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ABSTRACT

In recent years, commentators on socialization and adolescent development have suggested that secondary schools encourage students' participation in voluntary community service. This study, conducted in 1982-83 on students in volunteer programs and in comparison groups at eight high schools, tested whether such programs positively effect the social development of student volunteers. Through open-ended interviews, pre- and posttests, and a questionnaire, researchers compared volunteer and non-volunteer groups for: (1) students' sense of responsibility and concern for the welfare of others, (2) students' sense of competence in working on collective tasks and in dealing with adults, and (3) students' anticipated participation in adult groups and politics. Also analyzed were social development in problem-solving skills and students' perceived opportunities to take responsibility and make decisions. Findings indicate that while community service modestly increases students' sense of social responsibility and sense of personal competence, it fails to bring special benefits in sense of school responsibility, political efficacy, future affiliation, and future political participation. The conclusion is that developmental opportunities offered in regular school classes may presently have more impact on social development than specific opportunities within community programs. (LP)

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The Effects of High School Community Service Programs  
on Students' Social Development

Fred M. Newmann  
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December, 1983

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We offer a special salute to the eight schools who participated in the study: to the principals for their support of community service programs and for their willingness to participate in this research, to the students who completed the questionnaires, participated in interviews, and hosted our visits to their field placements, and to the program teachers who gave so much of themselves--offering input on the instruments, making arrangements for data collection and providing open access to all aspects of their programs. The program teachers impressed us with their commitment, their talent, their warmth; it was an honor and a pleasure to work with them.

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## I. Problem

For several years commentators on socialization and adolescent development have suggested that secondary schools encourage students to participate in volunteer community service (e.g., National Commission on Resources for Youth, 1974; Newmann, 1975; Conrad and Hedin, 1977). A Gallup poll indicated that 87% of adults favored awarding academic credit for such experiences in high school (Gallup, 1978). The recent report of the Carnegie Foundation for the Advancement of Teaching advocates a community service requirement for high school graduation (Boyer, 1983). According to a 1979 national survey, about 14% of all high schools offered some program of community service, and an average of 119 students per school volunteered about 4.5 hours of time per week serving in nursing homes, day care centers, hospitals, and other human service agencies (National Center for Service Learning, 1979).

Four broad rationales have been offered for community service programs. The personal psychological development rationale claims that service aids the transition from the dependency of childhood to the status of an independent adult, able to care for others, to make decisions on one's own, and to feel a sense of competence functioning in the adult world. The intellectual development rationale emphasizes ways in which community experiences promote the growth of reasoning skills, abstract and hypothetical thought, and the ability to organize diverse sources of information into a constructive problem-solving process. The social development rationale portrays community service as a vehicle for developing a reflective sense of responsibility to the society at large, empathy for the conditions of others, bonding to and participation in social institutions. Finally, the social obligation rationale stresses

the duty of all persons to contribute, not simply to take from their communities--an obligation to help others in need, regardless of possible developmental benefits this may bring to the volunteers. In spite of articulate advocacy for community service programs in high school, there has been little research to document the actual impact of such programs on youth. The first research question, then, is what effects do community service programs have on student volunteers?

Discussions on how to structure experiential education and how it differs from academic learning in classrooms have identified several activities deemed necessary for youth to develop psychologically, intellectually and socially. These experiences, henceforth referred to as "developmental opportunities," include having responsibility to make important decisions, identifying and reflecting upon one's personal values, working closely with adults, facing new and challenging situations, receiving appropriate credit and blame for one's work. Such experiences are commonly assumed to be good for youth, but we have not examined the extent to which such experiences actually do enhance development. The second research question is, what effect do particular developmental opportunities have on student development?

The pioneering study by Conrad and Hedin (1981) was the first to attack these questions by examining several school programs. They studied 27 programs of experiential learning involving more than 1000 students, enrolled in 10 community service programs, 8 career internship programs, 5 community study programs and 4 outdoor adventure education programs. After gathering assessments of psychological, intellectual and social development through pre-post testing, with comparison groups in six of the schools, the study found that students in experiential

programs showed more growth in each of the areas than comparison students, but with considerable variation between schools. It also found that certain developmental opportunities within the programs were associated with growth rates of students. The current study complements the Conrad-Hedin effort by a) studying only community service programs and only those which met criteria that presumably maximize their impact on students; b) using a comparison group in each school; c) gathering data on students' developmental opportunities not only within the program, but also in other school classes, in their family life, in their jobs, and extracurricular activities; d) using data from site visits and student interviews as well as survey data; and e) focusing on students' social development.

Each of the four rationales for community service programs deserves careful research, but we believe that social development requires the most urgent attention. Conventional instruction in civics and government stresses loyalty to the existing social system in the United States, teaching often without critical reflection, that the system has best served the private interests of most individuals. Schools attempt to teach the duty of ritualistic citizen participation in voting, letter writing or volunteer service, but fail to generate active inquiry about the nature of the public good or commitment to working for it. The dominant rationale for education itself is individual aggrandizement and personal fulfillment. We see this ideology as leading to cultural degradation and global suicide, because it neglects human needs for communal (as opposed to individual) fulfillment, it minimizes the significance of interdependence in the larger human community, and it

abdicates collective moral responsibility required for the survival and integrity of human life.

The question is whether public education can effectively challenge dominant messages of unbridled individualism with messages about the excitement and worth of communal participation for public, instead of private, good. Newmann and others have argued for major changes in civic education aimed toward this end, but few schools have responded. It is possible, however, that programs encouraging students to participate in the rendering of public service may enhance student concerns for the welfare of society at large. For these reasons, this study focused primarily on the contribution of community service to students' social development.

## II. Methodology

### A. Sample

A sample of eight public school programs was sought to meet each of the following criteria: program established for a minimum of 4 years, academic credit awarded for participation, minimum of 20 students enrolled in programs, average of at least four hours of on-site community service per week, minimum of two hours per week in a school class connected to the program, a socially diverse student body in the school and the program.

A list of possible schools was generated from a review of literature on community service programs, suggestions from organizations who served as clearinghouses for such programs (e.g. the National Commission on Resources for Youth, the National Center for Service Learning), and from individual educators familiar with such programs. A



letter describing the study and inviting participation was sent to 76 schools known to operate community service programs. Follow-up correspondence and phone calls were placed to non-respondents. Eventually about 20 schools expressed interest in participating, and eight were selected, based on their approximating each of the criteria established for the ideal sample.

Table 1 summarizes characteristics of the eight schools.

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Insert Table 1 about here

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Some failed to meet the criterion of two hours of class per week, and most of the schools had only small percentages of minority students. We could not locate eight schools that met all criteria, and we found not a single inner city high school with a program that approximated these characteristics. While the eight schools chosen have most of these criteria in common, they are diverse in their locations, enrollments, racial composition, socioeconomic compositions, and other program characteristics.

Each school selected a comparison group of about twenty 11th and 12th graders, which ideally would match the school's program group on characteristics such as grade point average, gender distribution, socioeconomic status. Because of logistical difficulties, comparison groups were not formed through the same process in each school, but all attempted to approximate a random sampling of the non-program population. In two schools the comparison group consisted of volunteers who would take the community service program in a subsequent semester. In seven schools, the comparison group was a class in a typical required

course such as 11th grade English or social studies. Table 2 presents characteristics of the program and comparison groups pooled across all schools. In general, similarities and differences in the pooled population reflect the situation in each school.

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Insert Table 2 about here

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Program classes contain about 70% women in contrast to comparison classes where women barely exceed 50%. Program students participate more frequently in non-school activities such as church, clubs, Scouts, volunteer work, but program students are lower in socio-economic status, grade point average, and aspirations for future schooling. Program and comparison students are similar in the percent holding part-time jobs and hours worked per week, aspirations for future jobs, frequency of participation in school activities, and proportion of white and non-white students in class. The significance of apparent differences in student entry characteristics between the two groups should be interpreted with reference to the considerable variation within each group shown by the standard deviations, for example on socio-economic status, job aspirations, hours worked per week and participation. The importance of differences within and between groups on these matters can be clarified, however, only after comparing the groups on the dependent variables of social development.

With program and comparison students combined in each school, we found substantial differences between schools (at the .05 level of probability) on all of the variables in Table 2 except for job aspirations. This is consistent with other recent research which notes

substantial diversity between the student population of different schools, and it alerts us to the possibility that unique school-based responses to students may have more impact on student outcomes than general program characteristics across schools.

#### B. Dependent Variables of Social Development

Social development has been conceptualized in a variety of ways emphasizing for example, movement from egocentric to sociocentric thought (Kohlberg, 1969; Adelson, 1971), development of bonds and attachments to norms and institutions beyond the immediate family (Hirschi, 1969), or increasing participation and sense of efficacy in adult groups and organizations (Coleman, 1974). Because of logistical constraints, this study relied mostly on paper-pencil survey instruments which limited its ability to study students' thought processes and actual social behavior. It assessed development in three main areas: students' sense of responsibility and concern for the welfare of others within their school and in the society at large (e.g., "I feel I should be doing something about problems in our community."); students' sense of competence and efficacy in working on collective tasks and in dealing with adults (e.g., "How often do you feel successful when you are trying to persuade adults to consider your point of view seriously?"); students' anticipated participation in adult groups and politics (e.g., "How often do you think you will contact public officials to give your views on issues?").

Sense of responsibility, competence and participation in community affairs are equated here with development, but in a much broader and less technical sense than represented in scholarly literature. There is

reason to believe that young children score lower on these attitudes than adults (suggesting chronological development), but also that adults vary considerably and that relatively few show consistently high levels in all three areas (suggesting that development is neither universal nor invariant in progression). This research is not grounded in a particular theory about the structure of these attitudes or their chronological evolution. They are considered indices of social development primarily on the judgment that both society and individuals would benefit if all people (children and adults) would attain high positive levels on such attitudes.

The three areas were assessed through six scales, presented in Appendix B, with alpha reliability statistics. Alpha is highly dependent upon the number of items in a scale, and by itself inadequate for determining the extent to which the total set of items actually represents the six distinct, one-dimensional variables we have named. To date, the study has not analyzed the items through more sophisticated procedures such as factor analysis and causal modeling. An examination of correlations between the scale totals (Table 3), shows non-chance correlations among every pair of scales, ranging in magnitude from .33 to .62. That is, a scale will share from a minimum of 10% to a maximum of about 38% of the variance with any of the other five scales.

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Insert Table 3 about here

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Such findings are consistent with the claim that all scales measure something in common that may be considered social development, but that

they represent distinct aspects of development that could not be assessed through one scale alone.

The study also collected data on other dimensions of social development. To measure problem-solving skills, we presented three one-paragraph problems (adapted from Conrad-Hedin, 1981) which asked students to list alternative solutions and to give reasons why they would choose a particular course of action. Open-ended written responses were coded into two scales: cognitive complexity of reasoning, and the degree of empathy shown with the interests of all persons affected by the solution. Although a high degree of reliability was obtained between two coders on both scales, the results showed substantial declines in scale reliabilities between pre and post test and declines in actual scores among many students between pre and post. Results of this nature in both program and comparison groups, along with the observations of researchers administering the instrument suggest that students failed to take this more demanding portion of the post-test seriously. As a result, cognitive complexity and empathy were deleted from analysis of final results. Reliabilities of scales requiring less complex response formats remained stable from pre to post test, and we, therefore, retain confidence in them. The study's failure to provide information about change in students' thought processes, moral reasoning, empathy or conceptions of social reality is an unfortunate shortcoming, but assessing such aspects of development required more resources than were available in this study.

C. Developmental Opportunities and Other Independent Variables

A variety of commentators on experiential learning and social development recommend that adolescents be placed in roles which encourage them to take responsibility, to make their own decisions, to work cooperatively, to examine their values, to deal with conflict, to confront new situations, to contribute to others, etc. An 18-item questionnaire (Appendix A, #8) was created, asking students to report on the extent to which such conditions prevailed in their school classes, family life, extracurricular activities, jobs, and in the classes and fieldwork of community service programs.

Eventually, we shall discuss the impact of such developmental opportunities on social development, but first consider some properties of the developmental opportunities scales. According to student reports, the eighteen experiences on each scale tended to be highly associated with one another (alphas of .88). The data was not subjected to factor analysis, or other methods of determining the degree of independence between opportunities in family, school, job, etc. Table 4, shows that total scale scores correlate with one another. Although student ratings of opportunities in different areas are related, large amounts of unexplained variance suggest that students can independently assess the quality of these different experiences.

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Insert Table 4 about here

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Is it possible that students with particular characteristics are attracted to or provided with more developmental activities than others? Table 5 shows the relationship between socioeconomic status, school

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Insert Table 5 about here

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achievement and pre-test participation, on the one hand, to reported developmental opportunities in each of the five contexts at post test. Nine of the correlations were too small to be considered non-chance at the .10 level, and of the remaining sixteen, only four exceeded .17. This shows that socioeconomic status, hours worked on the job, and non-school participation are not impressively associated with students' tendencies to report developmental opportunities. Grade point average and participation in school activities, however, are positively associated (beyond .20) with developmental opportunities in school classes and extra curricular activities, a finding which one might well expect. The generally low correlations between student entry characteristics (especially SES) and their reports of developmental opportunity help to establish these measures of developmental opportunity as an independent assessment of students' environments rather than as simply a reflection of other student characteristics.

#### D. Data Collection

Surveys were administered to program and comparison students near the beginning and end of the first semester of the 1982-83 academic year. Pre-test surveys included orientation to questionnaire format and demographic data not collected at post-test. Two class periods were

allocated for the pre-test, and one period for the post-test. At pre and post testing times, four program students in each school were interviewed for about twenty minutes to determine their expectations about the program, and their evaluation of its impact. Midway in the semester at a time when program teachers considered their students to be sufficiently oriented and highly involved in program activity, the following additional data were gathered in site visits to each school; interviews (about 30 minutes) with four program and four comparison students about the kinds of developmental opportunities they found in school, family, on the job, extracurricular activities, and community service program; observation of at least one program class, one or two comparison classes, and of four students' at their field placements to determine the amount of developmental activity occurring there; interviews with the program teacher, the school principal and four on-site supervisors to learn more about program operations.

### III. Findings

#### A. Student Expectations and Evaluation of Programs

At the beginning of the semester, in open ended interviews, four program students per school were asked to describe why they enrolled in the community service program, and what they expected to learn. Tape recorded responses were coded into five main themes or anticipated student outcomes.

A dominant theme dealt with social relationships, indicating a desire to work with people, to understand them better, to help them. Several students wanted to learn to work with people different from themselves such as the handicapped, the elderly, or persons from different races and cultures.



A second frequent theme signified a concern for self development or improvement. It was distinguished by an orientation toward self, in statements such as "I need to learn... how to speak up in a group, to be able to talk with strangers, to develop more patience, to become more responsible."

Students also spoke in terms of specific skills and subjects; for example, hoping to learn more about government, how to develop a budget, how to operate a cash register. If skill learning was directly connected to vocational intentions, it was recorded under the vocational theme below.

To learn about the community or to become involved in community activities was mentioned occasionally, and sometimes this was expressed as a desire to get a better sense of the real world (i.e., the world beyond school).

Some students expected their fieldwork to give them insight into a career such as medicine, education, office work, or a more general sense of occupational options. This theme was labeled vocational awareness/experience.

Apart from expectations about the type of education the program would offer, students mentioned other reasons for enrolling, such as doing something novel, different and enjoyable. Occasionally a student mentioned needing the credits or being encouraged to take the program by others.

In the final interviews we asked the same students a general question about how the program affected them, and to name the two or three most important specific things they learned. Table 6 shows

frequency of responses on anticipated and actual program impact. Of the

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Insert Table 6 about here

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five categories, social relationships and self-development rank consistently high in both expected and actual impact.

In both their hopes for the program and their evaluations, students expressed a number of social concerns. These were counted explicitly in two categories of Table 6--"social relationship" and "community/world awareness/involvement." Even within other categories (self-development, learn specific skill, or vocational awareness), however, students indicated interest in other people and the society at large. The interviews were not constructed to assess students' social development directly, but they indicated that students viewed the programs as responding largely to their concerns for productive social relationships and societal welfare, not simply to self-centered interests or career training.

We asked students whether they thought the program would involve hard work, and whether it would present them with any difficult decisions. The frequency of responses in Table 7 shows that only about

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Insert Table 7 about here

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25% of the students anticipated such a demanding experience. Interviews indicated that many students tended to view "hard work" as work they considered unpleasant and compulsory, such as studying difficult school

subjects or intense physical labor. "Difficult decisions" tended to be construed as those requiring resolution of personal value conflicts (e.g., whether to follow your conscience or expectations of peers). Generally community service was seen as free of such burdens.

Students were asked what particular experiences they found most rewarding in their fieldwork, and they frequently mentioned feelings of accomplishment with other people; for example, helping another resolve a problem, being successful in teaching a specific task or subject (math problems, reading lessons) or winning the trust of an uncooperative or difficult child. Personal relationships in fieldwork were highly rewarding, especially experiencing affection, respect and receiving statements of appreciation from children and adults. These themes are consistent with students' initial reasons for participating which often stressed social relationships. In short, students' initial expectations for what their community service work might give them were frequently met.

When asked if they had encountered any difficulties with their fieldwork, the largest complaint had to do with children who were uncooperative, who did not see the volunteer as an authority figure, or who sometimes developed crushes which created some minor problems. A large number of students reported no difficulties in their fieldwork, which might be expected since the teachers tried to select only those fieldwork sites which they thought would provide a useful learning experience. Students who did report difficulties with their site supervisor sometimes attributed difficulties to their own personalities (e.g. shyness) and their own occasional bad days. Even though some students reported serious, justifiable concerns (e.g. a nursing home

placement in which students sat with little to do), many students admitted that their expressed difficulty was really a minor one.

