyond .001. Assessed by the parents, teacher commitment had very definitely declined between Spring, 1978, and Spring, 1980, despite the notable increases in teacher salaries.

e. Responsive to them?

If teachers, had become less dedicated or committed in the eyes of parents, did the parents also describe the school as a whole as less responsive to them?

We gauged responsiveness to parents, both in Survey A (Spring, 1978) and Survey B (Spring, 1980), by means of the following four items, all negatively worded:

The school this child attends is trying to do too many things all at once, rather than doing a few things well;

This school does a lot of things that I wish it would not do.

When the school does things I do not like, I feel powerless to do anything about it.

The principal and teachers in this school don't pay much attention to what parents think.

Response to these items were assigned the following numerical values (with later refinements):

- 0 no opinion
- l 'strongly agree.
- 2 tend to agree
- 3 tend to disagree
- 4 strongly Misagree

Since we reversed values for the four negatively worded items, higher scores reflect perception of less responsiveness.

The mean of school means was 6.12 in Survey A (Spring, 1978) and 10.16 in Survey B (Spring, 1980), according to Table 4. There is an upward shift of 4.04, or 5.30 standard deviations, with a statistical significance beyond the .001 level. Thus, parents seem to indicate that the school's responsiveness to parents very definitely declined.

effectiveness, used in the parent questionnaires both in Survey A (Spring, 1978) and Survey B (Spring, 1980). We do not assume that parents (or anyone else, for that matter) can accurately determine, from their mere observations, which schools are the most effective. It will be interesting, however, to determine whether parents' perceptions in this regard have changed.

The item is: "The rate of student learning is above average in this school, in comparison with most other schools." Responses to this item were assigned the following numerical values (with later refinements):

- 0 no opinion
- l strongly agree
- 2 tend to agree
- 3 tend to disagree,
- 4 strongly disagree

Thus, higher scores indicate less perceived school effectiveness.

The mean of school means on this item was 1.88 in Survey A (Spring, 1978) and 2.56 in Survey B (Spring, 1980), indicating an upward shift (in the direction of less perceived school effectiveness) of .68, or 1.86 standard deviations, with a statistical significance beyond the .007 level (see Table 4).

#### 2. Changes in Teachers' Reports

Since teachers were midway between parents and students in the tendency to indicate striking differences between public and independent schools in Survey A, we consider them next.

a. <u>Social Cohesion</u>. Do teachers, like parents, perceive less social cohesion in their independent schools in the Spring of 1980 than they did in the Spring of 1978?

We measured teachers' perceptions of social cohesion by means of the following items in the teacher questionnaire, both in Survey A (Spring, 1978) and Survey B (Spring, 1980):

This school often seems like a big family, everyone is so close and cordial.

Parents often indicate that they appreciate the work teachers are doing in this school.

Teachers in this school appreciate each other's efforts to an unusual extent.

In this school, people take a personal therest in each other.

The atmosphere in this school is rather impersonal. (Negatively worded)

Except for the negatively worded item, responses to these items were assigned the following numerical values (with later refinements):

- O no opinion
- 1 strongly agree
- 2 tend to agree
- 3 tend to disagree
- 4 strongly disagree

Thus, higher scores indicate a perception of <u>less</u> social cohesion in these independent schools.

The mean of school means was 11.10 in Survey A (Spring, 1978) and 9.45 in Survey B (Spring, 1980), indicating a downward shift (toward more perceived social cohesion) of 1.66, or .74 standard deviations, with statistical significance beyond the .001 level (see Table 5). Later, we will ask how parents and teachers could have opposite perceptions in this regard.

b. Teacher Commitment. We assessed teacher commitment, as reported by the teachers themselves (in response to largely projective items) by means of the following items in Survey A (Spring, 1978) and Survey B (Spring, 1980):

What would you estimate as the approximate percentage of teachers in this school who throw themselves wholeheartedly into their work?

Most teachers in this school seem dedicated to doing a truly outstanding job,

Some teachers in this school seem downright lazy. (Negatively worded)

Responses to the first item listed above were assigned the following numerical values:

- 1 All or nearly all
- 2 60 802
- 3 Around 50%
- 4 30 40%
- 5 Less than 20%

Response, to the second item listed above were assigned the following

TABLE

SIGNIFICANT COMPARISONS BETWEEN TEACHERS IN SURVEY A AND SURVEY B ON SEVEN COMPOSITED SCALES SUMMARIED ON 28 INDEPENDENT SCHOOLS

Scale	Mean of School Means, Survey A	Means of School Means, Survey B	Difference	Correlated t
1. Teacher Autonomy	8.94	9.73	0/79 (s.d.=1.627)	- 2.5
4. Social Cohesion	11.10	9.45	1.66	3.89**
6. Teacher Commitment	7.42	4.70	2.72 (s.d.=1.416)	10.17**

\*n / 02

\*\*p 4.001



numerical values, which were reversed for the third item:

- no opinion
- acrongly agree
- tend to agree
- tend to disagree strongly disagree disagree

Higher scores indicate less perceived teacher commitment.

