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## ATTITUDES OF STUDENTS IN A "STUDENT-CENTERED" HIGH SCHOOL

**ABSTRACT:** Attitudes of 437 students toward school were studied to test hypothesized superiority for students attending a "student-centered" secondary school in British Columbia. Comparisons were made with students attending two more-conventional schools in comparable socioeconomic areas in B.C. Attitudes were measured by a modification of a 36-item scale developed by Weaver (1959). Scores for students at the "student-centered" school were significantly greater ( $p < .05$ ) than for students at other schools. Demographic variables such as school program and sex were associated with differences in attitude scores but the relative advantage of the "student-centered" school was maintained through all comparisons.

Articulate young people are bringing school personnel rather forcibly to the realization that elements other than subject-matter achievement are important in their school experience. Jackson's (1968) intriguing study of *Life in Classrooms* presents the sobering view that, even among students succeeding in school, few strong positive attitudes about school are in evidence. The adage that "the student who does well in school thinks well of school (p. 71)" received little support when students were asked to report their attitudes toward school. Jackson comments further that:

The proportion of students who claim to dislike school comprise a significant number. If we believe the statistics they would seem to indicate that about one child in five, or six students in every average-sized classroom, feels a sufficient amount of discomfort to complain about it when given the opportunity (p. 54).

Attention to attitudes toward school was also provided by Goodlad (1969) who found in his survey of schools that, "... teachers and students did not appear to be intensely involved in their work. Only occasionally did we encounter a classroom aura of excitement, anticipation, and spontaneity; when we did, it was almost invariably a kindergarten class (p. 60)."

The present study was concerned with attitudes toward various aspects of school held by students attending a senior secondary school that deliberately set about to move toward student-centered procedures. Students in this school were encouraged to make their own decisions about programs, courses and instructors, and attendance. The principal stated his objective as wanting a human, personal atmosphere in which the pupil, freed from the tyranny of the timetable, occupies his rightful place at the centre of the learning process. He had publicly emphasized the importance of developing improved attitudes toward education by saying that the school should be far more concerned with the student's *attitude* toward learning than with his *aptitude* for learning. At the time of the study, the school was in its fourth year of operation during

which time many descriptive accounts of activities had been provided but few controlled studies had been conducted.

Attitude toward school was selected as the criterion in assessing attainment of school objectives. Student attitudes toward several school referents, such as teachers and rules, were indicated by responses to a measure which appears to have merit for other studies of secondary students. An empirical description of these attitudes at this innovative school, labelled as Alpha School in this report, was thus provided. For the purposes of comparison, attitudes of students at two more conventionally organized schools, named Beta and Chi in this report, were also assessed.

The present report is concerned with the application of the attitude measure to a Canadian sample and with comparisons between students at conventional and "student-centered" secondary schools. It was hypothesized that attitudes toward each of the school referents would be more favorable for students from the "student-centered" school than that of students attending conventional schools. Furthermore, it was hypothesized that this advantage would be found among subgroupings formed by considering such demographic variables as intellectual ability, school achievement, age, school program, and sex.

## METHOD

### *Subjects*

Subjects were 437 grade-twelve students attending Alpha ( $n = 144$ ), Beta ( $n = 64$ ), and Chi ( $n = 229$ ) Secondary Schools in British Columbia. Samples from each school consisted of all students at the grade 12 level present at school on the test administration day.

Alpha School is located in a small but rapidly expanding center in B.C. The present population is about 10,000. Local economy is based on forestry and fishing and parental occupations ranged from semi-skilled workers to professional engineers. The school offers grades 11 and 12; the school population was about 350. It operated from a non-directive orientation with students making their own choices and with staff sharing in administrative decisions. A small proportion of its students (5 to 10%) were from outside the district and had characteristics of dissatisfaction with conventional schools or unsuccessful school adjustments prior to their enrolment at Alpha.

Beta School served as one of the comparative schools. It is a combined junior-senior secondary school in a small town of comparable size to Alpha. The occupational level was approximately the same as Alpha and based on forest products. The town was somewhat older than the relatively booming Alpha. The school was organized in a more conventional manner with attendance, dress, and conduct regulations.

The second comparative group, from Chi School, lived in a suburb of a small city (population of about 150,000). Real estate prices, income, and cost-of-living indices were comparable to Alpha. Chi School was the largest of the three included in the present study. Consider-

able effort had been made to democratize procedures within a relatively conventional teacher-centered framework.

### *Attitude Measure*

The semantic distance questionnaire developed by Weaver (1959) was modified for use in this study. It consisted of a total of 36 items directed toward six school referents: teachers, high school, classroom, study period, school rules, and studying. Examples of items are presented in Table 1. Subjects were asked to rate each statement along a five-point scale from "Strongly Agree" to "Strongly Disagree." Responses were recorded by Ss on IBM scoring sheets (IBM 1230 Document No. 511) following an A to E coding described in the questionnaire.