Students were asked if they had any particular experiences in their agencies or the community service class which had a big impact on them or which might make a lasting impression. Several students said they had no such experiences, but many gave examples such as teaching a child to tie his shoes, being scared about being able to help the patients or leading a large group of children; or learning something interesting about family life and parenting. While students did not describe dramatic or traumatic incidents, several felt the overall experience would remain with them always, and some indicated it helped considerably with career decisions. They were overwhelmingly pleased with their community service programs, and described its impact more in general terms such as "giving me an opportunity to teach, try hospital work, look at law enforcement, help some people" rather than in terms of critical events or incidents.

#### B. Student Change in Social Development

##### 1. General levels of change

How much did students change on six measures of social development between September and January? Table 8 reports the pre and post test means and standard deviations, change scores and statistical significance of observed differences. All variables were computed on a

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Insert Table 8 about here

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five-point scale with values ranging from 1-5. The program and

comparison group had similar means at pre-test time, except for the variable of non-school responsibility which might be due to the fact that program students participated in more non-school organized activities at pre-test time. On each variable, variances are similar for program and comparison groups at pre test and post test, but some variables show far more variance than others (e.g. school responsibility vs. future affiliation).

Both program and comparison students increased on school responsibility, future affiliation and future political participation. Comparison students declined on non-school responsibility and social competence, but increased on political efficacy. Program students increased in social competence, remained the same in non-school responsibility and declined on political efficacy. With such small amounts of pre to post change in each group, it may seem unnecessary to investigate whether program group changes exceeded comparison group changes. According to the last column of Table 7, only the variable of social competence shows a possible overall benefit to the program group.

Reasons for such low levels of pre to post change will be discussed later, but first the results will be compared to findings of Conrad and Hedin who concluded that experiential learning programs have a significantly positive impact on students (1981, p. 35) Table 9 shows pre-to-post change scores for program students across the eight schools of the present study and across the ten schools of the Conrad-Hedin

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Insert Table 9 about here

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study that had community service programs. The two studies used different dependent variables, but there were substantial similarities among items in the measures of social responsibility, sense of competence and the prospect of active participation in community life.

In contrast to the present study, Conrad-Hedin found large changes among program students from pre to post on several variables, both in absolute scores and in changes as proportions of scale ranges and pre-test means. The Newmann-Rutter study found larger changes on the variables of future affiliation and political participation (compared to Conrad-Hedin on attitudes toward being active in the community). Even the more robust findings of Conrad-Hedin, however, do not generally exceed 3% of a scale's range or average pre-test score.\* Improving one's score from 1 to 3 items on a 100-item test may be statistically significant (because of sample size), but attaching educational significance to such small changes is problematic. Realizing that dramatic changes are rarely found in any aspects of human behavior over short periods of time, it is difficult to arrive at criteria for educationally significant change. It is important, however, to be aware that the magnitudes represented here are in the range of 1-8.5%, and not, for example, as high as 10%.

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\*Changes can also be described as the average distance moved across the variance of a population; that is, change as a proportion of the standard deviation. In the Newmann-Rutter study changes of this sort ranged from about 0% (non-school responsibility) to 10% (personal competence) to 32% (future affiliation). Similar data were not available from the Conrad-Hedin study, but this method of computing change is not likely to alter the conclusion of "small" amounts of pre-post change.

## 2. Variation between programs

Examination of change scores pooled across all schools obscures potentially important differences between schools in program impact. This is explored first by creating an index of program effectiveness for each school and later through two-way analysis of variance. An index of program effectiveness was computed by comparing the number of students in each program group whose gain score exceeded the median gain of a) program students in all schools; b) comparison students in all schools; c) comparison students in the home school. Table 10 presents the results. The number of students in each cell indicates the

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Insert Table 10 about here

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number of students in the program group (out of 20) whose gain exceeded the median gain score in the other groups. The overall rank indicates where a school's program group falls in a ranking of eight schools (1= highest number of students exceeding median gains).

Whether we compare program performance with the program groups as a whole, the comparison groups as a whole or a comparison group in a home school, we find that programs in some schools consistently seem to have more impact than others. Schools 1, 2, and 4 for example, score higher than schools 5, 6, 7, and 8 on comparisons summed across the six variables. Although a program's rank depends in part upon what variable is considered and what comparison is made, across all six variables (and also on any given variable), a program group's rank among the eight schools tends to be similar across the three comparisons. Such consistencies indicate that programs differ in their impact.

Can we identify any demographic or program characteristics which distinguish programs computed to be most effective overall from the least effective ones? Looking at schools 1, 2, and 4 versus schools 5, 6, and 7, we find that neither demographic characteristics nor aspects of program structure distinguish the most effective from the least effective group. In both groups, schools from affluent and blue collar communities are represented, as are small schools and large schools. Both groups contain regularly scheduled class periods and place students in a variety of service opportunities. Staff observations of the programs found two of the three least effective schools to be less tightly organized than the three most effective programs, but one of the three low schools devoted more class and community time to the program and had greater staff resources than any of the schools. There seemed to be no apparent way in which the three high ranking schools differed consistently from the low ranking ones. It is possible that high ranking programs provide significantly more frequent developmental opportunities, and this will be discussed in the next section.

### 3. Impact of Programs

To what extent might levels of social development at post-test be due to program influences as opposed to other factors? Without a design in which students are randomly assigned to program versus comparison groups, it is difficult to verify causal effects unique to a program. Since randomized assignment to groups is rarely possible in educational



research, we tried to match student groups on variables that might affect post test performance and also statistically to purge post test scores of influences other than the program treatment so that remaining differences between groups could reasonably be attributed to the program intervention. We assumed that the variables likely to be associated with final social development scores (e.g. levels of social participation at pre test, holding a job or socio-economic status) would themselves be reflected in the pre test score for each variable. Therefore, the post test scores needed to be adjusted by controlling for pre test. The standard adjustment is simply to compute a gain score by subtracting pre from post test, and then to ask whether program gains exceed comparison gains.

Table 8 showed no impressive differences in the amount of positive change between program and comparison students, although the variable of social competence indicated a possible benefit to program students. The Conrad-Hedin study found positive gains for program students in ten community service programs on each of their variables in Table 9. These exceeded gains for comparison students in six schools, but only one of those comparison groups was matched with a community service program group. The consistency of the findings in the Conrad-Hedin study is impressive, but must be qualified by three points:

- 1) As discussed above, the magnitude of change is small; the large number of statistically significant comparisons in the Conrad-Hedin study is due to the large sample size (about 300 program students and 300 comparison students) in which small changes can appear as non-chance findings. In contrast, the Newmann-Rutter study had about 150 program and 150 comparison students.

2) Comparison students in the Conrad Hedin study declined from pre to post on each of the variables. Such consistent declines suggest a possible motivation problem in the testing of comparison students that enhances the probability of positive results for program students.

3) To reach conclusions about program impact it is useful to use techniques other than comparison of gain scores. Interpretations of comparisons between two groups in gain scores depends much upon a) group means at pre-test and b) the correlation between pre and post test. If at pre-test the program group mean is much lower than comparison mean, the program gain could exceed the comparison gain simply as a function of regression toward a grand mean. This would give a false indication of program impact. Even if pre test means are equal, the use of gain scores usually makes an unnecessarily crude adjustment of the post test scores by subtracting from them the entire pre test score, rather than only that portion of the post test which is actually linearly related to the pre test. Analysis of variance between groups adjusting for the pre test as a covariate gives a more precise estimate of the post test, purged of its relationship to the pre test. The present study examined program impact through these techniques.\*

Table 11 shows for each group in each school the post test means adjusted for the actual correlation between pre and post test scores, and the probability results of the two-way analysis of variance. The

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Insert Table 11 about here

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\*Conrad-Hedin could not use covariance adjustment because their design lacked comparison groups in each school and had considerably unequal sample sizes between schools.

conclusion of no overall impressive differences between program and comparison students still holds, but probabilities in the bottom half of the table indicate the possibility of an overall group effect on the variables of social competence and non-school social responsibility. In seven of the eight schools, program students exceeded comparison students on sense of social competence. On non-school social responsibility, four schools showed an advantage to program students.\* Inspecting the grand means, we find very small differences between program and comparison students on all other variables, except possibly future political participation in which program students finish lower. In summary, across all schools, program students seem to finish with a higher sense of personal social competence and responsibility to the non-school community, but possibly with a lower expectation of participation in political activity.

On two variables, school responsibility and future political participation, the differences between schools (with program and comparison students combined in each school) are greater than differences between program and comparison students across all schools. This indicates that in some schools students in general show more caring and interest in the school than in others, and that in some schools, interest in politics is higher for all students than in other schools. Such findings are consistent with emerging research on differences in school climate.

Finally, Table 11 indicates an interaction effect for three variables, suggesting that the effect of being in the program varies

\*This possible advantage to program students was not apparent with the use of raw gain scores.

considerably depending upon the school. On non-school responsibility, for example, in schools 2, 4 and 8 the difference between program and comparison students is about +.30, but in school 7 it is +.12, school 3, -.06, school 5, -.17. Similarly on school responsibility and anticipated political participation, differences between program and comparison students vary, depending upon the school. Interaction findings further underscore the difficulty of drawing conclusions about program effects across all schools, but also support conclusions of Conrad and Hedin that programs can have effects and that schools differ in the magnitude of program effects.

#### C. Profile of Developmental Opportunities

Before discussing the impact of developmental opportunities on social development, we describe the profiles of opportunities that students report. Students indicated how often they found 18 developmental opportunities to occur in school classes, family life, extra curricular activities, on the job, and in their community service program. Do comparison students differ from program students in the general levels of developmental opportunity they report? Table 12 shows that program students tend to report slightly more developmental activity

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Insert Table 12 about here

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in each of the four contexts they have in common with comparison students. For both groups, however, some contexts such as family and job are perceived to offer more frequent developmental opportunities than

others such as school classes and extracurricular activities. Program students find more developmental opportunities in their programs than in any other context, and they emphasized this consistently in the interviews.

During mid-point interviews, students were asked to compare their fieldwork experience with other school classes, extracurricular activities, job and family life. While it was often difficult for students to compare fieldwork with extracurricular activities, job and family life, several distinctions were mentioned between fieldwork and other school classes.

The most frequently mentioned distinction dealt with "treating students more as adults," that is, being allowed to use their own judgment, being given more responsibility, having more freedom (they could get a drink without asking permission, there was less structure, etc.), receiving more respect and being treated as responsible persons. Role reversal was frequently mentioned as another form of adult status for these students. Since many of the field placements were in a tutoring or teaching capacity, they could consider themselves teacher instead of pupil.

Another distinction made by several students emphasized fieldwork as an active learning experience versus school classes as passive learning. They talked about learning by doing or observation instead of listening (lectures) or reading, and this generally novel learning style appealed to many of the students.

Fieldwork was also distinguished from school classes by the absence of academic work such as taking tests, homework assignments, etc. Because many programs did not require these typical daily requirements

of schooling, several students found fieldwork "easier" than school classes. The students were asked if they valued their fieldwork experiences more, less or about the same as their school classes. Those who discussed this question, valued fieldwork more than their school classes. Students' were overwhelmingly enthusiastic and happy with their fieldwork experiences, and by and large had more favorable comments about them compared to school classes.

Students were also asked to compare fieldwork with their extracurricular activities and/or job. This was a difficult comparison for most who either could not compare these experiences or gave weak comparisons (for example, I work with kids in one and adults in another). One theme repeated in several responses echoed the thoughts on fieldwork versus school classes; namely, having more responsibility in fieldwork and being treated more like an adult than in extracurricular activities or even jobs. Finally, students were asked to compare fieldwork with family experiences. Because they found these experiences so dissimilar, they had difficulty articulating any points of comparison. The majority valued family experiences more than fieldwork, but those who did make comparisons found that in fieldwork they were treated more as an adult and had more responsibility. In general, the open-ended comparisons between fieldwork and other contexts such as school classes, extracurricular activities, jobs, and families were reflected in scale totals of the survey data.

To what extent do individual schools differ in the degree to which their classes and extracurricular activities offer developmental opportunity, and to what extent do the community service programs differ

between schools in the developmental opportunities offered? Table 13 shows that schools tend to differ in each of the three areas,

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Insert Table 13 about here

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although the differences between schools on developmental opportunities in programs can be considered more of a "chance" difference than the school differences on opportunities in classes and extracurricular activities.

Differences between schools were explored further to see whether developmental program opportunities for schools ranked high on effectiveness exceeded reported opportunities in low ranking schools. Comparing the three highest and three lowest schools on effectiveness, Table 14 shows the "effective" programs to have a higher score on developmental opportunities, but the difference between the two groups is slight.\* We conclude that developmental activities within the program as reported by students may offer some clues as to systematic differences between high and low ranking programs, but the association between a program's developmental opportunities and the dependent variables of social development is rather weak, as will be demonstrated further below.

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\*If the rankings of effectiveness are based only on the two variables in which programs as a whole made the greatest difference (i.e., social competence and non-school responsibility), the difference in developmental opportunities between high ranking versus low ranking programs is .24 rather than the .13 reported in Table 14.

#### D. Influences on Social Development

We turn now to quantitative explanation of social development in the entire sample, with program and comparison students pooled over eight schools. A major purpose of the study was to determine the extent to which certain developmental opportunities such as having responsibility to make decisions, working hard, or questioning one's values tend to be associated with student outcomes on the six dependent variables. We wanted to determine the extent to which such reported opportunities tended to predict students' post test scores on developmental variables, after controlling for the possible influences of the pre test score, family socioeconomic status, grade point average, and level of social participation at pre test in job, non-school and school activities. To estimate this, the post test score for each dependent variable was regressed on these independent variables in a stepwise fashion in four blocks (each block adds the indicated variables to those in the previous block): 1) pre test; 2) SES and GPA; 3) job hours, nonschool participation, school participation, 4) developmental opportunities in field placement, family, extracurricular activities, job, school classes, community service class. In the final regression equation including all variables, the coefficients represent the independent contribution of each variable after its shared influence with other variables has been deleted. A summary of the analysis is presented in Table 15.

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Insert Table 15 about here

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The pre test is a powerful predictor on all variables, accounting for almost all of the variance ( $r^2$ ) explained in the regression. Adding socioeconomic status and GPA produced almost no gain in variance explained, and adding participation in jobs and other activities also produced little change in  $r^2$  (except for slight effects on non school and school responsibility). When developmental opportunities were included, they increased the variance explained on each of the six variables, from 2% on future political participation to 7% on non-school responsibility and political efficacy. The independent contribution of developmental opportunities is small to be sure, but their addition to variance explained for every dependent variable is noteworthy.\*

The bottom half of Table 15 offers more precise indications of the strength of the independent variables.\*\* Although the impact of any single variable is small, the findings shed light on a variety of claims related to experiential learning. Neither socioeconomic status, job hours, developmental opportunities in extracurricular activities or in the community service school classes have any predictive power on any of the measures of social development.

In contrast, developmental opportunities in school classes are positively related to each of the six variables. Apparently classroom

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\*The change in  $r^2$  from block three to block four was statistically significant beyond the .01 level for each of the six equations.

\*\*The regression coefficient can be interpreted as the amount of change in the dependent variable associated with a one unit change in the independent variable. The meaning of the regression coefficient for the pre test in column one is given by the statement, "on average, if a student's score on the pre test were to increase by one point, we would expect his/her score on the post test measure of non-school responsibility to increase by .47 of a point." All variables consisted of 5 points or "units" except for SES, GPA, and job hours.

environments, that provide opportunities for challenge, student decision-making, questioning of values, mutual respect, and other developmental opportunities, have positive impact on sense of social responsibility, competence and participation-independent of socioeconomic status, prior achievement in school or developmental opportunities found elsewhere (e.g. in family or on the job). While classroom teachers may not focus explicitly on students' social development, this data suggests that they may have more impact on it than may be assumed. Although the effect of community service programs in general is limited to the variables of social competence and non-school participation, developmental opportunities in all school classes affect each of the six dimensions of social development.

Other coefficients in Table 15 deserve notice. Developmental opportunities in the family are positively related to sense of social competence (but only to that variable), and their impact is greater than developmental opportunities in school or on the job. A number of variables contribute to sense of responsibility within school. Community service opportunities may depress school responsibility slightly, (perhaps because students become more interested in agencies beyond school), but other forms of non-school participation at pre test are positively associated with sense of school and non-school responsibility. Non-school participation at pre test, has positive effects on social responsibility and affiliation in general, but apparently no impact on future political participation or political efficacy.

These findings can be compared, with some qualification, to the findings of Conrad-Hedin who reported on the influence of program features (length, seminar, intensity), student characteristics (age, GPA, SES), and characteristics of the students' experience (similar to our developmental opportunities) in predicting student growth in social, personal and intellectual development. Pooling data from all of their programs (ten involved community service, but seventeen involved other forms of experiential learning), they found that program features explained 5%, student characteristics (primarily age) 3%, and students' program experiences 15-20% of the variance in student growth on social, personal and intellectual development combined.

Our findings agree with Conrad-Hedin on the impact of student entry characteristics. Student SES and GPA considered independent of pre test scores had virtually no impact on any of the six post test measures of social development. It is encouraging to learn that social development is independent of these characteristics. Our findings diverge from Conrad-Hedin on the impact of specific developmental opportunities in the community service program. They found about thirteen items (e.g. discussed experiences with teachers, did things myself instead of observing, adults did not criticize me or my work, had adult responsibilities) to explain 15-20% of the variance in overall social, intellectual and psychological growth.\* We found (Table 16) that the 18 opportunities added almost nothing to explanations of variance in social development, and that they showed no meaningful pattern across

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\*In contrast to Conrad-Hedin, our findings are restricted to community service programs, our dependent variables consist of six measures of social development kept separate rather than pooled; we use post test scores (rather than gain scores) controlling for the influence of the pre test; and for independent variables we used students' SES, GPA, and individual program opportunities on 18 items (structural program features and student age were not included because of lack of variance).