The mean of school means for these items was 7,42 in Survey A (Spring, 1978) and 4.70 in Survey B (Spring, 1980), indicating a downward shift (toward more perceived commitment) of 2.72, or 1.9 standard deviations, significant beyond the .001 level (see Table 5). Once again, teachers disagree with parents. Whereas parents describe teacher commitment as declining between SPTing, 1978, and Spring, 1980, teachers describe that commitment as increasing.

Teacher Autonomy. Both in Survey A (Spring, 1978), and Survey B (Spring, 1980), we asked teachers the following four-part question:

During the Corrent school year, do teachers have too much, too little, or about the right amount of responsibility in each of the following areas?

- . Use of school budger
- Gurriculum planning
   Hiring of planning
  teachers
- Student evaluation (grading)

Under each of the four parts, teacher responses were assigned the following. numerical values (with later refinements):

- 1. too much
- about Fight
- too Itetje

Thus, higher scores signify dess teacher autonomy as perceived by the teachers themselves.

less than "about right," on average) in Survey A (Spring, 1978), and 9.73 in Survey B (Spring, 1978), showing an increase in the mean (and a decline in perceived autonomy) of .79, or .49 standard deviations, statistically significant at the .02 level (see Table 5). Compared with other changes from Survey A to Survey B, this one, though statistically significant, 13 not at all dramatic.

on four dimensions from the teacher questionnaire on which there was no statistically significant change from Survey A (Spring, 1978) to Survey B (Spring, 1980). These dimensions, all based on teacher perceptions, are Parent Commitment; Parent Involvement; Special, Agreed-Upon Mission; and Teacher Work Rewards. The items comprising each of these measures, both in Survey A and Survey B, are as follows:

Parent Commitment)

If you were planning a field trip with your students, how easy would it be to get parents to volunteer to come along and help?

If you needed some special help in the classroom next week, how easy would it be to get a parent or two to help you out for a total of three or four hours?

In your opinion, what percentage of parents in this school would be willing to help raise some money for some special project by-

Taking charge of a booth for two or three hours on a special school science fair, arts-and crafts fairs, or "fun day"?

- Donating cakes, cookies etc., to a special school "pastry sale"?
- Showing up to give the two above-named functions some moral support?

Parent Involvement)
Parents often indicate that they appreciate the work teachers are doing in this school.

Parents are extensively involved in activities in this school.

TABLE 6

COMPARISONS BETWEEN SURVEY A AND SURVEY B SHOWING NO SIGNIFICANT DIFFERENCES IN DATA
FROM FOUR COMPOSITED SCALES FROM TRACHER QUESTIONNAIRES, SUMMARIZED ON 28 INDEPENDENT SCHOOLS

	Mean of school Means			Correlated
Scale ,	Survey A(1978)	furvey B(1980)	Difference )	**
2 Parent Commitment	10.30	10.79'	.49 (s.d.=2.03)	, -1,29
1 Parent Involvement	, 4.61	4.22	.39 \$ (s.d.=1.32)	1.56
5 Special, Agreed-upon Mission	7.63	7.39	,25 (s.d.=1.84)	0.71
7 Teacher Work Rewards	1.94	1,93	,01 (s.d.=.71)	0.10

\*None statistically significant

ERIC PAUL EN PROPRIES DE FING

TSM(Special, Agraed-upon Mission)
I don't see anything very special about this school (Negatively worked)

This school offers students a number of unusual advantages.

The goals of this school are very similar to the goals most of our parents have in mind.

There is a strong feeting around here that this school is really distinctive, different from most other schools.

TWR (Teacher Work Rewards)
In this School, I find my work rewarding.

#### 3. Changes in Students' Reports

Finally, we turn to comparisons based upon data from the student questionnaires in Survey A (Spring, 1978) and Survey B (Spring, 1980)

a. Teacher Commitment. Whereas reports from parents indicated that teacher commitment had declined, and reports from teachers indicate that teacher commitment had increased, reports from students indicated no significant differences in this regard.

We measured teacher commitment as perceived by students by means of the following items in Survey A (Spring, 1978) and Survey B (Spring, 1980):

This teacher tries very hard to see that everybody learns.

This teacher really tries hard to do a good job.

This teacher really doesn't care whether we learn or not. (Negatively worded)

This teacher cares a lot about what students think.

This teacher goes out of the way to help students.

Except for the negatively worded item, responses to these items were assigned the following values (with later refinements):

1 true 2 false

Consequently, higher scores indicate a perception of less teacher commitment. The mean of school means was 8.09 in Survey A (Spring, 1978) and 7.55 in Survey B (Spring, 1980), but the difference of .54 , a mere twentieth of a standard deviation, is far from statistical significance (see Table 7).

b. Attractiveness of Teacher and Class. We asked students abour the attractiveness of teacher and class in the following items both in Survey A and Survey B:

Most students don't like this class. (Negatively worded)
This teacher is more like a friend than someone who tells you

Most students seem to like this class.