TABLE 1  
Examples of Attitude Questionnaire Items

School Referent	Item Number	Item
Teachers	11 <sup>a</sup>	Some teachers should be in the student's desk and the student should be teaching.
High School	1	I think it's a privilege to attend high school.
Classroom	22 <sup>a</sup>	Classrooms are dull places.
Study Period	26 <sup>a</sup>	Study periods are times to see your friends.
School Rules	25 <sup>a</sup>	Rules make schools seem like a prison.
Study	20	I think I should study more instead of going places.

<sup>a</sup>weightings for these items were reversed.

The measure was developed initially by considering over 2,000 statements submitted by 147 grade twelve students who had been asked to comment on twelve aspects of the educative process. The statements were rated by 20 teachers on a 7-point continuum of "good" to "bad" attitude. Thirty-six items referring to six attitude objects were used by Weaver (1959) and the measure was found to have respectable split-half reliability ( $r = .92$ ,  $N$  not given).

Pilot work was conducted prior to the present study to test the appropriateness of Weaver's measure with Canadian students. The 7-point scale was reduced to 5-points since other investigators (Shaw & Wright, 1967) had found that the extreme two ratings were seldom used. Reliability, as indicated by the Kuder-Richardson split-half method, was  $r = .79$  ( $N = 50$ ). Wording of seven items appeared to need modification due to ambiguity or inappropriate reference for the Canadian group. Instructions were amplified to clarify meaning and to ensure anonymity. Sequence of items was modified to separate the referent clusters and to distribute the negatively-weighted items throughout the measure. Reliability of the revised scale in the present study was  $.90$  ( $N = 437$ ).

Scoring was conducted by assigning scores ranging from five, for "strongly agree," to one, for "strongly disagree," to responses. Weighting for the negative items was reflected. Attitude score for

each subject was the summation of scores for the 36 items. In addition, six subtest scores were computed by summing scores for the six items in each of the subgroupings.

### *Demographic Data*

Sex and age at last birthday were reported by each subject on his response sheet. School program, academic or vocational, was also reported on this sheet. General ability level was approximated by using results of standardized ability tests, usually the Otis Tests of Mental Ability or Henmon-Nelson Tests of Mental Ability, recorded on the students' permanent record cards. For 37 subjects, no test score was available; this group was omitted for that part of the study concerned with general ability. School achievement scores were composites of grades from the previous June and from Easter examinations of the current year.

To provide an exploratory consideration of association between these demographic variables and attitude toward school, two subgroups on each of these variables were formed as indicated in Table 3. Groups for ability, achievement, and age variables were made on the basis of placement above and below the median of scores for the total group. The high ability group consisted of subjects with ratings of A and B according to provincial norms. The older age group included all students of 18 years and over. The high-achievement group consisted of students with A, B, and C+ grade averages.

These demographic variables were considered to compensate, to some degree, for the correlational design used for the study. Since differences in attitudes of students from the three schools could have been due to variables other than orientation of school programs, it was important to consider as many of these variables as was practical. The influence of each of these variables was tested by a series of two-way analyses of variance, using high-school and demographic variable as the factors.

Further extraneous variation was controlled by conducting all testing within a one-month period, April 15 to May 15, and by using the same examiner. The scale was used as a group measure with intact classes except for follow-up testing of small groups of students who had been absent on the initial testing day. Socioeconomic background was controlled, to some degree, by selecting schools from generally comparable areas.

## RESULTS AND DISCUSSION

The hypothesis that students attending a secondary school which had explicitly emphasized a "student-centered" approach would hold more favorable attitudes than would students attending other schools was considered by comparing mean scores reported in Table 2.

Students from the "student-centered" school, Alpha, had the most favorable attitudes toward school. Differences in scores on the Total Scale were tested by one-way analysis of variance. Scores from the three schools were significantly different ( $F = 52.38$ ,  $df = 2,434$ ,

TABLE 2  
Means and Standard Deviations on School Attitude Scale  
of Students from Three Secondary Schools

School Referent	School					
	Alpha (n = 144)		Beta (n = 64)		Chi (n = 229)	
	M	SD	M	SD	M	SD
Teachers	18.2	4.8	11.9	3.7	15.0	4.1
High School	20.9	3.8	16.7	4.8	19.7	4.2
Classroom	20.5	3.8	15.0	4.1	18.1	3.9
Study Period	21.8	3.5	16.6	4.3	19.8	4.0
Rules	18.5	3.9	14.6	4.0	17.8	4.5
Study	17.7	4.0	15.2	4.5	16.7	4.0
Total Scale	117.6	17.5	89.9	19.9	107.0	17.8

$p < .001$ ). Comparisons among the three groups by the Newman-Keuls procedure (Winer, 1962, p. 80) indicated that Alpha School scores were significantly greater than Beta scores ( $p < .001$ ) and Chi scores ( $p < .01$ ). The hypothesized difference in attitudes toward school was supported by consideration of the full-scale scores.