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Insert Table 16 about here

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the six dependent variables. Only 25 of a possible 216 coefficients were significant beyond the .10 level, seven of these had negative relationships contrary to reasonable expectations, and no dependent variable claimed more than four (of eighteen) significant coefficients. The low impact of particular opportunities within programs could be expected from results of Table 15 which showed more impact of opportunities outside of the program than within.

Recall that Conrad and Hedin estimated the role of developmental opportunities in a diverse set of experiential programs (outdoor adventure, career internship, community study as well as community service), while ours was confined to community service programs meeting common criteria. Students in the Conrad-Hedin sample had far greater variance in program experiences which would enhance explained variance in student growth. Without further analysis of the Conrad-Hedin data, however, the two studies' findings on the impact of developmental opportunities cannot be meaningfully compared, because Conrad-Hedin did not report regression coefficients of the impact of particular developmental opportunities on social development. We conclude, therefore, that developmental opportunities within exemplary community service programs have almost no impact on students' social development. This may be due in part to the limited range of variance in the opportunities of those programs studied. As Tables 12 and 13 indicated, students perceived their programs to offer high levels of opportunities (on a five point scale, the overall mean was 3.88 with a standard

deviation of .63). A greater range of opportunities within programs could have shown greater statistical impact on social development.

We remain hard pressed to account for students' social development. Combining SES, GPA, prior levels of social participation, developmental opportunities in school classes, family, extracurricular activities, job, or community service programs adds only a few percentage points to variance explained beyond the powerful pre-test score, and the coefficients reveal no consistently powerful variables.

#### Summary

In the combined population of comparison and program students very little change was found on most of the social development variables. Controlling for covariation with the pre test, program students exceeded comparison students slightly on sense of non-school social responsibility and social competence. On the variables of school responsibility and future political participation, differences between schools were more significant than differences between program and comparison students across all schools. On the variables of non-school responsibility, school responsibility and future political participation, the impact of the community service program varied between schools. The pattern of developmental opportunities among school classes, family, job, extracurricular activities, and community service program opportunities showed school classes ranked consistently lowest and the programs ranked consistently highest. Developmental opportunities in programs, however, had virtually no independent impact on the dependent variables. In contrast, developmental opportunities in

school classes were significantly associated with each of the dependent variables, independent of eleven other variables in the regression analysis. School classes were perceived as offering the fewest opportunities, but the statistical impact of those opportunities exceeded the impact of developmental opportunities in the other contexts. Nevertheless, most of the variance in social development remained unexplained. Students expressed consistent enthusiasm for the programs, praising their contributions to personal growth in communication skills, patience, taking responsibility, and in facilitating constructive relationships with others (e.g., children, adult supervisors, patients).

#### IV. Conclusions

Community service programs seem to increase students' sense of non-school social responsibility and their sense of personal competence in a modest way (about 1.5% of a five point scale), but they fail to bring special benefits on sense of school responsibility, political efficacy, future affiliation and future political participation. Furthermore, specific developmental opportunities within programs generally fail to account for those changes that do accrue to individual students. In contrast, student participation levels at entry and developmental opportunities outside of the programs, especially in other school classes, do have some impact on the six social development variables. Considering the programs' commitment to student involvement in community service and the fact that students perceive the programs as offering the highest levels of developmental opportunities compared to

school, family, job, and extracurricular activities, how can we explain these findings of low program impact?

It is possible, of course, that deficiencies in the research methodology have led to underestimates of program student change in social development and underestimates of the impact of the programs' developmental opportunities. Had the survey instrument included other scales of social maturity, perhaps the findings would have been more robust. The limitations of survey methodology itself are significant. More extensive interviewing and observation of students may have given data more sensitive to social development outcomes and influences upon them. Because of the care taken in the design of the study (e.g., basing the instruments on previous studies, pilot testing, comparison groups in each school) and the fact that its findings of small degrees of student change are consistent with previous research, the findings should not be dismissed on methodological grounds. We must try to explain them.\*

Lack of program impact in sense of school responsibility, political efficacy, future political participation, and future affiliation can be explained by the fact that programs did not focus on these aspects of social development. Student placements occurred outside of school, and much of the program's attractiveness to students consisted of being released from school responsibilities to take part in the community at large. (Recall that in Table 15, developmental opportunities in

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\*Several claims in this section about program emphases or omissions are based on observations and interviews of teachers and students by the 4-person research team. They represent the team's general conclusions from several sources of data.

fieldwork showed a negative impact on school responsibility). Since students were not engaged in political action or political organizations, nor did community service classes devote substantial study to the process of political and social change, one would not expect growth in political efficacy or anticipated participation. While the programs emphasized service in the community at large, they did not dwell upon the need for organizational affiliation as a way to discharge service. Instead, programs conveyed a more individualistic conception of service--each person could find a way to volunteer to fit his/her interests; this would not necessarily require active participation in churches, clubs, unions, or civic associations. Students' primary motivations for entering the programs were self-development, or entering into meaningful relationships with others. Although they expressed concerns for helping others on an individual basis, they did not relate these concerns to broader conceptions of the public good or social welfare.

Teachers' goals for students were similarly oriented toward students' personal psychological development--building competence with adults, exposing them to career opportunities, helping them feel needed and appreciated by others, facilitating a "human" experience unconstrained by the abstract trappings of academic school work, teaching punctuality and responsibility on the job. Because program activities and the goals of both students and teachers alike aimed largely toward self-development, with little emphasis upon school responsibilities, political participation, or social affiliation, one could reasonably expect the findings that emerged--programs would show



some impact on sense of responsibility outside of school and sense of personal competence in dealing with different types of social interactions (social competence), but little or no impact on other dimensions of social development.

Through its survey of developmental opportunities in school classes, family, job, extracurricular activities, and the community service program, the study attempted to identify influences on social development in both program and comparison students. In spite of the enthusiasm with which these opportunities are advocated by proponents of experiential education, we found that their reported frequency has only minor impact on students' social development. One of the study's most interesting findings is the fact that school classes rank the lowest in developmental opportunities (confirming the claims of experiential educators), but at the same time such opportunities in school classes have more impact on students' social development than opportunities outside of school (except that family opportunities have slightly more impact on social competence). This might be explained by the greater intensity of school classes. If making important decisions, or expressing personal values occurs "almost always" or "almost never" in school classes, it is likely to make a bigger difference in students' lives by virtue of the fact that students spend so much more time in school classes (about 30 hours per week), than in other activities. Even if something occurs "often" in a community service program or on the job, it can be a relatively rare experience.

Although none of the eighteen developmental opportunities is worded to convey a message of social responsibility, their occurrence in school

classes tends to promote a sense of responsibility, competence and anticipated participation in social life. These findings may bring good news for social education; namely, that teachers in all subjects can promote the social development of students without necessarily addressing it explicitly. They need only provide students with opportunities for problem-solving, taking responsibility, fair feedback on the quality of their work, discussion of value questions, etc. Deweyian educators have told us for years that such practices can bring both intellectual growth and social development.

This conclusion must be qualified. The amount that developmental opportunities contribute to scores on social development is small, and we have not found particular items (among the set of 18) that consistently contribute to development on several scales. The impact of particular developmental opportunities within programs is also weak. By using total scale scores of developmental opportunities in each of the four contexts (school classes, family, job, extracurricular activities, community service program) for all students, we can explain more variance on most of the dependent variables than by using the eighteen specific program opportunities for program students. In the analysis using all students and developmental opportunities beyond the programs (Table 15), opportunities in the community service class emerged with a significant coefficient only once among the six variables of development. On the two variables where program membership did have some overall impact, specific opportunities within the program added only 1% to explained variance in non-school responsibility and only 6% to variance explained in social competence (Table 16). Each of these variables, however, claimed a different set of five opportunities (among 18) as having significant impact upon it.

The statistical analyses permit only the most modest claims regarding the impact of community service programs or the impact of developmental opportunities within programs on students' social development. Such findings do not imply, however, that programs have no positive effects on students.

The persistent enthusiasm that students and staff express for these programs is probably grounded in sources other than programs' contributions to social development as we have conceptualized it. Several of the dependent variables we used included a sense of responsibility to and participation in collective entities--school, social organizations, the community at large. Observations, interviews, and some of the survey data indicated that students maintained relatively low levels of social consciousness in the sense of collective identity. Instead their social concerns tended to focus on the satisfaction of individual helping relationships, the sense of self-development that emerged in those relationships, and the pleasure of working in settings less alienating than typical school classes (i.e., settings in which they were respected as adult co-workers rather than as children requiring much custodial supervision).

Our scale of social competence detected benefits that programs may bring to self-esteem. Program students increased more than comparison students in their sense of competence on such tasks as communicating effectively to groups, starting conversations with strangers, persuading adults to take their views seriously, making plans and organizing group activity. This is consistent with Conrad-Hedin findings on program student growth in self-esteem and sense of personal competence. It also

reflects students' reasons for enrolling in the program and their conception of its impact (Table 6). Feelings of competence, efficacy, or personal growth are not necessarily equivalent to feelings of social responsibility and participation, but such outcomes are probably critical to further learning and to attitudes more directly connected to social development. For this reason, the impact of programs on sense of personal growth must be recognized as a positive outcome.

A second major source of satisfaction is summarized by the phrase meaningful work. Student field placements usually shared at least three characteristics which distinguished them from most school classes: a) the purpose of work was to meet some real human need or to fulfill a concrete function (as in office work) with a clear goal more important than the education of the student volunteer; b) as students worked they could perceive the effects of their actions on people--children, nursing home residents, hospital patients--who they experienced face-to-face; c) adult supervisors focused on the competence of student volunteers (as would be expected in adult relationships), not upon their custodial care. For reasons such as these, work at field sites could be considered worthwhile and important. In contrast to schoolwork in which students toil alone in their studies to improve their individual minds, work at the field sites facilitates students' connections with the larger human community. Community service work offers students the critical benefit of engagement in work they consider meaningful.

The study has shown that community service programs contribute to students' sense of social competence and responsibility to the community beyond school; that programs differ considerably in their impact on

students; that developmental opportunities in regular school classes have more impact on social development than specific opportunities within community service programs; and that student and staff enthusiasm for such programs can be traced to the increased sense of personal growth and the opportunity to engage in meaningful work that programs offer. Future research on the programs' effects on students' social thought and more precise assessment of developmental opportunities is needed.

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Table 1

Characteristics of the Eight Schools

|  | <u>School 1</u>            |                        |                           |                                |                        |                          |                        |                                 |
|--|----------------------------|------------------------|---------------------------|--------------------------------|------------------------|--------------------------|------------------------|---------------------------------|
|  | 1<br>midwest<br>small city | 2<br>midwest<br>suburb | 3<br>mid-Atlantic<br>city | 4<br>New England<br>rural town | 5<br>midwest<br>suburb | 6<br>eastern<br>township | 7<br>midwest<br>suburb | 8<br>eastern seaboard<br>suburb |
| 1) location  |                            |                        |                           |                                |                        |                          |                        |                                 |
| 2) enrollment (grades 9-12)                                | 1425                       | 1716                   | 2153 <sup>1</sup>         | 219                            | 2027                   | 1273                     | 1989                   | 1800                            |
| 3) % minority  | 1                          | 5                      | 2                         | 2                              | 25                     | 15                       | 3                      | 96                              |
| 4) % in college prep curric                                | 61                         | 56                     | 38                        | 48                             | 50                     | 75                       | 60                     | 10                              |
| 5) enrollment in community<br>service program, Semester 1  | 28                         | 56                     | 76                        | 22                             | 75                     | 55                       | 80                     | 175                             |
| 6) years program has existed<br>at the school              | 8                          | 7                      | 7                         | 14                             | 10                     | 11                       | 8                      | 4                               |
| 7) student hours on-site<br>per week                       | 6                          | 6 <sup>2</sup>         | 4                         | 3                              | 8                      | 10                       | 6                      | 6                               |
| 8) student hours in<br>community service class<br>per week | 4                          | 10 <sup>2</sup>        | 1                         | 1                              | 2                      | 9                        | 1.5                    | NA <sup>3</sup>                 |

<sup>1</sup>grades 10-12 only

<sup>2</sup>10-12 times per semester

<sup>3</sup>student seminars conducted twice per semester

43.

Table 2  
 Characteristics of the Student Sample at Pre-Test

| Variable <sup>1</sup>                       |             | Comparison Group<br>N=156 | Program Group<br>N=158 | F Prob <sup>2</sup> |
|---|-------------|---------------------------|------------------------|---------------------|
| 1. Gender                                   | % Male      | 54                        | 29                     | .000                |
|   | % Female    | 46                        | 71                     |                     |
| 2. Race                                     | % White     | 85                        | 81                     | .470                |
|   | % Non-white | 15                        | 17                     |                     |
| 3. Part-Time Job %                          |             | 56                        | 54                     | .751                |
| 4. Socioeconomic Index                      | mean        | 51.15                     | 42.61                  | .001                |
|   | s.d.        | 23.73                     | 26.71                  |                     |
| 5. Grade Point Average                      | mean        | 5.60                      | 5.34                   | .085                |
|   | s.d.        | 1.32                      | 1.24                   |                     |
| 6. Job Hours Per Week<br>(of those working) | mean        | 19.32                     | 19.00                  | .905                |
|   | s.d.        | 10.26                     | 10.01                  |                     |
| 7. Schooling Aspirations                    | mean        | 3.56                      | 3.35                   | .051                |
|   | s.d.        | .97                       | 1.01                   |                     |
| 8. Job Aspirations                          | mean        | 6.01                      | 6.10                   | .719                |
|   | s.d.        | 2.95                      | 2.85                   |                     |
| 9. School Participation                     | mean        | 1.56                      | 1.49                   | .278                |
|   | s.d.        | .57                       | .55                    |                     |
| 10. Non-School Participation                | mean        | 1.32                      | 1.57                   | .001                |
|   | s.d.        | .56                       | .72                    |                     |

<sup>1</sup>See Appendix A for descriptions of variables 3-10.

<sup>2</sup>Results of analysis of variance. Prob=the probability that observed differences between program and comparison students are due to sampling error rather than to real differences in the population.



Table 3

Correlations Among Scale Totals on Six Variables of Social Development (post-test)\*

|  | 1                            | 2                        | 3                    | 4                     | 5                     | 6                                    |
|--|------------------------------|--------------------------|----------------------|-----------------------|-----------------------|--------------------------------------|
|  | Non-School<br>Responsibility | School<br>Responsibility | Social<br>Competence | Political<br>Efficacy | Future<br>Affiliation | Future<br>Political<br>Participation |
| 1 Non-School<br>Responsibility         | 1.00                         |                          |                      |                       |                       |                                      |
| 2 School<br>Responsibility             | .46                          | 1.00                     |                      |                       |                       |                                      |
| 3 Social<br>Competence                 | .36                          | .33                      | 1.00                 |                       |                       |                                      |
| 4 Political<br>Efficacy                | .43                          | .34                      | .39                  | 1.00                  |                       |                                      |
| 5 Future<br>Affiliation                | .40                          | .52                      | .35                  | .40                   | 1.00                  |                                      |
| 6 Future<br>Political<br>Participation | .38                          | .41                      | .47                  | .44                   | .62                   | 1.00                                 |

\*For all coefficients,  $p < .001$ .

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Table 4

Correlations Among Developmental Opportunity Scale  
Scores for All Students Participating in  
Extracurricular Activities and Jobs (N=144)

|                 | School<br>Classes | Family | Extracurricular | Job  |
|-----------------|-------------------|--------|-----------------|------|
| School Classes  | 1.00              | .67    | .61             | .50  |
| Family          |                   | 1.00   | .55             | .57  |
| Extracurricular |                   |        | 1.00            | .48  |
| Job             |                   |        |                 | 1.00 |

Table 5  
 Correlations (where  $p < .10$ ) of Student Entry Characteristics  
 with Student Reports of Developmental Opportunities

| Entry Variable              | School<br>Classes <sup>1</sup> | Family <sup>1</sup> | Job <sup>2</sup> | Extra-<br>curricular <sup>3</sup> | Community Service<br>Program <sup>4</sup> |
|-----------------------------|--------------------------------|---------------------|------------------|-----------------------------------|---|
| GPA                         | .28                            | .16                 |                  | .20                               |   |
| SES                         |                                |                     | -.10             |                                   |   |
| JOB HRS                     |                                | -.10                | .13              |                                   |   |
| School<br>Participation     | .20                            | .12                 | .14              | .25                               | .12                                       |
| Non-school<br>Participation | .17                            | .14                 | .14              | .17                               | .11                                       |

<sup>1</sup>All students, N=314

<sup>2</sup>Students with jobs, N=200

<sup>3</sup>Students participating in extracurricular  
activities only, N=210

<sup>4</sup>Program students only, N=155

Table 6

Frequency of Student Expectations and Perceived  
Personal Impact of Community Service Program (N=32)\*

| Area   | PRE INTERVIEW          |                                    | POST INTERVIEW                 |                                       |
|--|------------------------|------------------------------------|--------------------------------|---------------------------------------|
|  | A<br>Hope to<br>Learn? | B<br>Expect<br>Specific<br>Skills? | C<br>Program<br>Effects on You | D<br>Most Important<br>Things Learned |
| 1. Social Relationship                       | 8                      | 11                                 | 14                             | 27                                    |
| 2. Self-development                          | 11                     | 11                                 | 12                             | 18                                    |
| 3. Learn specific subject or skill           | 4                      | 5                                  | 5                              | 7                                     |
| 4. Community/world awareness/<br>involvement | 7                      | 1                                  | 8                              | 4                                     |
| 5. Vocational awareness/experience           | 6                      | 1                                  | 9                              | 2                                     |

\*Totals do not add to 32, because multiple responses were possible from each student.