Students in this class like their teacher a lot.

Except for the negatively worded item, the following numerical values were assigned to the responses to these items (with later refinements):

1 true 2 false

what you should do.

Higher scores signify less' attractiveness of teacher and class.

The mean of school means on this dimension was 7.40 in Survey A (Spring, 1978) and 7.61 in Survey B (Spring, 1980), indicating a shift of 21 (.54 of a standard deviation) in the direction of diminished attractiveness, statistically significant at the .006 level (Table 7).

c. Student Engagement in Work. In an effort to determine how much students tended to engage in their work, rather than "fooling around,"

TABLE 7

# COMPARISONS BETWEEN STUDENTS IN SURVEY A AND SURVEY B ON SIX COMPOSITED SCALES SUMMARIZED ON 31 INDEPENDENT SCHOOLS

Scale	Mean of School Means Time 1	Mean of School Means Time 2	pliference	Correlated t	P
(1) Attractiveness of Teacher & Class	7.40	7.61	(B.d39)	-2.97	.006
(2) Student Engagement	5.04	4.82	(B.d., 22 (61)	2,05	.050
(3) Student Enthusiasa for Work	4.16	4,53	(B.d. 38	-8,63	.000
(4) School Justice	5.28	5.67	(\$.d40)	-5.52	.000
(5) Special School Attractiveness	2.62	3.07	(8.d., 44 1.05)	-2,37	.025
(6) Teacher Commitment	ę0.8 <sup>†</sup>	1.55	(6.d	.30	J.8.

daydre ning, etc., we included the following items in Survey A and Survey B:

Some students fool around a lot in this class. (Negatively worded)

Sometimes it is hard to work in this class because it's noisy.

(Negatively worded)

Students are pretty quiet in this class.

Except for the two negatively worded items, which were reversed in value, the following values were assisted to the responses (with later refinements): 25

1 2 true false

Thus, wisher scores indicate less engagement in work as reported by students.

The mean of school means is 5.04 in Survey A. (Spring, 1978) and 4.82 in Survey B (Spring, 1980), indicating a shift of .22, or .36 standard deviations, statistically significant at the .05 level, in the direction of Breater engagement in work (see Table 7).

dents pere enthusiastic about their studies, we used the following items in Survey A and Survey B:

I really enjoy my work in this school.

Most of my school work is boring. (Negatively worded)

1 am proud of my school work.

except for the negatively worded item, responses to these items were assigned a numerical value of 1 for "true" and 2 for "false" (with later refinements).27

Thus, higher scores indicate less



The mean of school means is 4.16 for Survey A (Spring, 1978) and 4.53 for Survey B (Spring, 1980), indicating a shift of .38, or 1.58 standard deviations, significant beyond the . 001 level, in the direction of diminished enthusiasm for school work (see Table 7).

e. School Justice. To determine the extent to which students saw themselves as treated fairly in their schools, we used the following items in Surveys A and B:

When teachers become angry in this school, it is usually for a good reason.

Teachers around here almost never notice when a student does a good job. (Negatively worded)

When I work hard around this school, nobody seems to appreciate it. (Negatively Worded)

I know some students who got into trouble when they had done nothing to deserve it. (Negatively worded)

Except for the three negatively worded items, for which values were reversed, the values assigned to the responses were 1 for "true" and 2 for "false"

Thus, higher scores indi-

cate less of a sense of being treated justly.

The mean of school means is 5.28 for Survey A (Spring, 1978) and 5.67 in Survey B (Spring, 1980), indicating a shift of .40, or almost precisely one standard deviation, significant beyond the .001 level, in the direction of less perceived fairness (see Table 7).

f. Special School Attractiveness. Finally, we sought to ascertain the extent to which students were attracted to their school as one that was in some sense special. To that end, we included the following items in the endeant questionnaire in both Survey A (Spring, 1978) and Survey B



(Spring, 1980);

I feel it is an honour to 80 to a school like this.

Most of the time I think this is one of the best schools there is.

As before, the responses to these items were assigned values of 1 for "true" and 2 for "false" (with later refinements).

Thus, higher scores indicate less of a tendency to view a school as a special place that one is proud to attend.

The mean of school means is 2.62 for Survey A (Spring, 1978) and 3.07 for Survey B (Spring, 1980), indicating a shift of .44, or .87 of a standard deviation, significant at the .025 level, in the direction of a diminished tendency to view the school as a special, attractive place (see Table 7).