Similarly, as indicated in Table 2, attitudes toward each of the six school referents were most favorable for students from Alpha School. Comparisons of differences among school means by one-way analysis of variance indicated that differences were greatest toward teachers ( $F = 52.05$ ,  $df = 2,434$ ,  $p < .001$ ), classroom ( $F = 46.85$ ,  $df = 2,434$ ,  $p < .001$ ), study periods ( $F = 40.74$ ,  $df = 2,434$ ,  $p < .001$ ), and high school ( $F = 22.87$ ,  $df = 2,434$ ,  $p < .001$ ). For each of these school referents, scores of students from Alpha School were significantly greater ( $p < .05$ ) than scores of both Beta and Chi School students as indicated by Newman-Keuls comparisons. Students at Beta School consistently showed lower attitude scores than students at the other schools considered. Differences among schools on attitudes toward rules ( $F = 19.94$ ,  $df = 2,434$ ,  $p < .001$ ) were statistically significant but Alpha and Chi students scored at similar levels ( $p > .05$ ).

For the total group of students at each school, therefore, more favorable attitudes toward school were reported by students attending Alpha School. Since the possibility existed that the "student-centered" orientation at Alpha was more appropriate for some students than for others, several subgroupings of students were considered (Table 3). Attitude scores of each of these subgroups were computed and compared by two-way analysis of variance (school by subgroup). It will be noted in Table 3 that higher achievers reported more favorable attitudes than did low achievers, academic students more

favorable than vocational, and females more favorable than males. The main effects for achievement, program, and sex were statistically significant ( $p < .01$ ). Students at Alpha School in each of the subgroupings reported more favorable attitudes than their counterparts in the other schools. The main effect for school was statistically significant ( $p < .001$ ) in each of the comparisons. None of the interaction effects of demographic variable by school reached significance.

Attitude scores of students attending the "student-centered" school consistently exceeded those of students attending schools having other orientations. There was no support for a concern that any of the subgroupings of students considered in this study, such as low achieving students, might feel less favorably than comparable students at other schools. Limitations in the research design used in the present study do not permit firm conclusions about causes of the more favorable attitude of Alpha students. However, the association between a student-centered orientation and more favorable student attitudes was found to be strong and consistent. Compared to students from similar backgrounds, the students attending a secondary school which was attempting to provide a human and personal atmosphere reported much more positive feelings about their school experience.

TABLE 3  
Means and Standard Deviations on School Attitude Scale  
for Demographic Subgroups

Variable	Group	School								
		Alpha			Beta			Chi		
		n	M	SD	n	M	SD	n	M	SD
General Ability	High	55	118.1	17.5	32	87.5	19.0	88	106.8	19.2
	Low	79	116.6	16.8	30	93.8	19.4	116	106.0	17.1
Achievement	High	51	125.3	17.2	28	90.1	17.3	81	112.4	17.3
	Low	93	113.4	16.1	36	89.7	21.5	148	104.0	17.3
Age	under 18	71	117.8	18.6	38	87.6	19.4	124	106.7	17.9
	18 +	73	117.4	16.2	25	92.6	20.0	105	107.3	17.6
Program	Academic	96	119.3	17.3	39	90.5	20.4	157	109.2	17.5
	Vocational	48	114.3	17.3	25	88.8	18.6	72	102.3	17.4
Sex	Male	79	113.8	16.4	26	83.0	18.1	118	103.6	17.5
	Female	65	122.2	17.5	38	94.6	19.5	111	110.6	17.3

RESUME: Les attitudes, face à l'école, furent inventoriées chez 437 étudiants. L'hypothèse à vérifier énonçait que les étudiants fréquentant une école secondaire "centrée sur l'étudiant," située en Colombie Britannique, présenteraient des attitudes plus positives. Les auteurs comparèrent les résultats obtenus avec ceux d'étudiants de même origine socio-économique fréquentant deux écoles plus traditionnelles. Une échelle modifiée de 36 item, mis au point par Weaver (1959), servit d'instrument de mesure. Les scores des étudiants fréquentant l'école "centrée sur l'étudiant" furent significativement plus élevés ( $p < .05$ ) que ceux des étudiants fréquentant le milieu scolaire traditionnel. Les variables démographiques, le programme scolaire et le sexe furent associés aux différences notées. Cependant, l'avantage relatif de "l'école centrée sur l'étudiant" est demeuré constant au niveau de toutes les comparaisons.

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#### NOTE TO READERS

The June issue of *Canadian Counsellor* will include glimpses into the future of guidance and counselling in Canada. The editor invites you to send short (1 to 2 pages) descriptions of your views of the future to her by March. (See the editorial on page 2; for her address, see page 1.) One page of the journal includes about 450 to 500 words.