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Table 7

Students' Expectations of Program Difficulty:  
Frequency of Interview Responses at Pretest (N=32)

|               | A<br>Hard<br>Work? | B<br>Difficult<br>Decisions? |
|---------------|--------------------|------------------------------|
| 1. Yes        | 6                  | 8                            |
| 2. No         | 17                 | 12                           |
| 3. Some/maybe | 7                  | 11                           |
| 4. Don't know | 2                  | 1                            |

A. Examples of Students' Elaboration

1. Difficult to communicate with others; difficult to work with mentally retarded; the written requirements
2. Like being with kids/people; no written requirements (homework, tests)
3. It could try your patience; it's difficult
4. --

B. Examples of Students' Elaboration

1. When working with mentally retarded; dealing with personal problems
2. (none stated)
3. What to allow children to do; disciplining
4. --

Table 8

Pre - Post Changes for Program and Comparison Groups Across Eight Schools on Social Development

| Variable                          |       | Pre  |     | Post |     | mean change | p <sup>1</sup><br>mean change | p <sup>2</sup><br>difference in<br>mean changes |
|-----------------------------------|-------|------|-----|------|-----|-------------|-------------------------------|---|
|                                   |       | mean | sd  | mean | sd  |             |                               |   |
| Non-School<br>Responsibility      | prog. | 3.61 | .53 | 3.61 | .50 | .00         | .905                          | .591  |
|                                   | comp. | 3.52 | .48 | 3.49 | .53 | -.03        | .410                          |   |
| School<br>Responsibility          | prog. | 3.15 | .89 | 3.18 | .85 | +.02        | .667                          | .738  |
|                                   | comp. | 3.14 | .82 | 3.20 | .84 | +.05        | .400                          |   |
| Social<br>Competence              | prog. | 3.42 | .62 | 3.48 | .69 | +.07        | .103                          | .130  |
|                                   | comp. | 3.44 | .60 | 3.42 | .64 | -.02        | .603                          |   |
| Political<br>Efficacy             | prog. | 3.50 | .63 | 3.47 | .68 | -.03        | .607                          | .459  |
|                                   | comp. | 3.49 | .64 | 3.51 | .61 | +.02        | .594                          |   |
| Future Affiliation                | prog. | 1.71 | .38 | 1.83 | .37 | +.12        | .000                          | .271  |
|                                   | comp. | 1.68 | .36 | 1.84 | .37 | +.16        | .000                          |   |
| Future Political<br>Participation | prog. | 2.39 | .84 | 2.52 | .81 | +.13        | .025                          | .241  |
|                                   | comp. | 2.37 | .83 | 2.58 | .78 | +.21        | .000                          |   |

1. P<sup>1</sup> = probability that change from pre to post is zero rather than the observed value.

2. P<sup>2</sup> = probability that the difference in change scores is zero rather than the observed value.

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Table 9

## Pre - Post Change Scores of Program Students

Newmann-Rutter Study

| Variable                          | scale<br>range | $\bar{\Delta X}^*$ | $\frac{\bar{\Delta X}}{\text{scale range}}$<br>% | $\frac{\bar{\Delta X}}{\bar{X}}$<br>pre test<br>% |
|-----------------------------------|----------------|--------------------|--|---|
| non-school<br>responsibility      | 1-5            | .00                | 0.0  | 0.0   |
| school<br>responsibility          | 1-5            | +.02               | 0.4  | 0.6   |
| social competence<br>competence   | 1-5            | +.07               | 1.4  | 2.0   |
| political<br>efficacy             | 1-5            | -.03               | 0.6  | .1  |
| future<br>affiliation             | 1-5            | +.12               | 2.4  | 7.0   |
| future political<br>participation | 1-5            | +.13               | 2.6  | 5.4   |

Conrad-Hedin Study

|   |       |      |     |     |
|---|-------|------|-----|-----|
| personal/social<br>responsibility                   | 21-84 | +.88 | 1.4 | 1.5 |
| attitudes toward<br>adults                          | 14-98 | +.82 | 1.0 | 2.0 |
| attitude toward<br>being active in<br>the community | 11-77 | +.87 | 1.3 | 2.2 |
| self-esteem   | 10-40 | +.85 | 2.8 | 2.8 |
| problem solving/<br>empathy                         | 2-14  | +.35 | 2.9 | 8.5 |
| personal<br>competence                              | 3-12  | +.25 | 2.8 | 2.9 |

\* $\bar{\Delta X}$  = change in mean between pre and post.

Table 10

Number of Program Students Exceeding Median Gains of Pooled Program,  
Pooled Comparison and School Comparison Groups on Six Variables

| School        | non school<br>responsib | school<br>responsib | social<br>competence | political<br>efficacy | future<br>affilia. | future<br>pol. part. | total<br>6 variables | total<br>3 groups | overall<br>rank |
|---------------|-------------------------|---------------------|----------------------|-----------------------|--------------------|----------------------|----------------------|-------------------|-----------------|
| 1 pooled prog | 8                       | 13                  | 10                   | 11                    | 11                 | 17                   | 70                   |                   |                 |
| pooled comp   | 8                       | 13                  | 10                   | 9                     | 11                 | 17                   | 68                   | 192               | 3               |
| school comp   | 8                       | 12                  | 10                   | 9                     | 11                 | 4                    | 54                   |                   |                 |
| 2 pooled prog | 9                       | 12                  | 14                   | 11                    | 10                 | 13                   | 69                   |                   |                 |
| pooled comp   | 9                       | 12                  | 14                   | 6                     | 10                 | 13                   | 64                   | 193               | 2               |
| school comp   | 11                      | 6                   | 14                   | 6                     | 10                 | 13                   | 60                   |                   |                 |
| 3 pooled prog | 7                       | 7                   | 9                    | 13                    | 10                 | 9                    | 55                   |                   |                 |
| pooled comp   | 7                       | 7                   | 9                    | 8                     | 10                 | 9                    | 50                   | 162               | 4               |
| school comp   | 8                       | 7                   | 15                   | 8                     | 10                 | 9                    | 57                   |                   |                 |
| 4 pooled prog | 11                      | 7                   | 12                   | 13                    | 11                 | 12                   | 60                   |                   |                 |
| pooled comp   | 11                      | 7                   | 12                   | 9                     | 11                 | 12                   | 62                   | 198               | 1               |
| school comp   | 11                      | 8                   | 12                   | 13                    | 11                 | 15                   | 70                   |                   |                 |
| 5 pooled prog | 9                       | 4                   | 11                   | 14                    | 5                  | 7                    | 50                   |                   |                 |
| pooled comp   | 9                       | 4                   | 11                   | 11                    | 5                  | 7                    | 47                   | 136               | 6               |
| school comp   | 6                       | 4                   | 11                   | 6                     | 5                  | 7                    | 39                   |                   |                 |
| 6 pooled prog | 6                       | 7                   | 9                    | 12                    | 8                  | 5                    | 47                   |                   |                 |
| pooled comp   | 6                       | 7                   | 9                    | 7                     | 8                  | 5                    | 42                   | 126               | 8               |
| school comp   | 3                       | 7                   | 9                    | 10                    | 5                  | 3                    | 37                   |                   |                 |
| 7 pooled prog | 7                       | 2                   | 7                    | 9                     | 7                  | 7                    | 39                   |                   |                 |
| pooled comp   | 7                       | 2                   | 7                    | 6                     | 7                  | 7                    | 36                   | 128               | 7               |
| school comp   | 12                      | 11                  | 7                    | 9                     | 9                  | 7                    | 53                   |                   |                 |
| 8 pooled prog | 9                       | 10                  | 5                    | 8                     | 9                  | 7                    | 48                   |                   |                 |
| pooled comp   | 9                       | 10                  | 5                    | 5                     | 9                  | 7                    | 48                   | 146               | 5               |
| school comp   | 11                      | 10                  | 8                    | 5                     | 9                  | 7                    | 50                   |                   |                 |



Table 11

Post Test Means Adjusted for Pre Test as Covariate in Program and Comparison  
Groups in Eight Schools and Probabilities for Group, School and Interaction  
Effects in Analysis of Variance

| School      | non-school<br>responsibility |      |      | school<br>responsibility |      |      | social competence |      |      | political efficacy |      |      | future affiliation |      |      | future political part |      |      |
|-------------|------------------------------|------|------|--------------------------|------|------|-------------------|------|------|--------------------|------|------|--------------------|------|------|-----------------------|------|------|
|             | comp                         | prog | comb | comp                     | prog | comb | comp              | prog | comb | comp               | prog | comb | comp               | prog | comb | comp                  | prog | comb |
| 1           | 3.54                         | 3.43 | 3.48 | 3.02                     | 3.37 | 3.19 | 3.44              | 3.50 | 3.47 | 3.52               | 3.47 | 3.50 | 1.84               | 1.90 | 1.87 | 2.97                  | 2.70 | 2.83 |
| 2           | 3.39                         | 3.69 | 3.54 | 3.25                     | 3.31 | 3.28 | 3.36              | 3.69 | 3.53 | 3.46               | 3.47 | 3.46 | 1.88               | 1.81 | 1.85 | 2.49                  | 2.70 | 2.59 |
| 3           | 3.60                         | 3.54 | 3.58 | 3.33                     | 3.25 | 3.29 | 3.39              | 3.46 | 3.43 | 3.51               | 3.56 | 3.53 | 1.90               | 1.84 | 1.87 | 2.76                  | 2.50 | 2.63 |
| 4           | 3.44                         | 3.75 | 3.60 | 3.36                     | 3.33 | 3.34 | 3.37              | 3.44 | 3.41 | 3.43               | 3.60 | 3.52 | 1.73               | 1.84 | 1.79 | 2.27                  | 2.58 | 2.42 |
| 5           | 3.68                         | 3.51 | 3.59 | 3.42                     | 2.87 | 3.15 | 3.42              | 3.48 | 3.45 | 3.68               | 3.58 | 3.63 | 1.82               | 1.76 | 1.79 | 2.64                  | 2.35 | 2.50 |
| 6           | 3.54                         | 3.41 | 3.48 | 3.08                     | 2.84 | 2.96 | 3.41              | 3.44 | 3.43 | 3.46               | 3.35 | 3.40 | 1.86               | 1.72 | 1.79 | 2.55                  | 2.23 | 2.39 |
| 7           | 3.45                         | 3.56 | 3.51 | 2.86                     | 2.98 | 2.92 | 3.54              | 3.54 | 3.54 | 3.50               | 3.33 | 3.41 | 1.80               | 1.82 | 1.81 | 2.58                  | 2.45 | 2.52 |
| 8           | 3.48                         | 3.78 | 3.63 | 3.36                     | 3.51 | 3.43 | 3.35              | 3.36 | 3.35 | 3.57               | 3.38 | 3.47 | 1.96               | 1.88 | 1.92 | 2.51                  | 2.64 | 2.58 |
| Grand Mean  | 3.52                         | 3.59 |      | 3.21                     | 3.18 |      | 3.41              | 3.49 |      | 3.51               | 3.47 |      | 1.85               | 1.82 |      | 2.60                  | 2.52 |      |
| Effects     | <u>F Prob</u>                |      |      | <u>F Prob</u>            |      |      | <u>F Prob</u>     |      |      | <u>F Prob</u>      |      |      | <u>F Prob</u>      |      |      | <u>F Prob</u>         |      |      |
| Group       | .131                         |      |      | .713                     |      |      | .145              |      |      | .442               |      |      | .342               |      |      | .249                  |      |      |
| School      | .658                         |      |      | .005                     |      |      | .725              |      |      | .672               |      |      | .343               |      |      | .032                  |      |      |
| Interaction | .014                         |      |      | .078                     |      |      | .857              |      |      | .853               |      |      | .497               |      |      | .077                  |      |      |

Table 12

Overall Levels of Developmental Opportunities for  
Comparison Students, Program Students and All Students Combined

|       | School Classes<br>Opportunities |      | Family<br>Opportunities |      | Extracurricular<br>Opportunities |      | Job<br>Opportunities |      | Comm. Service Prog<br>Opportunities |      |
|-------|---------------------------------|------|-------------------------|------|----------------------------------|------|----------------------|------|-------------------------------------|------|
|       | mean                            | s.d. | mean                    | s.d. | mean                             | s.d. | mean                 | s.d. | mean                                | s.d. |
| Comp. | 3.50                            | .59  | 3.70                    | .56  | 3.54                             | .63  | 3.64                 | .59  |                                     |      |
| Prog. | 3.58                            | .60  | 3.71                    | .60  | 3.63                             | .66  | 3.71                 | .81  | 3.88                                | .63  |
| Comb. | 3.53                            | .59  | 3.71                    | .57  | 3.58                             | .65  | 3.67                 | .70  |                                     |      |

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Table 13

School Means, Standard Deviations and Analysis of Variance Results on Scale Scores on Developmental Opportunities in School Classes, Extracurricular Activities and Community Service Program Activities  
(Comparison and Program Students Pooled)

| School | School Classes (N = 314) |     | Extra Curric. (N = 210) |     | Comm. Serv. Program (N=155) |     | F Ratio | F prob |
|--------|--------------------------|-----|-------------------------|-----|-----------------------------|-----|---------|--------|
|        | mean                     | sd  | mean                    | sd  | mean                        | sd  |         |        |
| 1      | 3.39                     | .53 | 3.36                    | .67 | 3.80                        | .60 |         |        |
| 2      | 3.62                     | .66 | 3.65                    | .88 | 4.10                        | .62 |         |        |
| 3      | 3.57                     | .57 | 3.44                    | .56 | 3.89                        | .61 |         |        |
| 4      | 3.37                     | .68 | 3.60                    | .75 | 4.02                        | .74 | 2.28    | .03    |
| 5      | 3.30                     | .44 | 3.49                    | .50 | 3.72                        | .64 |         |        |
| 6      | 3.43                     | .52 | 3.48                    | .50 | 3.71                        | .50 |         |        |
| 7      | 3.63                     | .60 | 3.70                    | .60 | 4.09                        | .59 |         |        |
| 8      | 3.79                     | .64 | 3.91                    | .53 | 3.68                        | .66 |         |        |

Table 14

Analysis of Variance of Program Developmental Opportunities  
Among Programs Ranking Highest vs. Lowest  
on Program Effectiveness

|                               | Mean | S.D. | F. Ratio | F Prob. |
|-------------------------------|------|------|----------|---------|
| High Group<br>(Schools 1,2,4) | 3.97 | .66  | 1.26     | .26     |
| Low Group<br>(Schools 5,6,7)  | 3.84 | .59  |          |         |

Table 15

Adjusted  $r^2$  for Six Dependent Variables Regressed on Four Sequential Blocks of Independent Variables, with Regression Coefficients (B) and Standard Errors (SE) for Independent Variables in the Final Equation\*

| Independent Variables                             | Dependent Variables      |     |                      |       |                      |       |                       |       |                       |       |                              |      |     |
|---|--------------------------|-----|----------------------|-------|----------------------|-------|-----------------------|-------|-----------------------|-------|------------------------------|------|-----|
|   | non-school<br>responsib. |     | school<br>responsib. |       | social<br>competence |       | political<br>efficacy |       | future<br>affiliation |       | future pol.<br>participation |      |     |
|   | $r^2$                    |     | $r^2$                | $r^2$ |                      | $r^2$ |                       | $r^2$ |                       | $r^2$ |                              |      |     |
| 1) pre test                                       | .34                      |     | .38                  |       | .47                  |       | .29                   |       | .45                   |       | .42                          |      |     |
| 2) 1) + SES, GPA                                  | .35                      |     | .40                  |       | .47                  |       | .30                   |       | .45                   |       | .42                          |      |     |
| 3) 2) + : Participation Variables (see below)     | .37                      |     | .43                  |       | .48                  |       | .30                   |       | .45                   |       | .42                          |      |     |
| 4) 3) + ( Developmental Opportunities (see below) | .40                      |     | .49                  |       | .53                  |       | .37                   |       | .48                   |       | .44                          |      |     |
| <u>Final Equation (Block 4) Variables</u>         |                          | B   | SE                   | B     | SE                   | B     | SE                    | B     | SE                    | B     | SE                           |      |     |
| 1) pre test                                       |                          | .47 | .05                  | .41   | .05                  | .62   | .05                   | .46   | .05                   | .57   | .05                          | .60  | .05 |
| 2) SES<br>GPA                                     |                          |     |                      |       |                      |       |                       |       |                       |       |                              | -.05 | .03 |
| 3) Participation:                                 |                          |     |                      |       |                      |       |                       |       |                       |       |                              |      |     |
| Job Hours   |                          |     |                      |       |                      |       |                       |       |                       |       |                              |      |     |
| Non-School Participation                          |                          | .09 | .04                  | .19   | .05                  |       |                       | .05   | .03                   |       |                              |      |     |
| School Participation                              |                          |     |                      | .16   | .08                  |       |                       |       |                       |       |                              |      |     |
| 4) Developmental Opportunities in:                |                          |     |                      |       |                      |       |                       |       |                       |       |                              |      |     |
| Community Service Fieldwork                       |                          |     |                      | -.11  | .06                  |       |                       |       |                       |       |                              |      |     |
| Family  |                          |     |                      |       |                      | .15   | .06                   |       |                       |       |                              |      |     |
| Extracurriculars                                  |                          |     |                      |       |                      |       |                       |       |                       |       |                              |      |     |
| Job   |                          |     |                      | .05   | .02                  | .03   | .02                   |       |                       |       |                              |      |     |
| School Classes                                    |                          | .09 | .05                  | .34   | .08                  | .11   | .06                   | .28   | .07                   | .08   | .03                          | .23  | .08 |
| Community Service Class                           |                          |     |                      |       |                      |       |                       |       |                       |       |                              |      |     |

\*Only coefficients where  $P < .10$  are reported; blanks indicate coefficients where  $p > .10$ .