To summarize those findings, when we compared data from Survey A (Spring, 1978) with data from Survey B (Spring, 1980), we discovered the following:

#### On the positive side:

Parents indicated that their independent schools were less severely jeopardized for lack of money

Students indicated that

teacher commitment had not changed

students were more consistently engaged in their work (rather than daydreaming, etc.)

Teachers indicated that

teacher commitment had increased

social cohesion had increased

, there was no diminution of parent commitment,

parent involvement, sense of special mission, teacher

work rewards

#### On the negative side:

Parents indicated that

. . they had a diminished sense of being needed at the school

. . social cohesion had diminished at the school

. . teacher commitment had diminished

. . the independent schools were less responsive to parents

levels of vstudent academic achievement had diminished

relative

Students indicated that

they found their schools, classes and teachers less

attractive than before

their enthusiasm for their school work had diminished

they had a diminished sense of being treated justly

Teachers indicated that their autonomy had diminished to some extent

#### Conclusions

Except for the data from teachers, these findings concerning social climate changes in independent schools between the spring of 1978 and the spring of 1980 are mostly negative. According to parents' responses to the



their independent schools all point to deterioration between Spring, 1978, and Spring, 1980. The only advantage associated with the provincial aid is that financial difficulties have diminished. According to students, they are now more consistently engaged in their school work, and teacher commitment has not changed, but they find their schools, their classes, and their teachers less attractive, they are less enthusiastic about their school work, and they are treated less justly. Teachers, most of whom have enjoyed unprecedented salary increases, describe themselves and their colleagues as more committed than before, think there is more social cohesion in their schools, and see nothing discussed in this report as deteriorating.

Though the negative findings were all predictable in terms of the conceptualization on which the entire study was based,

plain. In interviews that will be reported elsewhere, key informants (mostly administrators and association officials) had indicated to us, with exceptional consistency, that the independent schools showed no significant negative effects thus far. On the contrary, according to these key informants, parents, teachers, administrators, board members, and association officials had taken new heart as a consequence of the public assistance. Now that the achools no longer were plagued by recurring fiscal crises, personnel could Concentrate on important improvements. Parents, rather than losing interest, seemed more enthusiastic and involved than ever before. School leaders were so vigilant against the danger of losing the distinctive features of independent schools that they were emphasizing those distinctions



as never before, and with manifest success. There might be danger in the future, especially if the level of the aid were significantly increased, or if significant new regulations were laid down by the province, but thus far, there had been no notable deleterious consequences. We believe these reports were entirely sincere, and we found them convincing.

If one is interested in social climate characteristics, however, the evidence analyzed in the present report is much superior to the impression-istic reports of school (administrators and association of imals. The evidence Clearly contradicts the about mentioned reports

one possible interpretation is that the evidence from teachers, when coupled with the earlier reports from administrators and association officials, should be regarded as valid, and thus that the reports of the students and parents should be disregarded. However, teachers, administrators, and association officials are not, as we have noted, the best source of data on the perceptions of students and parents. Perceptions are one of the key elements of social climate. If students see themselves as the reports in this study indicate, and if the perceptions of parents are as reported here, then in those respects, at least, the social climates have deteriors ted beyond question.

captions of students and tents are a reflection, not of negative outcomes of B. C.'s aid to indeptment schools, but of a growing negativism toward all schools in our seciety as a whole. The validity of this interpretation



report. We will be eager to see, for example, whether the attitudes of students and parents in public schools deteriorated along the same lines, and to roughly the same extent, between Spring, 1978, and Spring, 1980.

A third possible interpretation is that the indications in this study of a deteriorating social climate in independent schools are fallacious-mere artifacts of sampling error or chance variations. The rigorous levels of statistical significance (mostly beyond .001) for most of the relationships in this study tend to rule out chance findings, though we plan to perform multivariate analyses in the future to reduce that likelihood even further. Moreover, it is becoming more and more difficult to dismiss the suggested relationship between social climate and source of school funding (public versus private) now that the relationship has been suggested in four independent analyses. The relationship was first sugin which gested empirically in the Spencer study, publicly supported Catholic schools in Alberta, Saskatchewan, and Ontario were compared with privately supported Catholic schools in British Columbia and Manitoba. It was suggested again in comparisons between British Columbia's public and independent schools in Survey A (Spring, 1978), Sum was rized It was suggested a third time in

a doctoral dissertation done with an entirely different population of people, in an area far away, in Merced, California, where public and 33 Catholic schools were compared. Now, in the present study, variations over time in the source of funding for a single set of schools are found to be associated with the same social climate differences. These highly congruent findings, though not conclusive, are difficult to dismiss lightly.



A fourth interpretation of the findings in the present study is that social climate characteristics in independent schools did indeed deteriorate between the spring of 1978 and the spring of 1980 as a consequence of the inflow of public money, in keeping with the predictions of the conceptualization on which the present study was based. We must emphasize that the findings do not lead inexorably to this conclusion. Much further work, including some discussed below, must be done before the interpretation will be substantiated at all firmly, and it could still turn out to be wrong. Readers should take it no more seriously than the logic of the situation appears, in their minds, to warrant.

The conceptualization has been discussed in detail elsewhere. 37

A few of

However, it may be important to summarize its central elements here:

Effects of Jeopardy .-- When public money is not available to support a school, two immediate consequences agem obvious: Its clients must support it (normally through fees), and unless it obtains considerable access to Private wealth, its future will be in doubt. Everyone in the enterprise knows it will go out of business if it does not compete successfully for clients and their money, so normally everyone has an additional incentive In the Spencer study mentioned earlier, many teachers to perform well. and parents said their commitment to a school was enhanced when their efforts seemed badly needed and difficult to replace. Some teachers discussed the apparent benefits of understaffing in privately supported schools.35 When there are barely enough people to keep the school running, apparently they value each other's contributions very highly, and express appreciation often and intensely, thus reinforcing commitment. Similarly, when a private school is short of money, it appears that people Pull together as a result. Teachers, viewing the financial sacrifices of Parents and the conscientiousness of students, redouble their efforts. Students, knowing that their parents are doing without things to send them to school, and witnessing their teachers working extra hard for ridiculously little pay, feel obligated to apply themselves to their work. Parents, seeing that teachers do so much for so little, and observing that their children apply themselves, are reinforced in their commitment.

On the negative side, extreme deprivation seems likely to have negative effects in any school, producing discouragement than commitment.



Effects of Investment: --Parents may often view schools that appear to cost them nothing as offering nothing special and thus warranting no special effort or thought. When parents must pay, or pay more, one would expect them to affiliate more deliberately and with greater commitment. They probably will not affiliate at all unless they think they are getting something extra in exchange for the extra costs. If they get something extra, or think they get it, they may feel obliged (committed) to reciprocate in some way. And people often follow their investments with efforts to ensure a payoff.

Some parents, having decided (for whatever reason) to shoulder the extra costs of a private school, may justify the costs by convincing themselves (in the absence of evidence, if need be) that the school does, indeed, feature special benefits. They may view the school through rose-colored classes and respond to what they perceive with enhanced commitment. But one would not generally expect people either to shoulder the costs or evidence the commitment when there is nothing to suggest that the school does something extra. Schools with diffuse, unarticulated, or even contradictory goals probably inspire little commitment. It seems likely that most parents will respond apathetically to such schools, and if payment is involved, will decide it is not warranted. The more a school must depend upon private sources of support, then, more one may expect it to stress and preserve its signs of exceptionality.

Effects of Homogeneity. —We suspect that schools with relatively homogeneous clienteles are dramatically different from schools with heterogeneous slienteles, epsecially when the homogeneity relates to



educational preferences. When there is reasonable consensus on what a school should do, much energy that might otherwise be expended on managing conflict and trying to accomplish too many things simultaneously should be available for more productive tasks. When goals are more consistent and clearly focused, they should be easter to achieve. Thus schools marked by consensus should be characterized by greater student achievement along the lines that the school emphasize. The homogeneity and consensus should foster the development of cohesive social groups, characterized by norms of commitment to the common goals and by collective belief systems that reinforce the common commitment. Because of the internal consistency of such schools, students should feel that they are treated in a more principled and consistent fashion, should believe they have more control over their destinies (because of the greater predictability), and should develop more self-confidence. , Teachers should report that their intrinsic rewards are consistent and powerful, that their classroom efforts are generally successful, and that parents are supportive and trusting.

To reiterate, homogeneity, in turn, seems a logical product of the screening effect of school fees.

Effects of Selective Admissions. —In contrast to public schools, which are forced to serve virtually envone who shows up, privately supported schools may arbitrarily exclude would be patrons who seem likely to create serious problems (to say nothing of the freedom to expell them later, if they are admitted and prove to be misfits).

Public funding need not affect selective admissions. But whenever public funding of private schools is considered or given, there is political



funding could increase the demand for private schools, and private schools could respond to that increased demand, or to the enhanced stability that may come with it, by expanding in such a way as to become less rigorously selective.

However, the findings identified earlier do not precisely fit the above-discussed conceptualization. For example, the inflow of public funds is associated with positive perceptions by teachers, but mostly negative perceptions by students and parents. It may be useful to speculate concerning one scenario which appears to reconcile the findings with the conceptualization, and with each other at those junctures where they seem contradictory:

cutives have good reason to view British Columbia's aid to independent schools through rose-colored glasses. Except in the few independent schools in British Columbia that have access to wealthy clients, teachers, administrators, and board members must have experienced an overwhelming sense of relief, once the aid was given, for many of them had faced fiscal crisis after fiscal crisis, year after year. Association executives, dealing mostly with crisis-ridden schools, must have experienced similar relief. We know from the key-informant interviews mentioned earlier that the salaries of reachers in most independent schools were considerably sugmented as a consequence of the sid, and one would anticipate commensurate



improvements in the remuneration of administrators and association executives. The jobs of all these people must now seem immeasurably more sequere. We should not be surprised then, if teachers, administrators, board members, and association executives, flushed by the recent advent of this bright new era, are not yet cognizant of negative and less dramatic consequences of the aid. In fact, the thought of returning to an era of endless financial emergencies may make in difficult for them to recognize negative consequences.