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Table 16

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Adjusted  $r^2$  for Six Dependent Variables Regressed on Three Sequential Blocks of Independent Variables, With Regression Coefficients and Standard Errors for Developmental Opportunities in the Final Equation.\*

| Independent Variables   | Non-school Responsibility |                  | School Responsibility |           | Social Competence |           | Political Efficacy |           | Future Affiliation |     | Future Political Participation |     |
|---|---------------------------|------------------|-----------------------|-----------|-------------------|-----------|--------------------|-----------|--------------------|-----|--------------------------------|-----|
|   | cls <sup>1</sup>          | fld <sup>2</sup> | cls                   | fld       | cls               | fld       | cls                | fld       | cls                | fld | cls                            | fld |
| 1. Pre test   | .39                       | .39              | .45                   | .45       | .50               | .50       | .26                | .27       | .44                | .44 | .41                            | .41 |
| 2. 1) + SES + GPA   | .40                       | .41              | .45                   | .45       | .50               | .50       | .26                | .27       | .44                | .44 | .41                            | .41 |
| 3. 2) + 18 Developmental Opportunities (see below)                    | .41                       | .42              | .47                   | .45       | .57               | .55       | .26                | .34       | .40                | .44 | .39                            | .37 |
|   | B                         | B                | B                     | B         | B                 | B         | B                  | B         | B                  | B   | B                              | B   |
| 1. My ideas and comments were taken seriously.                        | -.08(.03)                 |                  | -.13(.08)             |           |                   | .12(.06)  |                    |           |                    |     |                                |     |
| 2. I felt I made a contribution.                                      |                           |                  |                       | -.17(.09) |                   |           |                    |           |                    |     | .14(.07)                       |     |
| 3. I received appropriate credit or blame.                            |                           | .07(.04)         |                       |           |                   | .11(.05)  |                    |           |                    |     |                                |     |
| 4. I was free to solve problems on my own.                            |                           |                  |                       |           |                   |           |                    |           |                    |     | -.05(.03)                      |     |
| 5. I made important decisions.  |                           |                  | .14(.06)              |           |                   | -.15(.05) |                    |           |                    |     | -.05(.03)                      |     |
| 6. I thought carefully about difficult judgments.                     |                           |                  |                       |           |                   |           |                    | .14(.06)  |                    |     |                                |     |
| 7. Adults took notice of my work.                                     |                           |                  |                       |           |                   |           |                    | .14(.07)  |                    |     |                                |     |
| 8. Other young people respected my efforts.                           |                           |                  |                       |           |                   |           |                    |           |                    |     |                                |     |
| 9. Improved my opportunities for the future.                          |                           |                  |                       |           |                   |           |                    | .17(.07)  |                    |     |                                |     |
| 10. I had to examine some personal values.                            |                           |                  |                       |           |                   |           |                    |           |                    |     |                                |     |
| 11. I expressed important personal values.                            | .09(.04)                  |                  |                       |           |                   |           |                    |           |                    |     | .06(.03)                       |     |
| 12. I discussed carefully questions about my experiences with others. |                           |                  |                       |           | .14(.04)          |           |                    | -.13(.06) |                    |     |                                |     |
| 13. Adults treated me unfairly.                                       |                           |                  | -.08(.05)             |           |                   |           |                    | -.13(.05) |                    |     |                                |     |
| 14. I participated in activities I had never done before.             | -.07(.04)                 |                  |                       |           |                   |           |                    |           |                    |     |                                |     |
| 15. I was exposed to new ideas and ways of seeing the world.          | .10(.04)                  |                  | -.11(.06)             | .15(.06)  |                   |           |                    |           |                    |     |                                |     |
| 16. I wondered about whether I would do good work.                    |                           |                  |                       |           | -.11(.04)         | -.09(.03) |                    |           |                    |     |                                |     |
| 17. I tried my hardest, gave my best effort.                          |                           |                  |                       |           |                   |           |                    |           |                    |     |                                |     |
| 18. I accomplished things I never thought I could do.                 |                           |                  |                       |           |                   |           |                    |           |                    |     |                                |     |
| 1. Opportunities in comm. serv. class                                 |                           |                  |                       |           |                   |           |                    |           |                    |     |                                |     |
| 2. Opportunities in comm. serv. fieldwork                             |                           |                  |                       |           |                   |           |                    |           |                    |     |                                |     |
| 3. ( ) = standard error.  |                           |                  |                       |           |                   |           |                    |           |                    |     |                                |     |

\*Only coefficients where  $p < .10$  are reported.

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APPENDIX A

Independent Variables

## APPENDIX A

## Independent Variables

## 1. Socioeconomic status

Job description of the adult who contributes most income to the household was coded according to the Duncan scale, which combines education and income into a rating ranging approximately from 0-100.

## 2. Grade point average

Which of the following best describes your grades so far in high school? Check one.

- |   |  |
|---|--|
| <input type="checkbox"/> (1) Mostly A (a numerical average of 90-100) | <input type="checkbox"/> (5) Mostly C (70-74)                |
| <input type="checkbox"/> (2) About half A and half B (85-89)          | <input type="checkbox"/> (6) About half C and half D (65-69) |
| <input type="checkbox"/> (3) Mostly B (80-84)                         | <input type="checkbox"/> (7) Mostly D (60-64)                |
| <input type="checkbox"/> (4) About half B and half C (75-79)          | <input type="checkbox"/> (8) Mostly below D (below 60)       |

Responses scored on 8 point scale

## 3. Job hours

Do you have a paying job?

- (1) yes  
 (2) no

How many hours a week do you work? \_\_\_\_\_

## 4. Schooling aspirations

How far would you like to go in school? (check one response)

- (1) some high school  
 (2) graduate from high school  
 (3) attend college or business school for one to three years  
 (4) graduate from a four year college or university  
 (5) complete post-graduate or professional training (M.D., Ph.D., etc.)

## 5. Job aspirations

Describe the job you would really like to have as an adult

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Response was coded into a 9-point scale, based on Duncan categories.



6. School participation

How much do you currently participate in each of the following activities? Please circle only one number.

|  | don't<br>participate | do participate                  |                       |                       |                                  |             |
|--|----------------------|---------------------------------|-----------------------|-----------------------|----------------------------------|-------------|
|  |                      | less than<br>1 hour<br>per week | 1-2 hours<br>per week | 3-5 hours<br>per week | more than<br>5 hours<br>per week |             |
| a. Organized team sports   | 1                    | 2                               | 3                     | 4                     | 5                                |             |
| b. Band, orchestra, drama,<br>dance                              | 1                    | 2                               | 3                     | 4                     | 5                                |             |
| c. Cheer leader, color-<br>guard, drill squad                    | 1                    | 2                               | 3                     | 4                     | 5                                | Alpha = .22 |
| d. School organizations<br>such as newspaper,<br>yearbook, clubs | 1                    | 2                               | 3                     | 4                     | 5                                |             |
| e. Student government  | 1                    | 2                               | 3                     | 4                     | 5                                |             |

7. Non-school participation

How much do you currently participate in each of the following activities? Please circle only one number.

|   | don't<br>participate | do participate                  |                       |                       |                                  |             |
|---|----------------------|---------------------------------|-----------------------|-----------------------|----------------------------------|-------------|
|   |                      | less than<br>1 hour<br>per week | 1-2 hours<br>per week | 3-5 hours<br>per week | more than<br>5 hours<br>per week |             |
| a. Youth groups out of<br>school such as church,<br>clubs, scouts | 1                    | 2                               | 3                     | 4                     | 5                                |             |
| b. Political organizations  | 1                    | 2                               | 3                     | 4                     | 5                                | Alpha = .48 |
| c. Volunteer work not<br>sponsored by school                      | 1                    | 2                               | 3                     | 4                     | 5                                |             |

## 8. Developmental opportunities

To what extent were each of the descriptions below true of your experience during the fall 1983 school semester in your school classes and your family? If you participated in extracurricular activities or a job last fall, rate those also. If you did not participate in an extracurricular activity or a job, leave that entire column blank. If you did participate, answer every item in the column. Circle the appropriate number for each description.

- 1 = never true  
 2 = seldom true  
 3 = sometimes true  
 4 = often true  
 5 = almost always true

|  | School<br>Classes |   |   |   |   | Family |   |   |   |   | Extra-<br>curricular<br>Activities |   |   |   |   | Job |   |   |   |   |     |  |  |  |  |
|--|-------------------|---|---|---|---|--------|---|---|---|---|------------------------------------|---|---|---|---|-----|---|---|---|---|-----|--|--|--|--|
|  | 1                 | 2 | 3 | 4 | 5 | 1      | 2 | 3 | 4 | 5 | 1                                  | 2 | 3 | 4 | 5 | 1   | 2 | 3 | 4 | 5 |     |  |  |  |  |
| a. My ideas and comments were taken seriously.                       | 1                 | 2 | 3 | 4 | 5 | 1      | 2 | 3 | 4 | 5 | 1                                  | 2 | 3 | 4 | 5 | 1   | 2 | 3 | 4 | 5 |     |  |  |  |  |
| b. I felt I made a contribution.                                     | 1                 | 2 | 3 | 4 | 5 | 1      | 2 | 3 | 4 | 5 | 1                                  | 2 | 3 | 4 | 5 | 1   | 2 | 3 | 4 | 5 |     |  |  |  |  |
| c. I received appropriate credit or blame.                           | 1                 | 2 | 3 | 4 | 5 | 1      | 2 | 3 | 4 | 5 | 1                                  | 2 | 3 | 4 | 5 | 1   | 2 | 3 | 4 | 5 |     |  |  |  |  |
| d. I was free to solve problems on my own.                           | 1                 | 2 | 3 | 4 | 5 | 1      | 2 | 3 | 4 | 5 | 1                                  | 2 | 3 | 4 | 5 | 1   | 2 | 3 | 4 | 5 |     |  |  |  |  |
| e. I made important decisions.                                       | 1                 | 2 | 3 | 4 | 5 | 1      | 2 | 3 | 4 | 5 | 1                                  | 2 | 3 | 4 | 5 | 1   | 2 | 3 | 4 | 5 |     |  |  |  |  |
| f. I thought carefully about difficult judgments.                    | 1                 | 2 | 3 | 4 | 5 | 1      | 2 | 3 | 4 | 5 | 1                                  | 2 | 3 | 4 | 5 | 1   | 2 | 3 | 4 | 5 |     |  |  |  |  |
| g. Adults took notice of my work.                                    | 1                 | 2 | 3 | 4 | 5 | 1      | 2 | 3 | 4 | 5 | 1                                  | 2 | 3 | 4 | 5 | 1   | 2 | 3 | 4 | 5 |     |  |  |  |  |
| h. Other young people respected my efforts.                          | 1                 | 2 | 3 | 4 | 5 | 1      | 2 | 3 | 4 | 5 | 1                                  | 2 | 3 | 4 | 5 | 1   | 2 | 3 | 4 | 5 |     |  |  |  |  |
| i. Improved my opportunities for the future.                         | 1                 | 2 | 3 | 4 | 5 | 1      | 2 | 3 | 4 | 5 | 1                                  | 2 | 3 | 4 | 5 | 1   | 2 | 3 | 4 | 5 |     |  |  |  |  |
| j. I had to examine some important personal values.                  | 1                 | 2 | 3 | 4 | 5 | 1      | 2 | 3 | 4 | 5 | 1                                  | 2 | 3 | 4 | 5 | 1   | 2 | 3 | 4 | 5 |     |  |  |  |  |
| k. I expressed important personal values.                            | 1                 | 2 | 3 | 4 | 5 | 1      | 2 | 3 | 4 | 5 | 1                                  | 2 | 3 | 4 | 5 | 1   | 2 | 3 | 4 | 5 |     |  |  |  |  |
| l. I discussed carefully questions about my experiences with others. | 1                 | 2 | 3 | 4 | 5 | 1      | 2 | 3 | 4 | 5 | 1                                  | 2 | 3 | 4 | 5 | 1   | 2 | 3 | 4 | 5 |     |  |  |  |  |
| m. Adults treated me unfairly.                                       | 1                 | 2 | 3 | 4 | 5 | 1      | 2 | 3 | 4 | 5 | 1                                  | 2 | 3 | 4 | 5 | 1   | 2 | 3 | 4 | 5 |     |  |  |  |  |
| n. I participated in activities I had never done before.             | 1                 | 2 | 3 | 4 | 5 | 1      | 2 | 3 | 4 | 5 | 1                                  | 2 | 3 | 4 | 5 | 1   | 2 | 3 | 4 | 5 |     |  |  |  |  |
| o. I was exposed to new ideas and ways of seeing the world.          | 1                 | 2 | 3 | 4 | 5 | 1      | 2 | 3 | 4 | 5 | 1                                  | 2 | 3 | 4 | 5 | 1   | 2 | 3 | 4 | 5 |     |  |  |  |  |
| p. I wondered about whether I would do good work.                    | 1                 | 2 | 3 | 4 | 5 | 1      | 2 | 3 | 4 | 5 | 1                                  | 2 | 3 | 4 | 5 | 1   | 2 | 3 | 4 | 5 |     |  |  |  |  |
| q. I tried my hardest, gave my best effort.                          | 1                 | 2 | 3 | 4 | 5 | 1      | 2 | 3 | 4 | 5 | 1                                  | 2 | 3 | 4 | 5 | 1   | 2 | 3 | 4 | 5 |     |  |  |  |  |
| r. I accomplished things I never thought I could do.                 | 1                 | 2 | 3 | 4 | 5 | 1      | 2 | 3 | 4 | 5 | 1                                  | 2 | 3 | 4 | 5 | 1   | 2 | 3 | 4 | 5 |     |  |  |  |  |
| Alpha  |                   |   |   |   |   | .88    |   |   |   |   | .88                                |   |   |   |   | .88 |   |   |   |   | .88 |  |  |  |  |

Program students also rated their program classes and their fieldwork in the program on each of the 18 items. Alphas were .94 and .95 respectively.

APPENDIX B

Dependent Variables of Social Development

\*

## APPENDIX B

## Dependent Variables of Social Development

Please read each statement and then indicate how often you think it is true of you. Circle one number for each item.

|   | never<br>true | seldom<br>true | sometimes<br>true | often<br>true | almost<br>always<br>true | Alpha |      |
|---|---------------|----------------|-------------------|---------------|--------------------------|-------|------|
|   |               |                |                   |               |                          | PRE   | POST |
| 1. Non-school responsibility  |               |                |                   |               |                          | .59   | .62  |
| a. I feel I should be doing something about problems in our community.          | 1             | 2              | 3                 | 4             | 5                        |       |      |
| b. I make commitments to other people that I cannot keep.                       | 1             | 2              | 3                 | 4             | 5                        |       |      |
| c. Helping other people is more important to me than my personal success.       | 1             | 2              | 3                 | 4             | 5                        |       |      |
| d. I prefer not to think about problems in my community.                        | 1             | 2              | 3                 | 4             | 5                        |       |      |
| e. On group projects, I let others do most of the work.                         | 1             | 2              | 3                 | 4             | 5                        |       |      |
| f. I'm concerned about how to make our community a better place for everyone.   | 1             | 2              | 3                 | 4             | 5                        |       |      |
| g. If I can't make an appointment, I let the person know in advance.            | 1             | 2              | 3                 | 4             | 5                        |       |      |
| 2. School responsibility  |               |                |                   |               |                          | .70   | .76  |
| a. I try to get other students to support our school's programs and activities. | 1             | 2              | 3                 | 4             | 5                        |       |      |
| b. I don't care to be involved in projects to help our school.                  | 1             | 2              | 3                 | 4             | 5                        |       |      |
| c. I try to imagine how we could improve the school for everyone.               | 1             | 2              | 3                 | 4             | 5                        |       |      |

Please read the sentences below and circle the number that best describes you.

|  |                      |                    |                |                 |               | <u>Alpha</u> |      |
|--|----------------------|--------------------|----------------|-----------------|---------------|--------------|------|
|  | Practically<br>Never | Once in<br>a While | Some-<br>times | Fairly<br>Often | Very<br>Often | PRE          | POST |
| 3. Social competence   |                      |                    |                |                 |               | .73          | .81  |
| a. When you have to talk in front of a class or a group of people your own age, how often do you feel you can communicate effectively?                         | 1                    | 2                  | 3              | 4               | 5             |              |      |
| b. How often do you feel comfortable when starting a conversation with people whom you don't know?   | 1                    | 2                  | 3              | 4               | 5             |              |      |
| c. If you have responsibility in a group for making plans or organizing arrangements, how often do you think you do a good job?                                | 1                    | 2                  | 3              | 4               | 5             |              |      |
| d. When you are trying to help someone, how often do you feel successful in giving help?   | 1                    | 2                  | 3              | 4               | 5             |              |      |
| e. How often do you feel successful when you are trying to persuade adults to consider your point of view seriously?   | 1                    | 2                  | 3              | 4               | 5             |              |      |
| f. Suppose you wanted to convince a group of people your age to work together to accomplish something. How often do you think they would pay attention to you? | 1                    | 2                  | 3              | 4               | 5             |              |      |
| g. When you are given instructions, on the job or in volunteer work, to do things new to you, how often are you confused about what to do?                     | 1                    | 2                  | 3              | 4               | 5             |              |      |
| h. When you face a tough personal and emotional problem, how often do you feel that you handle it successfully?  | 1                    | 2                  | 3              | 4               | 5             |              |      |