- forward to reasonably attractive remuneration, may be motivated to make a greater investment in collegial relationships, thus creating the enhanced social cohesion that they have reported. They may be unaware that parents, increasingly peripheral to the enterprise, perceive social cohesion as waning markedly.
- yet quite mild and sympathetically administered, they may carry a powerful symbolic message: Pay attention to the province's criteria of school adequacy, or you may lose your funds and suffer public disgrace. There is much evidence, in the key informant interviews, of sensitivity to the need to keep independent schools above reproach in the view of provincial authorities, and ultimately, in the mind of the general public that relies on the Provincial seal of good schoolkeeping. The province need dot wield a heavy band to elicit a response from the independent schools. They are strongly motivated to "keep their houses in order." In contrast, holding their clients is far less problematic in a day when demand far exceeds

available student spaces in most independent schools. Under these conditions, it would be sufprising if the independent schools were not be coming more responsive to the province (while simultaneously insisting that they will not be told what to do) and, as the parents are telling us, less responsive to parents. In effect, the independent schools now have two masters, with two different criteria of good behavior, and under current conditions, displeasing the one master carries more serious consequences than displeasing the other. It is also not surprising, since provincial criteria of school adequacy are largely a reflection of the traditional standards of public schools, that students and parents are besidness to describe their independent schools as less "special."

their school work in Spring, 1980, than in Spring, 1978, may itself be evidence of the sensitivity of teachers to the expectations of provincial officials, since it is clear that the independent schools will be judged in the future in terms of the performance of their students on standardized achievement tests. Teachers seem widely convinced that time on task is presequisite of student learning. This heightened teacher attention to student time on task, something directly evident to students but not to parents, may be one reason why students do not see teacher constituent as declining between 1978 and 1980, whereas parents do. Parents are probably responding to other indications of teacher commitment.

fet high that a large slice of each school's income (except in the fet high that lon schools) now comes from the province, and each family provides an ineignificant share, there is still another reason to be more

responsive to the biggest client of all, and less responsive both to individual parents (who are insignificant contributors, and under present conditions, easily replaced by other parents on the waiting list) and to parents as a total group (since the voice of the province is constant, whereas the sentiments of parents are difficult to register collectively). Furthermore, teachers and administrators, who want better salaries and frings benefits, now compete for their share of the provincial dollar against parents, who want their school costs to be held down, or even reduced. Thus parents and professionals, who once worked together to raise funds, provide contributed services, and balance the budget, are drawn into opposition, in this respect at least.

(f) Now that the school is on a firmer financial footing, parents feel their contributions are needed less, and probably are less appreciated. If the principle of paying people adequately for services becomes ever more firmly established, the independent schools may reach the point where parents' contributed services are actually resented, since they reduce the need for teacher employment and overtime.

reduced (allowing for inflation)-and some of this has occurred—and to the extent that the provincial funds are used to make independent schools more the attractive, independent schools may be expanding to limits of their capacity, and sometimes by increasing their capacity, at the cost of gaining clients whose motivations did not direct them to independent schools in the past. The inflow of these new clients, different in character from the old clients, may introduce dissonance into independent schools, thus



triggering the diminished sense of community (social cohesion) that par-

(h) Teachers, now with two masters (the province and the parent), with increasingly dissonant signals from the latter, and with new and unaccustomed reasons to take their own financial interests increasingly into account, may be torn in different directions and may act inconsistently in consequence. This inconsistency, in turn, may mean that students, finding the consequences of their actions less consistent and predictable, attribute the things that happen to them increasingly to chance and injustice. Partly for this reason, they may become less enthusiastic about their school work and find their schools, classes, and teachers less

We continue to speculate. One way of summarizing all these possible tendencies in keeping with the conceptualization discussed

30000 is to state that, in the wake of the introduction of provincial assistance, the typical British Columbia independent school is ceasing to be a Gemeinschaft, a close-knit community in which people perform because of mutual commitment to special goals and to each other, is moving ever closer to the Gesellschaft, the complex "society" where relationships smong people are segmented and specialized, where goals are divergent, and where people make their various contributions calculatively, in exchange for their own special incentives, teachers for salaries, parents for a more orderly school environment for their children, and children because they have little choics. If these tendencies continue, they may be self-reinforcing. As teachers focus more and more on extrinsic incentives, they



may seem less and less committed to parents and eventually to students, they may be brought into increasing confrontations with parents and school boards, and they may exhibit numerous other attributes often subsumed under the term, "union mentality." Parents, sensing more and more that their contributions and involvement are not only unneeded, but resented, may withdraw to the sidelines, parhaps eventually sniping at their schools in the alienated manner that has been so widely evident in recent years. Students, treated more like patients under treatment than members of a functioning community may perform ever more inauthentically, eventually exhibiting much of the hostility and disintents that has been publicized of late. Eventually, independent schools could lose all the social climate characteristics that once distinguished them from public schools.

This speculative picture may be overdrawn. Some important social climate characteristics have not been considered in this report. Though there is persuasive evidence to indicate that the social climate characteristics that seem typically to distinguish privately supported schools from publicly supported schools are more crucial to school success than are the characteristics that typically distinguish publicly supported schools from privately supported ones, the evidence is not conclusive.

## Implications for Practice

Even though the deleterious effects of public funding, as suggested above, have not been firmly substantiated, we think the findings raise tentative questions about current public policies and policies now under consideration. The does not seem self-evident that partial or full public support is an unmixed blessing for schools, either public or independent. The above-discussed tendencies suggest to us that if independent schools need government-granted fiscal relief, grants directly to parents (e.g., the inflamous vouchers) may be preferable to grants directly to schools, tax credits or deductions may be preferable to grants, and perhaps the best arrangement of all may be to equalize the competitive position of public and independent schools by withholding public funds from both, except, perhaps, for educational allowances to poor parents.

However, many other considerations must enter into the debates that lead to public policy. What seems most desirable educationally is often not feasible politically or economically, and in the United States, at least, complex constitutional issues are raised as well. Since the issues are so complex and our evidence is still inconclusive, a full-blown

discussion of these practical implications had best await another day.

## Implications for Research

Implications for research are much simpler to discern. Without further evidence, it will be impossible to determine which of the shove-discussed interpretations, plus others not mentioned here, are most congruent with actual conditions in independent schools. At least the following steps should be taken:

- haps as many as two hundred, should be conducted soon in British Columbia's independent schools, mainly with teachers, parents, and older students who have been in their current schools since the beginning of the 1977-78 school year, to test many aspects of the competing interpretations of this study's findings against these people's perceptions of what has occurred. If possible, these interviews should be supplemented by extensive observations, and preferably some substantial ethnography.
- (2) Several other types of data should be gathered to test several key components of the competing interpretations. For example, we should acquire precise figures on the growth rates, teacher salary increases, and recent policy conflicts of various independent schools, so we can determine what circumstances are associated with various social climate changes.
- (3) Current data must be analyzed much more extensively, along lines suggested earlier and in other respects. It would be illuminating to discover, for example, whether the most pronounced social climate charges have



occurred in the independent schools in which the provincial Stants represent the highest proportions of operating budgets.

- of 1982, to add a third point in time to the data from 1978 and 1980. By determining which trends were persisent from 1978 to 1980 and from 1980 to 1982, which were shortlived, and which became more intense as time passed, we would be in immeasurably better position to discern the central dynamics by which public funding affects school climates.
- (5) Beyond the enigmas identified here, we need to begin focusing on the factors which are most closely determinative of school social climates. To do this, we must go beyond comparing public and independent schools, studying, instead, the effects on schools, regardless of their affiliative type, of various combinations of policy-influenced variables. Analyses of that nature, for which we have already gathered supplementary data in two United States cities, will soon begin.

## Notes

- 1. In some respects, the politics of the study itself make more interesting reading than the findings. For example, the work has been strenuously opposed by teacher organizations in British Columbia and Washington, D, C., and we have reason to suspect that our difficulties with the National Institute of Education have some relationship to that opposition. In the future, we may report systematically on these matters.
- 2. Donald A. Erickson and Richard L. Nault, Effects of Public Money on Catholic Schools in Western Canada: Exploratory Interviews. A final report to the Spencer Foundation. San Francisco: Center for Research on Private Education, University of San Francisco, 1980.
- 3. E. g., Edward L. McDill, Leo C. Rigsby, and Edmund D. Meyers, Jr., "Educational Climates of High Schools: Their Effects and Sources," American Journal of Sociology 74 (1969): 567-86; James S. Coleman, The Adolescent Society: The Social Life of the Teenager and Its Impact on Education (Glencoe: Free Press, 1961); Michael Rutter et al., Fifteen Thousand Hours: Secondary Schools and Their Effects on Children (Cambridge: Harvard University Press, 1979); George F. Madaus et al., "The Sensitivity of Measures of School Effectiveness," Harvard Educational Review 49 (May, 1979): 207-30.
- 4. Donald A. Erickson, Lloyd MacDonald, and Michael E. Manley-Casimir, Characteristics and Relationships in Public and Independent Schools (San Francisco and Vancouver: Center for Research on Private Education and Educational Research Institute of British Columbia, 1979). Also see shorter version in Donald A. Erickson, "Should All the Nation's Schools Compete for Clients and Support," Phi Delta Kappan, September, 1979, pp. 14-17, 77.
- 5. Item responses to each scale were later recoded to: (a) assure data integrity, and (b) provide for internal consistency in eliciting responses. Missing data were set equivalent to a neutral scale position equidistant from the two ends on the scale. Values above the neutral position were recoded to accommodate a neutral position.