To what extent do you agree or disagree with each of the following statements? Please circle one answer for each item.

|  |                      |          |           |       |                   | <u>Alpha</u> |      |
|--|----------------------|----------|-----------|-------|-------------------|--------------|------|
|  | Strongly<br>Disagree | Disagree | Uncertain | Agree | Strongly<br>Agree | PRE          | POST |
| 4. Political efficacy  |                      |          |           |       |                   | .57          | .64  |
| a. If I worked at it, with other people, we could influence the government to improve conditions in our community. | 1                    | 2        | 3         | 4     | 5                 |              |      |
| b. If I worked at it, with other students, we could improve policies in our school.                                | 1                    | 2        | 3         | 4     | 5                 |              |      |
| c. I believe public officials don't care much about what people like me and my parents think.                      | 1                    | 2        | 3         | 4     | 5                 |              |      |
| d. People like me and my parents don't have any say about what the government does.                                | 1                    | 2        | 3         | 4     | 5                 |              |      |

As an adult, how likely are you to become actively involved in each of the following activities?

|  | <u>not likely</u> <u>somewhat likely</u> <u>very likely</u> |   |   | <u>Alpha</u> |      |
|--|---|---|---|--------------|------|
|  |   |   |   | PRE          | POST |
| 5. Future affiliation  |   |   |   | .71          | .72  |
| a. Church group  | 1   | 2 | 3 |              |      |
| b. Labor union   | 1   | 2 | 3 |              |      |
| c. Volunteer service in social agencies like hospitals, schools, nursing homes, scouting, etc. | 1   | 2 | 3 |              |      |
| d. Recreation groups like social clubs, athletic teams, outdoor or musical groups              | 1   | 2 | 3 |              |      |
| e. Fraternal organization (Elks, Moose, etc.) or women's club or organization                  | 1   | 2 | 3 |              |      |
| f. Neighborhood association  | 1   | 2 | 3 |              |      |
| g. Civic association (Rotary, Chamber of Commerce)   | 1   | 2 | 3 |              |      |
| h. Political party   | 1   | 2 | 3 |              |      |
| i. Interest group  | 1   | 2 | 3 |              |      |

As an adult how often do you think you will participate in each of the following activities? Circle one answer for each.

|   | <u>practically never</u> <u>once in a while</u> <u>sometimes</u> <u>fairly often</u> <u>very often</u> |   |   |   |   | <u>Alpha</u> |      |
|---|--|---|---|---|---|--------------|------|
|   |  |   |   |   |   | PRE          | POST |
| 6. Future political participation   |  |   |   |   |   | .78          | .80  |
| a. Vote for local, state and federal officials                              | 1  | 2 | 3 | 4 | 5 |              |      |
| b. Contribute money to political campaigns or other social causes           | 1  | 2 | 3 | 4 | 5 |              |      |
| c. Volunteer to work in political campaigns or for social causes            | 1  | 2 | 3 | 4 | 5 |              |      |
| d. Sign petitions to support candidates or take a position on social issues | 1  | 2 | 3 | 4 | 5 |              |      |
| e. Contact public officials to give my views on issues                      | 1  | 2 | 3 | 4 | 5 |              |      |
| f. Participate in a protest march or demonstration                          | 1  | 2 | 3 | 4 | 5 |              |      |

Appendix C

Summaries of School Programs

(Consult Table 1 for demographic information on each school.)

## SCHOOL 1

Central High School is located in a small midwestern city. This community differs from many communities in socioeconomic composition since its families are predominantly white lower-middle and upper-middle class families.

The School. The biggest issues confronting the school are declining enrollment and the budget cuts determined primarily by the state. Due to decreasing funds, the length of the school day has been shortened, reducing the number of courses a student can take. There has also been a reduction in the number of courses from which a student could choose.

A number of other issues present themselves from time to time at the school. For example, student freedom versus school control as embodied in the current debate about "open campus," an issue that attracts periodic reevaluation by the administration, faculty and parents.

The Community Service Program. The program, which began in 1974, has been given high priority by the administration. Every program in this school is periodically reviewed and evaluated and no program is very safe at present. The continuation of community service is contingent on sufficient enrollment and available monies. Although not targeted toward any particular group of students, with the reduction in the school day, few of the most academically successful students choose to enroll in the program.

Structure of the Program. The course lasts eighteen weeks and students receive a letter grade with a credit in social studies. Grading is based on classwork, coordinator's evaluation, site supervisor evaluation and student self-evaluation. Students may not repeat the course.

Class Component. The Community Awareness Program (CAP) class meets two days a week for two periods. It is best described as a cross between psychology and sociology but is not as comprehensive as either would be in a traditional classroom. Units covered include family, aging, mental illness and career planning.

Although some of the class day is spent on lectures, reading or assignments, a much larger proportion of the day is spent on discussion and small group work. Frequent discussion of students' fieldwork experiences sometimes postpones otherwise planned classroom activities; for example when students collectively work to solve a problem encountered at a field site. An individual or group project is required of all students which must be related to their fieldwork experiences (e.g., a research paper or an activity at the site which is planned and executed by the student).



## SCHOOL 1

There are frequent guest speakers, for example, from the Red Cross or a signing teacher for the deaf. The class is a very flexible one which allows students to become involved in different activities based on group interest. Oftentimes students may become involved in a large class project. For example, last year program students visited the School for the Deaf and arranged for some of the deaf students to visit their public high school in return. Each assigned a Big Brother or Big Sister, the deaf students were treated as any other student and experienced a "typical" day. The school television station and other school media were also contacted and subsequently become involved in the project.

Fieldwork Component. The program coordinator and student select a site based on student interests. Information packets for some sites and class visits from some site personnel are provided at the beginning of the course to inform students about placement opportunities.

The coordinator very actively recruits fieldwork placements in the community and maintains about sixty sites from which students may choose. In selecting student placements, the coordinator looks for a social service placement where students are dealing with critical social problems and with people in a meaningful and responsible way. Standards for selecting a site are rigorous and poor or inadequate sites are quickly abandoned.

Orientation is primarily the agency's responsibility as is supervision of the student on site. The program coordinator visits the sites every one and one-half weeks, always looking for improvements. In some agencies, where the coordinator's presence might create some disruption in routine, telephone contacts are made rather than visits.

Students arrange their own transportation (e.g., car, bus, bicycle) and attend their field placement three times a week for two hours a day. The predominant placement is classroom/school aid, but students also participated at day care centers, in health programs, as tutors for the mentally retarded or in the English as a Second Language program, and as physical therapy assistants.

Problems with the Program. There were no major problems reported. The only minor problem reported was that of staff reductions or changes.

Coordinator's Sense of Program Benefits. The personal contact and closeness to the students are highly rewarding aspects of working with this program. Observing students' increase in self-esteem and students' developing motivation towards something in their life for what appears to be the first time is another rewarding aspect of the program. Some students have made career choices based on their fieldwork which is another benefit of the program.

## SCHOOL 2

Frontier High School is located in a suburb outside of a mid-western city. The community is predominantly white and lower-middle to upper-middle in socioeconomic status.

The School. There has been a small decline in enrollment recently, but the enrollment is expected to increase in two years. This will further exacerbate the overcrowded conditions where even now trailers are used to provide extra classroom space. Increasing the facilities in a time of monetary constraints is the major issue the school faces at this time. The targets for improvement in the immediate future include the school's physical growth and changes and additions to the curriculum.

The Community Service Program. Since the program's inception in 1975, it has received enthusiastic support by the principal and members of administration. Feedback from parents has always been positive. Feedback from community agencies has generally been positive except for a few complaints when program students failed to keep commitments (on such occasions the student is removed from the program). Colleges in the area give the program legitimate academic credit in admission applications, but colleges elsewhere in the state are not aware of the program.

The program is vulnerable to staff cuts. General budget cuts could lead to reassignment of community service staff in other areas of the curriculum, for example social studies and home economics, in which case the community service program would no longer continue. The principal, however, is very supportive of the program and would strive to have it continue if at all possible.

The program is structured on two nine-week segments and students enroll for both. One segment, the classroom portion, is counted as a social studies credit toward graduation. The other segment, the fieldwork, is a general elective credit. The course appeals to all types of students from potential dropouts to college bound.

Structure of the Program. The two-hour classroom segment, entitled Family and Community Problems, is divided into two equal units of four and one half weeks each. One teacher provides supervision of the fieldwork while the other teaches the class. At the end of the unit the teachers trade positions. The first class hour is spent in lecture and class discussion and in the second hour students work on individual contracts. Coursework in this program is only occasionally based on fieldwork experiences since one half of the students have not experienced fieldwork prior to the class.

One class unit covers family life. Here students learn to budget, apply for a job, acquire a home or apartment and something about planning for and raising children. There are daily assignments, quizzes,

## SCHOOL 2

tests and projects as grading requirements. All students are required to do a family simulation project. Other projects, which students can choose include devising and conducting opinion polls, interviewing a professional in the community or visiting and reporting on a community agency. Guest speakers are brought in, for example, to speak on child abuse or death in the family.

The other class unit covers community and government. Here students study courts, crime and sentencing (e.g., probation, jail). They also learn about taxes and filling out income tax forms. Activities for involvement within the community are also introduced. Speakers are also brought in and students visit a court hearing and sentencing. Student projects include conducting opinion polls in the community, interviewing community persons (e.g., police officers or the mayor). Requirements, as in the other unit, include daily assignments, quizzes, tests and projects.

Fieldwork. Because the school is far from the nearest city, sites are confined to the immediate suburban area. Transportation is by car, and students share the driving to attend. Students remain at their sites about an hour and a half per day, five days a week. Placements are predominantly as classroom/school aids or daycare workers with a few in nursing homes. New this year for a few students was a placement in the police department. To select a placement, students list their first and second choices at the beginning of the course and every effort is made to give students their first choice. Students who begin the course with fieldwork are given a three-day orientation prior to beginning at their site.

Attendance is strictly enforced and students must sign in and out each day. Unexcused or too many absences of any kind are cause for the student to be dropped from the program.

The major criterion for the program's selection of placements is sufficient involvement by students with the clients at the site. The site supervisor provides the supervision once the students are placed and evaluates the student at the end of the placement period. Program teachers check with the site supervisors at least once a week by phone during the term to see if everything is satisfactory. There are also phone contacts should any problems arise. At the end of the placement, the program teachers visit the site to talk with the supervisors and collect the student evaluations.

Problems with the Program. There were no major problems reported by this school. A few minor problems included difficulties in finding field placements, logistical problems (e.g., scheduling, transportation) and occasionally a lack of interest by a program student.

Teachers' Sense of Program Benefits. Seeing students involved in the community as well as learning and enjoying it were rewarding aspects of the program for these teachers. Sometimes students received a job

## SCHOOL 2

offer stemming from their placements which was also very rewarding, but several students have changed career goals as a result of their field site experience. Perhaps the most rewarding, however, was when a "school failure" turned out to be a "shining star" as a volunteer.

## SCHOOL 3

Riverview High School is located within a medium-sized city in the middle Atlantic region. The community is predominantly white and represents the full range of socioeconomic status.

The School. Some issues of recent concern to the school have involved changes in state educational requirements; for example the requirement that seniors attend a minimum of four class periods per day. Previously seniors were required to attend only the number of specified classes necessary to meet graduation requirements. This allowed opportunities for many to take classes at the community college or to get a job.

Recurrent school-based issues center around student behavior such as restrictions on open campus or whether the school should provide designated smoking areas for students.

Targets for school improvement include further curriculum development in educational basics and preparation of young people for future work such as computer related jobs in which only a few students may now enroll due to inadequate school facilities.

The Community Service Program. The program which began in 1976 has the encouragement and support of the school principal and the majority of the faculty. Faculty complain occasionally if students miss classes due to extra training or additional assistance at their placement. The principal reports positive feedback from the parents and community in the form of complimentary notes and thanks.

The program is vulnerable if staff cuts continue. Should such staffing cuts occur, program staff may be required to teach a basics required course.

Structure of the Program. The program is eighteen weeks long and students receive .5 social studies credit and a letter grade. Grading criteria include attendance, cooperation (with staff and supervisors), attitude (enthusiasm), and a willingness to learn and improve.

Classroom Component. The class, entitled Community Services, meets one hour a week.

The largest percentage of class time is spent in listening to presentations (lectures, films on social issues, formal reports). Other class activities include field trips to various agencies, discussion, writing and gathering information and individual conferences with the teacher. A library report is required on a topic related to the student's placement and students give an oral report on their placement to the class at the end of the semester. A small group project is also required, for example, some students were involved in the assessment of the high school and other public buildings to plan for structural changes which would allow handicapped individual's access to the building.

Fieldwork Component. The first two weeks of the semester are spent on orientation. Each day during this two week time period a different agency representative talks to the students about their site. After ten days, students select their placement. The program teacher keeps a variety of sites from which students may choose. Placements are selected by the program teacher for their educational value, and the receptiveness of supervisory staff to student learning.

Placements are visited by the program teacher a minimum of once a week. The student is observed and the program teacher talks with the student and supervisor to find out how things are going or to discuss any problems. The program teacher also talks with the students at school about their field placement.

Students work on site four hours a week, either during their class period or on their own time. Transportation is the student's own responsibility. The largest number of student placements are in health programs and as day care workers. Other sites include classroom or school aides, Red Cross, Easter Seals, the public library and mental rehabilitation, YMCA, and residential care facilities.

Problems with the Program. No major problems reported. The only minor problem is the occasional lack of support from school faculty.

Teacher's Sense of Program Benefits. The teacher finds more rewards in this type of program than in the traditional classroom. Here the teacher is a confidant-advisor, and the students tend to open up more. Because the community service classroom is more open than regular classes, students tend to be more responsive. The teacher also finds it rewarding to observe students making major career decisions, whether positive or negative.

## SCHOOL 4

Mayflower High School is located in a small rural community about an hour's drive from a larger New England city. Many of the community members commute to the city each day to work. The community is predominantly white and middle class, but includes the full range of socioeconomic status.

The School. There are two major issues faced by this school: high staff turnover and curriculum development. High staff turnover occurs because salaries are low and nearly all of the teachers commute fairly long distances. When positions open up in another school nearer to home and/or with an offer of an increase in salary, teachers generally opt to leave.

The issue of curriculum development is closely linked to staff turnover. There has been high turnover of faculty and administrators since the school's inception, and since the faculty has had primary responsibility for curriculum development, the school has seen little stability in its curriculum. There has been a staff-wide effort, especially during the past year, however, to develop long-term and immediate curriculum objectives. Targets for school improvement include curriculum planning as well as efforts to reduce staff turnover.

The Community Service Program. The program, entitled Senior Project, has existed in its present form for about three years, although it began fourteen years ago. The Board of Education and the principal support the program. Generally parents and other members of the community speak very positively about the program. The local press frequently reports on the program's activities or student experiences.

Thanks to strong Board support, this program is reasonably secure. Should there be budget cuts, it appears that other nonacademic programs would go first. The principal would even like to see the program develop further by increasing the program director position to full-time and recruiting more students. However, this would require appropriating more monies, and as is true in most other schools, such funds are not readily available.

Students are actively recruited for the program in the spring of their junior year. The program director visits classes, sometimes taking current program students along to talk about their experiences. All types of students enroll in the program, from low to high academic performers. The main criterion for admission is student motivation. Students can repeat the course if they enroll initially in their junior year.

This program differs somewhat from other programs in its attendance restrictions. If a student is irresponsible and/or has too many absences, every effort is made to retain the student in the program

## SCHOOL 4

and try to work through the problem rather than to dismiss the student. The basic philosophy of the program is to encourage a long-term commitment by the student, working to resolve subsequent difficulties, thereby fostering social as well as psychological development.

Structure of the Program. The course lasts for twenty-eight weeks. Students receive an elective credit and a pass/fail grade. Grading is based on attendance, involvement in class discussion, a term paper, student log sheet accounts (weekly log entries based on their fieldwork experience), and an attitude evaluation sheet completed by the site supervisor, program director and the student.

Classroom Component. From one to four students meet as a group an average of once a week. Meetings are arranged according to student's individual schedules as the class is not scheduled along with other courses. Meetings may occur after school, during lunch or free hours or any other time convenient for the student(s) and director.

The group meetings are designed to provide reflection based on the students' community work, and the greatest amount of time is spent in class discussion. A smaller proportion of class time is spent in reading or written work. The teacher assigns articles which pertain to fieldwork experiences or the student projects. For example, if some students tutor, an article on dyslexia may be assigned and discussed. Other articles are selected to provide insightful material and broaden student awareness of social issues (e.g., an article on poverty).

In addition to field experience, a major group project is required of all students in the program; for example, running the Bloodmobile or a "Foodathon" (collecting food from community members and distributing it to needy families during the holidays).

Fieldwork Component. Student placements are based on student talent and interest. Students spend an average of three hours a week at their site, but as previously noted, the placements last for the entire academic year. The time spent at the site may be during school hours or after school. If students miss classes, they are expected to make up their work. Transportation is the student's responsibility, and students may share driving.

The program director locates student placements for the coming year during the preceeding summer. Criteria for selection are a positive and structured environment and a cooperative supervisor. The predominant placement is classroom or school aide. Other placements include health programs, nursing homes, peer tutoring, day care and recreation programs.



## SCHOOL 4

Problems with the Program. The major problem for this program is logistical, and includes scheduling of group meetings and transportation. The program director would like to have a regular scheduled class for the entire group of students. Minor problems include the school budget, staff reductions or changes, lack of support by faculty (e.g., when students are absent from class and/or fall behind in their regular school work) and occasional parent resistance or opposition.