Response to items in the questionnaires administered to teachers and parents were recoded as follows:

Positive Item Ira				Negative Items, Item Transpositions				
Previou	8	New	Previous		New			
Blank	•	<b>3</b> ,	Blank		3			
0 ′	**	3	0		3			
1 -	=	1	1	-	. 5			
2	. 🖛	2	. 2	٠.	ŭ			
3	=	4	· 3	-	2			
` 4	-	5	4	#	1			

Similarly, responses to items in the questionnaires administered to students were recoded as follows:

Positive Items, Item Transpositions

Negative Items, Item Transpositions

Previous	<u></u>	New	•			Previous		New
Blank	#	1.5				Blank		1.5
0	#	1.5		á.		0	=	1.5
1 .	=	1.0			•	1	=	2.0
2 ` ·	<b>=</b> ,	2.0				2 .	=	1.0

- 6. In Survey A, for the purposes of other analyses these items formed two scales, with alphas of .85 and .59, respectively. We have not yet had time to calculate the alpha for the present scale, used for comparisons between Survey A and Survey B.
  - 7. See note 5, above.
- 8. In Survey A, a scale with three items and an alpha of .74 was used for other purposes. One of the items was dropped in Survey B, for the scale used in these comparisons, and we have not yet had time to calculate an alpha for it.
  - 9. 'See note 5, above.
- 10. In Survey, we used a scale of 5 items for other purposes. It had an alpha of .73. The 4-item scale used for these comparisons has not yet had its alpha calculated.
  - 11. See note 5, above. -
- 12. In Survey A, the alpha for this scale was .69. The alpha has not yet been calculated for data from Survey B.
  - 13. See note 5, above.
- 14. In Survey A, the scale used for other purposes had 5 items and an alpha of .97. One of the items was dropped for the scale used for these comparisons, and the new alpha has not yet been calculated.
  - 15. See note 5, above.
  - 16. See note 6, above."

- 17. This scale had 7 items and an alpha of .83 in Survey A, but 5 items were dropped in Survey B, and no new alpha has yet been calculated for the scale use for the Present comparison.
  - 18. See note 5, above .
- 19. In Survey A, this scale had 7 items and an alpha of .87, but 4 items were dropped from Survey B, and a new alpha has not yet been calculated for the scale used for the present comparison.
- 20. In Survey A, this scale contained another item, and had an alpha of .53, but the other item was considered ambiguous and dropped from Survey B, and a new alpha has not yet been calculated for the scale used for the present comparison.
  - 21. See note 5, above.
- 22. In Survey A, this scale was composed of 6 items and had an alpha of .75, but one item was dropped in Survey B because of objections by the B. C. Teachers Federation (they objected to asking students to respond to the item, "Sometimes I think this teacher is lazy"), and a new alpha has not yet been calculated for the scale used for the present comparison.
  - 23. See note 5, above.
- 24. In Survey A, this scale had 6 items and an alpha of .81. One of the items was dropped in Survey B, and a new alpha has not yet been calculated for the scale used for the present comparison.
  - 25. See note 5, above.
- 26. This scale had 5 items in Survey A and an alpha of .65, but 2 items were dropped in Survey B, and a new alpha has not yet been calculated for the scale used for the Prsent comparison.
  - 27. See note 5, above.
- 28. In Survey A, this scale had S items and an alpha of .65. In Survey B (the version used for these comparisons), 2 items were dropped, and a new alpha has not yet been calculated.
  - 29. See note 5, above.
- 30. In Survey A, this scale, with these same items, had an alpha of .61. An alpha has not yet beeen calculated on the basis of data from Survey B.

- 31. See note 5, above,
- 32. In Survey A, this scale had 5 items and an alpha of .72. In Survey B, 3 items were dropped, and a new alpha has not yet been calculated. The 3-item version was used for these comparisons.
- Relationships in Pan E and Private Elementary and Junior High Schools in Merced, California Ed. D. dissertation completed, pending approval, School of Education, University of San Francisco, 1981.
  - '34. See note 4, above.
  - 35. This pattern is reminiscent of findings with respect to "undermanning" in the extra-curricular activities of high schools. See R. G. Barker and P. V. Gump, Big School, Small School: High School Size and Student Behavior (Stanford, CA: Stanford University Press, 1964): and Edwin P. Willems, "Sense of Obligation to High School Activities as Related to School Size and Marginality of Student," Child Development 38 (1967): 1247-60.
    - 36. See note 3, above.