Director's Sense of Program Benefits. In this type of program there is more one-on-one teacher interaction with students than found in regular teaching. Another rewarding aspect of the program is to observe students' success or their developing leadership potential. Helping people and accepting responsibility develops a more positive sense of self-esteem in all program students which, according to the director, is more gratifying to observe.

## SCHOOL 5

Gateway High School is located in a suburban area outside a large midwestern city. The students at this school are from homes of predominantly lower to middle socioeconomic status, and the school is racially integrated with approximately three-fourths of the student body white and one-fourth black.

The School. One of the major issues this school faced about six years ago was one of forced desegregation requiring the integration of students from another school which had a larger proportion of black students. Declining enrollment has raised a more recent issue: over the past six years, ten schools have been closed. The district is currently involved in decisions regarding the use or sale of the unused school buildings.

Community concern about student achievement levels has led to a district-wide effort to assess and monitor student achievement. Resolution of this issue is the major target for improvement, and includes developing educational programming to raise student achievement levels.

The Community Service Program. The current principal of this school initiated the program, approximately ten years ago, and feels it is not vulnerable to being cut. Parents also support the program, and speak enthusiastically of its impact on their children.

Initially, the faculty was only moderately supportive of the program. However, following administrative efforts to present the program and its benefits, the course came to be viewed by the faculty as a regular, legitimate part of the curriculum and was actively supported. Periodic re-education of the faculty is needed, however, to maintain faculty interest and support.

The experience which the program provides students appears to be valued by colleges, especially if students plan a medical or health career. Volunteer positions in these fields not only gives students actual work experience, but also represents a school-based interest in helping people.

Students must be responsible and have personal attributes conducive to helping in the volunteer setting in order to participate in the program. The program, however, appeals to many kinds of students. Some have an interest in a particular career area, while

## SCHOOL 5

others have more general ideals to do something positive for others. The program seems most attractive to bored students turned off by school. This type of student frequently learns from his/her experiences the importance of remaining in school in order to eventually obtain the work they desire as an adult.

Structure of the Program. The course, entitled Community Outreach, lasts nineteen weeks and students receive a letter grade in psychology which meets a social studies requirement. Students may repeat the course, for an additional elective credit. Grading is based on attendance, field site supervisor and program teacher evaluations, written assignments by the program teacher, and daily journal entries reflecting fieldwork activities. Students are also required to submit a project; for example, a planned activity at the field site or a report on some area related to the field experience.

Classroom Component. The class meets for two hours once a week. The largest proportion of class time is spent in small group work and in discussion. The class is devoted largely to discussing fieldwork experiences and problems. Run like a seminar, students share ideas and brainstorm about each other's problem situations.

A smaller proportion of class time is spent in reading or written work. Assigned topics focus on developmental psychology, for example child development or aging. During the first quarter, a values unit is presented which includes not only discussion of differing values but also discussion of life experiences that may lead to a change in values.

Fieldwork Component. The school provides bus transportation to students' sites in the nearby suburban areas. Students work on site about 1-1/2 hours a day, four times per week. The main criterion for selecting a site includes a willingness by potential supervisors to grant responsibility to the student. Location is also an important factor since sites must be close to the school. The predominant placement is classroom or school aide. Other placements include health programs, day care and handicapped school programs.

Orientation to fieldwork occurs at school in the first three to five days of the semester. This includes small group activities for example, on communication and listening skills, introductory material on the various field site placements from which students may choose, and slides of former program students working at their volunteer placements. Program teachers talk with students individually to ascertain career goals and interests. Every effort is made to give the students their first placement choice.

## SCHOOL 5

Problems with the Program. There were no major problems reported for this program. Some minor problem areas include staff reductions or changes, occasional lack of support from school faculty and lack of student interest.

Teacher's Sense of Program Benefits. The growth in student's self-confidence and student feedback were two rewarding aspects of working with this program, along with the feeling of being needed.

## SCHOOL 6

Independence High School is located in a suburb outside of a large eastern city. The community is predominantly white, with the full range of socioeconomic status.

The School. Curriculum changes are the major targets for improvement at this school. There are plans to offer a study skills course. Student scores on national achievement tests have led to evaluation of the math program. Beyond areas of remediation, improvement in the general curriculum is also being discussed, including a concern about grade inflation.

Alcohol abuse is another major area of concern at this school. Although alcohol usage does not occur on the school campus, awareness and prevention are treated as a school responsibility. Preventative educational programs on the effects of alcohol are currently planned for inclusion in the curriculum.

The Community Service Program. This program began eleven years ago and has both faculty and administrative support. Parents are generally positive about the program as are other community members, especially those involved with the program.

Given the program's longevity and the broad support it receives, it does not seem threatened at this point. However, it could be vulnerable at some future time, should declining school enrollments lead to smaller numbers of students enrolling in the program.

The course appeals primarily to the college preparatory student, although there are plans to expand and modify the class to encourage enrollment by a more diverse group of students.

Structure of the Program. The course lasts thirty-six weeks or the academic year and is for seniors only. It is a comprehensive program requiring two class periods per day for the class and two for the placement. Students must take one additional class each semester but may take two additional classes when enrolled in this program.

For the academic year, students earn two credits each in English and Social Studies. Students earn a letter grade for class work and a pass/fail grade for their placement. Grading criteria for the class work include homework, quizzes, tests, and presentations. Fieldwork requirements include involvement, attendance, compatibility and interest.

Enrollment occurs at the end of the students' junior year. Those interested attend meetings, view slides of current students at their placements, and then indicate their area of interest. Students are

interviewed and observe four or five placements before the final placement decision is made.

Classroom Component. The class, called Social Lab, is taught by a two teacher team, and meets for two class periods a day, nine hours a week. Described as a social humanities class, it covers content in both English and Social Studies. Some of the topics covered include identity, values, economics, language, vocabulary, grammar and novels.

The largest percentage of class time is spent listening to presentations (e.g., lectures, films, formal reports), but other activities such as discussions, small group work and simulations are included. Two student conferences each year are held with the staff members to discuss students' academic progress and placement experience.

Fieldwork Component. The emphasis of this program is largely on career exploration. About half of the students experience two placements during the year, the others remain in a single placement.

Placements, based on student choice, are mostly in health programs, businesses, industries or as classroom or school aides, but the program has also included such diverse settings as political action groups, day care, local government internships and the police department. The selection criteria for placements emphasize that students work in an area of their genuine interest and that they also be given a variety of worthwhile responsibilities. Contact with the site supervisors is the responsibility of both program teachers as well as the program coordinator.

Orientation is conducted at the placement and students spend about two hours per day, five days a week at their sites. Transportation is the student's responsibility.

Students are required to maintain daily activity logs which remain at the site. About twice a year the logs are reviewed with the student and evaluated. Monthly group discussions are held at school providing students the opportunity to express their views on the placements. At these meetings students are encouraged to help one another resolve any difficulties encountered.

Problems with the Program. No major problems were reported. Some minor problems include parent resistance or opposition, difficulties in finding placements, logistical problems (scheduling, transportation), and the occasional lack of support from faculty.

Teacher's Sense of Program Benefits. The relationship between student and teacher is more meaningful in this program, because of the extensive personal contact (2 hours per day for a year). The class structure facilitates an open group discussion which might otherwise not occur.

Observing students develop an increase in their self-esteem or some students begin to enjoy coming to school are highly rewarding aspects of

working with this program. Many will also improve their academic work after recognizing how important it will be for a career.

## SCHOOL 7

Viking High School is located in a suburb of a large metropolitan midwestern city. The community is predominantly white and middle to upper-middle socioeconomic status.

The School. The major issue recently faced by this school resulted from the merger of two area high schools, requiring many staff adjustments as well as creating overcrowded conditions in the one surviving school. Choices had to be made between the two chairpersons for each department, leaving several staff with reduced salary as well as a loss in status.

Broadening the decision-making process is the major target for improvement planned at this school. Organizing groups which will be composed of students, staff, administration, parents and other community members will provide for a sharing of perspectives and will ultimately lead to a more caring institution. It is an administrative goal to personalize education for each student, recognized as an especially difficult task with the large number of students enrolled.

The Community Service Program. This program, entitled "Community Involvement," began eight years ago. It originated in the school building recently closed and was moved to the location of the newly merged school. The school board supports the program, and the principal not only supports it, but believes the program essential. Because of the strong administrative support, this program is not very vulnerable to being cut.

Agencies working with the students and parents have been very positive about the program. Many faculty members, however, object to the Community Involvement as an alternative to the traditional social studies curriculum.

Although anyone may enroll in Community Involvement, this program tends to attract the academically successful student. Less academically successful students generally do not choose to enroll, since there are other, less academically rigorous, work experience programs offered at this school.

Structure of the Program. The course lasts eighteen weeks and may not be repeated. Students enrolling in this program are not required to take additional social studies courses during their senior year. Because the course meets two periods a day, students earn a double social studies credit.

Classroom Component. The class meets once a week for two periods (approximately one and one-half hours). A blend of social science concepts from psychology and sociology, reflection and critical thinking are important aspects of this class. Some of the topics covered include mental health, self concept, and role models. A research paper is required which begins with a case study based on the student's field



experience, and is later developed into an detailed research paper utilizing the six steps of hypothesis testing. Students may also negotiate an alternative project with the teacher.

The largest percentage of class time is spent in discussion and written work (reports, journals), although there is also some small group work and other traditional classroom activities. At the beginning of the semester, students negotiate grading contracts with the teacher since there are different requirements for each letter grade.

Fieldwork Component. Speakers visit the class early in the semester to explain placement opportunities with their agencies. The majority of placements are as day care workers or classroom or school aides. Examples of less common placements include peer tutoring, political action groups, nursing homes and alcohol/drug counseling. Criteria for selection of sites are need for student services and the ability of the placement to illustrate psychological or sociological concepts. Since students must provide their own transportation, the geographical location is also a factor in site selection.

Orientation and supervision is conducted at the field site by the supervisors. The program teacher maintains frequent contact with the site supervisors, giving more attention to problem placements. Attendance is important and a daily log journal is required. Supervisors submit a student evaluation each quarter which becomes part of the student's final grade.

Problems with the Program. Transportation, faculty changes and lack of departmental faculty support (i.e., opposition to nontraditional courses by a "veteran" staff) are problems noted with this program.

Teacher's Sense of Program Benefits. Observing student successes, especially those related to clients at the field site, are the major benefits in working with this program. The program has also strengthened school-community relations.

## SCHOOL 8

Oceanside High School is located just outside of a large city on the east coast. The community is predominantly black and lower to lower-middle socioeconomic status.

The School. Budget constraints and problems with information processing contribute to staffing problems at this school where staff assignments are often not made until the first week of school in the fall. A highly transient student population further contributes to lack of stability in program planning.

Curriculum development is the major target for improvement at this school, for college preparatory as well as vocational programming. New guidelines for students in the general education program are also planned which will better reflect state guidelines for graduation standards.

The Community Service Program. This program, entitled Community Based Learning Experience (CABLES), began a little over three years ago and is totally funded by the state. It is therefore entirely dependent upon the continuation of state funding which makes it highly vulnerable.

There has been a little feedback about the program from the community with the exception of positive reactions from the supervisors who work with the students. Faculty are often negative, because students miss their classes one day a week to attend their placements.

The program appeals to all types of students who enroll in large numbers and express much enthusiasm for it.

Structure of the Program. This program has a very different structure from most of the other programs. Students volunteer for an entire school day per week which requires them to miss all classes on that day and make up work. There is no regular scheduled class. Although the program director maintains frequent student contact, students are required to have a sponsoring teacher from the academic staff before they can be accepted. It is the student's and sponsor's responsibility to plan a project to be turned in as their CABLES project. The project is usually related to the student's field placement and/or the sponsor's academic area (photojournals, essays, etc.). Students at all grade levels (nine through twelve) may enroll for as many semesters as desired.

A student interested in enrolling must submit an application, a parent permission form and a sponsoring teacher agreement. The program director interviews each student, primarily to determine the desired placement and to help the student select a sponsoring teacher if not already arranged.

The program lasts about ten to twelve weeks each semester. The first four to six weeks are used to complete enrollments and coordinate site locations. Site personnel often visit the school during this period to discuss student opportunities for placements and many also conduct student interviews.

Counted as an elective and a work credit, students receive a satisfactory grade if they meet grading requirements. These requirements include a satisfactory evaluation from the site supervisor, a project with the sponsoring teacher and a minimum of 66 hours on site. If they fail to meet the requirements, no entry is made on the report card.

Classroom Component. There is no regular scheduled class, however, about twice a semester, seminars are arranged to discuss and share student placement experiences. At this time slides of students at their sites are shown and frequently a role play is planned, related to situations found at sites.

The program director maintains frequent contact with each student. Students must check in weekly to pick up and return their attendance cards, and these weekly visits offer opportunity to discuss placement progress or concerns.

Fieldwork Component. Students attend their sites six hours a day once a week. Transportation is usually by city bus, and students often travel long distances within the city to their placements.

This program has no problems obtaining placements. In fact, it is not unusual for potential supervisors, upon hearing of the program, to call the director to request students. The majority of placement examples include nursing homes, day care and local government internships. Criteria for selecting a site are an effective, caring site supervisor, and the opportunity for the student to be treated in an adult fashion. Opportunity to work with other adults is also sought.

Orientation is provided by supervisors at the site. At the end of the first week, the director talks with the supervisor and student individually before the final commitments are made. The director, or the assistant, maintains contact with each site supervisor once every two to three weeks and visits the sites once a semester. When visiting the placements, pictures of the student at work are taken which are later viewed at the seminars.

Problems with the Program. Major problems for this program include the budget (the continuation of funding for each year), staff reductions or changes and lack of support from school faculty. Logistical problems (e.g., scheduling, transportation) were noted as minor problems.

Director's Sense of Program Benefits. Generally all students have good learning experiences and the opportunity to be treated as adults. Most rewarding, however, is observing a student become excited and motivated about an aspect of their school life. Another benefit is the favorable impact on community members who have a chance to view

teenagers in a more positive light rather than the negative view frequently portrayed by the press.

## APPENDIX D

### Pre and Post Frequencies on Each Variable, Each School

This material is designed primarily for teachers in the eight schools to examine how the students' scores changed from pre to post test on each variable.

The right hand column shows the distribution of scores on the pre test, and the bottom row shows the distribution on the post test. In the first table (future political participation for all students), for example, only 2 students scored a 5 on the pre test, but 7 scored five on the post test.

The cells indicate how many students changed or stayed the same for each combination of pre and post scores. In the first table, for example, 5 students declined from a 4 on pre test to a 2 on the post test, 4 students increased from a 2 on the pre test to a 4 on the post test. The higher the numbers above the diagonal, the more positive change in the group; the higher the numbers below the diagonal, the more negative change in the group.

Future Political Participation (1-5)

|       |   | Post |     |     |    |   | Total |
|-------|---|------|-----|-----|----|---|-------|
|       |   | 1    | 2   | 3   | 4  | 5 |       |
| Pre   | 1 | 14   | 20  | 0   | 1  | 0 | 35    |
|       | 2 | 15   | 91  | 41  | 4  | 0 | 151   |
|       | 3 | 1    | 20  | 71  | 7  | 2 | 101   |
|       | 4 | 1    | 5   | 8   | 7  | 4 | 25    |
|       | 5 | 0    | 0   | 0   | 1  | 1 | 2     |
| TOTAL |   | 31   | 136 | 120 | 20 | 7 | 314   |

Pre and Post Frequencies on Each Variable, Each School

Pooled Program and Comparison (N=158)

Program Only (N=158)

Future Political Participation (1-5)

|       |   | Post |     |     |    |   | Total |
|-------|---|------|-----|-----|----|---|-------|
|       |   | 1    | 2   | 3   | 4  | 5 |       |
| Pre   | 1 | 14   | 20  | 0   | 1  | 0 | 35    |
|       | 2 | 15   | 91  | 41  | 4  | 0 | 151   |
|       | 3 | 1    | 20  | 71  | 7  | 2 | 101   |
|       | 4 | 1    | 5   | 8   | 7  | 4 | 25    |
|       | 5 | 0    | 0   | 0   | 1  | 1 | 2     |
| Total |   | 31   | 136 | 120 | 20 | 7 | 314   |

Future Political Participation (1-5)

|       |   | Post |    |    |    |   | Total |
|-------|---|------|----|----|----|---|-------|
|       |   | 1    | 2  | 3  | 4  | 5 |       |
| Pre   | 1 | 3    | 12 | 0  | 1  | 0 | 22    |
|       | 2 | 7    | 44 | 19 | 2  | 0 | 72    |
|       | 3 | 0    | 11 | 32 | 3  | 1 | 47    |
|       | 4 | 1    | 2  | 6  | 5  | 1 | 15    |
|       | 5 | 0    | 0  | 0  | 1  | 1 | 2     |
| Total |   | 11   | 69 | 57 | 12 | 3 | 158   |

Future Affiliation (1-5)

|       |   | Post |     |    |   |   | Total |
|-------|---|------|-----|----|---|---|-------|
|       |   | 1    | 2   | 3  | 4 | 5 |       |
| Pre   | 1 | 46   | 56  | 1  | 0 | 0 | 103   |
|       | 2 | 19   | 177 | 7  | 0 | 0 | 203   |
|       | 3 | 0    | 3   | 5  | 0 | 0 | 8     |
|       | 4 | 0    | 0   | 0  | 0 | 0 | 0     |
|       | 5 | 0    | 0   | 0  | 0 | 0 | 0     |
| Total |   | 65   | 236 | 13 | 0 | 0 | 314   |

Future Affiliation (1-5)

|       |   | Post |     |   |   |   | Total |
|-------|---|------|-----|---|---|---|-------|
|       |   | 1    | 2   | 3 | 4 | 5 |       |
| Pre   | 1 | 18   | 28  | 1 | 0 | 0 | 54    |
|       | 2 | 7    | 91  | 2 | 0 | 0 | 100   |
|       | 3 | 0    | 2   | 2 | 0 | 0 | 4     |
|       | 4 | 0    | 0   | 0 | 0 | 0 | 0     |
|       | 5 | 0    | 0   | 0 | 0 | 0 | 0     |
| Total |   | 11   | 121 | 5 | 0 | 0 | 158   |

Political Efficacy (1-5)

|       |   | Post |    |    |     |    | Total |
|-------|---|------|----|----|-----|----|-------|
|       |   | 1    | 2  | 3  | 4   | 5  |       |
| Pre   | 1 | 4    | 5  | 7  | 1   | 0  | 17    |
|       | 2 | 7    | 17 | 16 | 19  | 0  | 59    |
|       | 3 | 8    | 22 | 38 | 26  | 1  | 95    |
|       | 4 | 1    | 30 | 24 | 61  | 9  | 125   |
|       | 5 | 0    | 0  | 1  | 5   | 12 | 18    |
| Total |   | 20   | 74 | 86 | 112 | 22 | 314   |

Political Efficacy (1-5)

|       |   | Post |    |    |    |    | Total |
|-------|---|------|----|----|----|----|-------|
|       |   | 1    | 2  | 3  | 4  | 5  |       |
| Pre   | 1 | 0    | 4  | 5  | 1  | 0  | 10    |
|       | 2 | 4    | 7  | 7  | 5  | 0  | 23    |
|       | 3 | 7    | 11 | 19 | 13 | 1  | 51    |
|       | 4 | 0    | 18 | 9  | 32 | 5  | 64    |
|       | 5 | 0    | 0  | 1  | 2  | 7  | 10    |
| Total |   | 11   | 40 | 41 | 53 | 13 | 158   |

Non-School Social Responsibility (1-5)

|       |   | Post |   |     |     |    | Total |
|-------|---|------|---|-----|-----|----|-------|
|       |   | 1    | 2 | 3   | 4   | 5  |       |
| Pre   | 1 | 0    | 0 | 0   | 0   | 0  | 0     |
|       | 2 | 0    | 0 | 6   | 2   | 0  | 8     |
|       | 3 | 2    | 2 | 81  | 50  | 0  | 135   |
|       | 4 | 0    | 0 | 44  | 112 | 5  | 161   |
|       | 5 | 0    | 0 | 0   | 5   | 5  | 10    |
| Total |   | 2    | 2 | 131 | 169 | 10 | 314   |

Non-School Social Responsibility (1-5)

|       |   | Post |   |    |    |   | Total |
|-------|---|------|---|----|----|---|-------|
|       |   | 1    | 2 | 3  | 4  | 5 |       |
| Pre   | 1 | 0    | 0 | 0  | 0  | 0 | 0     |
|       | 2 | 0    | 0 | 4  | 1  | 0 | 5     |
|       | 3 | 1    | 0 | 37 | 23 | 0 | 61    |
|       | 4 | 0    | 0 | 24 | 57 | 3 | 84    |
|       | 5 | 0    | 0 | 0  | 3  | 5 | 8     |
| Total |   | 1    | 0 | 65 | 84 | 8 | 158   |

School Responsibility (1-5)

|       |   | Post |    |     |    |    | Total |
|-------|---|------|----|-----|----|----|-------|
|       |   | 1    | 2  | 3   | 4  | 5  |       |
| Pre   | 1 | 0    | 1  | 2   | 1  | 0  | 4     |
|       | 2 | 3    | 35 | 27  | 9  | 0  | 74    |
|       | 3 | 0    | 25 | 72  | 28 | 1  | 126   |
|       | 4 | 1    | 4  | 26  | 47 | 10 | 88    |
|       | 5 | 0    | 0  | 3   | 7  | 12 | 22    |
| Total |   | 4    | 65 | 130 | 92 | 23 | 314   |

School Responsibility (1-5)

|       |   | Post |    |    |    |    | Total |
|-------|---|------|----|----|----|----|-------|
|       |   | 1    | 2  | 3  | 4  | 5  |       |
| Pre   | 1 | 0    | 1  | 2  | 1  | 0  | 4     |
|       | 2 | 1    | 18 | 13 | 2  | 0  | 34    |
|       | 3 | 0    | 14 | 38 | 10 | 0  | 62    |
|       | 4 | 0    | 2  | 13 | 24 | 5  | 44    |
|       | 5 | 0    | 0  | 1  | 5  | 8  | 14    |
| Total |   | 1    | 35 | 67 | 42 | 13 | 158   |

Personal Competence (1-5)

|       |   | Post |    |     |     |    | Total |
|-------|---|------|----|-----|-----|----|-------|
|       |   | 1    | 2  | 3   | 4   | 5  |       |
| Pre   | 1 | 1    | 4  | 7   | 6   | 0  | 18    |
|       | 2 | 1    | 13 | 16  | 7   | 0  | 37    |
|       | 3 | 2    | 21 | 77  | 27  | 1  | 128   |
|       | 4 | 1    | 2  | 25  | 79  | 10 | 117   |
|       | 5 | 0    | 0  | 1   | 6   | 7  | 14    |
| Total |   | 5    | 40 | 126 | 125 | 18 | 314   |

Personal Competence (1-5)

|       |   | Post |    |    |    |    | Total |
|-------|---|------|----|----|----|----|-------|
|       |   | 1    | 2  | 3  | 4  | 5  |       |
| Pre   | 1 | 1    | 3  | 5  | 2  | 0  | 11    |
|       | 2 | 0    | 8  | 7  | 5  | 0  | 20    |
|       | 3 | 0    | 9  | 33 | 18 | 1  | 61    |
|       | 4 | 0    | 1  | 10 | 42 | 6  | 59    |
|       | 5 | 0    | 0  | 1  | 2  | 4  | 7     |
| Total |   | 1    | 21 | 56 | 69 | 11 | 158   |

School 1 (N=20)

Future Political Participation (1-5)

|       |   | Post |   |   |   |   | Total |
|-------|---|------|---|---|---|---|-------|
|       |   | 1    | 2 | 3 | 4 | 5 |       |
| Pre   | 1 | 3    | 4 | 0 | 1 | 0 | 8     |
|       | 2 | 1    | 5 | 2 | 0 | 0 | 8     |
|       | 3 | 0    | 0 | 4 | 0 | 0 | 4     |
|       | 4 | 0    | 0 | 0 | 0 | 0 | 0     |
|       | 5 | 0    | 0 | 0 | 0 | 0 | 0     |
| Total |   | 4    | 9 | 6 | 1 | 0 | 20    |

Future Affiliation (1-5)

|       |   | Post |    |   |   |   | Total |
|-------|---|------|----|---|---|---|-------|
|       |   | 1    | 2  | 3 | 4 | 5 |       |
| Pre   | 1 | 5    | 6  | 1 | 0 | 0 | 12    |
|       | 2 | 0    | 8  | 0 | 0 | 0 | 8     |
|       | 3 | 0    | 0  | 0 | 0 | 0 | 0     |
|       | 4 | 0    | 0  | 0 | 0 | 0 | 0     |
|       | 5 | 0    | 0  | 0 | 0 | 0 | 0     |
| Total |   | 5    | 14 | 1 | 0 | 0 | 20    |

Political Efficacy (1-5)

|       |   | Post |   |   |   |   | Total |
|-------|---|------|---|---|---|---|-------|
|       |   | 1    | 2 | 3 | 4 | 5 |       |
| Pre   | 1 | 0    | 3 | 2 | 0 | 0 | 5     |
|       | 2 | 0    | 0 | 0 | 0 | 0 | 0     |
|       | 3 | 2    | 3 | 2 | 3 | 0 | 10    |
|       | 4 | 0    | 1 | 1 | 2 | 0 | 4     |
|       | 5 | 0    | 0 | 0 | 1 | 0 | 1     |
| Total |   | 2    | 7 | 5 | 6 | 0 | 20    |

Non-School Social Responsibility (1-5)

|       |   | Post |   |    |   |   | Total |
|-------|---|------|---|----|---|---|-------|
|       |   | 1    | 2 | 3  | 4 | 5 |       |
| Pre   | 1 | 0    | 0 | 0  | 0 | 0 | 0     |
|       | 2 | 0    | 0 | 1  | 0 | 0 | 1     |
|       | 3 | 0    | 0 | 10 | 2 | 0 | 12    |
|       | 4 | 0    | 0 | 2  | 5 | 0 | 7     |
|       | 5 | 0    | 0 | 0  | 0 | 0 | 0     |
| Total |   | 0    | 0 | 13 | 7 | 0 | 20    |

School Responsibility (1-5)

|       |   | Post |   |   |   |   | Total |
|-------|---|------|---|---|---|---|-------|
|       |   | 1    | 2 | 3 | 4 | 5 |       |
| Pre   | 1 | 0    | 0 | 2 | 1 | 0 | 3     |
|       | 2 | 1    | 4 | 2 | 1 | 0 | 8     |
|       | 3 | 0    | 1 | 3 | 2 | 0 | 6     |
|       | 4 | 0    | 0 | 1 | 2 | 0 | 3     |
|       | 5 | 0    | 0 | 0 | 0 | 0 | 0     |
| Total |   | 1    | 5 | 8 | 6 | 0 | 20    |

Personal Competence (1-5)

|       |   | Post |   |    |   |   | Total |
|-------|---|------|---|----|---|---|-------|
|       |   | 1    | 2 | 3  | 4 | 5 |       |
| Pre   | 1 | 0    | 0 | 1  | 0 | 0 | 1     |
|       | 2 | 0    | 3 | 1  | 0 | 0 | 4     |
|       | 3 | 0    | 0 | 9  | 2 | 1 | 12    |
|       | 4 | 0    | 0 | 1  | 2 | 0 | 3     |
|       | 5 | 0    | 0 | 0  | 0 | 0 | 0     |
| Total |   | 0    | 3 | 12 | 4 | 1 | 20    |

Pre to Post Student Changes on Six Scales

School 2 (N=20)

Future Political Participation (1-5)

|       |   | Post |   |    |   |   | Total |
|-------|---|------|---|----|---|---|-------|
|       |   | 1    | 2 | 3  | 4 | 5 |       |
| Pre   | 1 | 0    | 3 | 0  | 0 | 0 | 3     |
|       | 2 | 0    | 5 | 4  | 0 | 0 | 9     |
|       | 3 | 0    | 0 | 7  | 0 | 0 | 7     |
|       | 4 | 0    | 0 | 0  | 1 | 0 | 1     |
|       | 5 | 0    | 0 | 0  | 0 | 0 | 0     |
| Total |   | 0    | 8 | 11 | 1 | 0 | 20    |

Future Affiliation (1-5)

|       |   | Post |    |   |   |   | Total |
|-------|---|------|----|---|---|---|-------|
|       |   | 1    | 2  | 3 | 4 | 5 |       |
| Pre   | 1 | 3    | 5  | 0 | 0 | 0 | 8     |
|       | 2 | 2    | 10 | 0 | 0 | 0 | 12    |
|       | 3 | 0    | 0  | 0 | 0 | 0 | 0     |
|       | 4 | 0    | 0  | 0 | 0 | 0 | 0     |
|       | 5 | 0    | 0  | 0 | 0 | 0 | 0     |
| Total |   | 5    | 15 | 0 | 0 | 0 | 20    |

Political Efficacy (1-5)

|       |   | Post |   |   |   |   | Total |
|-------|---|------|---|---|---|---|-------|
|       |   | 1    | 2 | 3 | 4 | 5 |       |
| Pre   | 1 | 0    | 0 | 0 | 1 | 0 | 1     |
|       | 2 | 0    | 1 | 1 | 1 | 0 | 3     |
|       | 3 | 1    | 0 | 3 | 2 | 0 | 6     |
|       | 4 | 0    | 3 | 1 | 3 | 1 | 8     |
|       | 5 | 0    | 0 | 0 | 0 | 2 | 2     |
| Total |   | 1    | 4 | 5 | 7 | 3 | 20    |

Non-School Social Responsibility (1-5)

|       |   | Post |   |   |    |   | Total |
|-------|---|------|---|---|----|---|-------|
|       |   | 1    | 2 | 3 | 4  | 5 |       |
| Pre   | 1 | 0    | 0 | 0 | 0  | 0 | 0     |
|       | 2 | 0    | 0 | 0 | 0  | 0 | 0     |
|       | 3 | 0    | 0 | 5 | 3  | 0 | 8     |
|       | 4 | 0    | 0 | 1 | 10 | 0 | 11    |
|       | 5 | 0    | 0 | 0 | 0  | 1 | 1     |
| Total |   | 0    | 0 | 6 | 13 | 1 | 20    |

School Responsibility (1-5)

|       |   | Post |   |   |   |   | Total |
|-------|---|------|---|---|---|---|-------|
|       |   | 1    | 2 | 3 | 4 | 5 |       |
| Pre   | 1 | 0    | 1 | 0 | 0 | 0 | 1     |
|       | 2 | 0    | 2 | 2 | 1 | 0 | 5     |
|       | 3 | 0    | 1 | 5 | 2 | 0 | 8     |
|       | 4 | 0    | 0 | 1 | 3 | 0 | 4     |
|       | 5 | 0    | 0 | 0 | 1 | 1 | 2     |
| Total |   | 0    | 4 | 8 | 7 | 1 | 20    |

Personal Competence (1-5)

|       |   | Post |   |   |   |   | Total |
|-------|---|------|---|---|---|---|-------|
|       |   | 1    | 2 | 3 | 4 | 5 |       |
| Pre   | 1 | 0    | 0 | 0 | 1 | 0 | 1     |
|       | 2 | 0    | 1 | 1 | 0 | 0 | 2     |
|       | 3 | 0    | 3 | 4 | 2 | 0 | 9     |
|       | 4 | 0    | 1 | 1 | 4 | 2 | 8     |
|       | 5 | 0    | 0 | 0 | 0 | 0 | 0     |
| Total |   | 0    | 5 | 6 | 7 | 2 | 20    |

School 3

School 3 (N=20)

Future Political Participation (1-5)

|       |   | Post |   |   |   |   | Total |
|-------|---|------|---|---|---|---|-------|
|       |   | 1    | 2 | 3 | 4 | 5 |       |
| Pre   | 1 | 0    | 1 | 0 | 0 | 0 | 1     |
|       | 2 | 1    | 6 | 3 | 0 | 0 | 10    |
|       | 3 | 0    | 2 | 3 | 0 | 1 | 6     |
|       | 4 | 0    | 0 | 3 | 0 | 0 | 3     |
|       | 5 | 0    | 0 | 0 | 0 | 0 | 0     |
| Total |   | 1    | 9 | 9 | 0 | 1 | 20    |

Future Affiliation (1-5)

|       |   | Post |    |   |   |   | Total |
|-------|---|------|----|---|---|---|-------|
|       |   | 1    | 2  | 3 | 4 | 5 |       |
| Pre   | 1 | 1    | 5  | 0 | 0 | 0 | 6     |
|       | 2 | 1    | 11 | 1 | 0 | 0 | 13    |
|       | 3 | 0    | 0  | 1 | 0 | 0 | 1     |
|       | 4 | 0    | 0  | 0 | 0 | 0 | 0     |
|       | 5 | 0    | 0  | 0 | 0 | 0 | 0     |
| Total |   | 2    | 16 | 2 | 0 | 0 | 20    |

Political Efficacy (1-5)

|       |   | Post |   |   |   |   | Total |
|-------|---|------|---|---|---|---|-------|
|       |   | 1    | 2 | 3 | 4 | 5 |       |
| Pre   | 1 | 0    | 0 | 0 | 0 | 0 | 0     |
|       | 2 | 0    | 1 | 0 | 3 | 0 | 4     |
|       | 3 | 2    | 0 | 2 | 1 | 0 | 5     |
|       | 4 | 0    | 2 | 1 | 5 | 1 | 9     |
|       | 5 | 0    | 0 | 0 | 0 | 2 | 2     |
| Total |   | 2    | 3 | 3 | 9 | 3 | 20    |

Non-School Social Responsibility (1-5)

|       |   | Post |   |   |    |   | Total |
|-------|---|------|---|---|----|---|-------|
|       |   | 1    | 2 | 3 | 4  | 5 |       |
| Pre   | 1 | 0    | 0 | 0 | 0  | 0 | 0     |
|       | 2 | 0    | 0 | 0 | 0  | 0 | 0     |
|       | 3 | 0    | 0 | 3 | 3  | 0 | 6     |
|       | 4 | 0    | 0 | 4 | 6  | 1 | 11    |
|       | 5 | 0    | 0 | 0 | 2  | 1 | 3     |
| Total |   | 0    | 0 | 7 | 11 | 2 | 20    |

School Responsibility (1-5)

|       |   | Post |   |   |   |   | Total |
|-------|---|------|---|---|---|---|-------|
|       |   | 1    | 2 | 3 | 4 | 5 |       |
| Pre   | 1 | 0    | 0 | 0 | 0 | 0 | 0     |
|       | 2 | 0    | 1 | 1 | 0 | 0 | 2     |
|       | 3 | 0    | 2 | 6 | 0 | 0 | 8     |
|       | 4 | 0    | 1 | 2 | 4 | 1 | 8     |
|       | 5 | 0    | 0 | 0 | 1 | 1 | 2     |
| Total |   | 0    | 4 | 9 | 5 | 2 | 20    |

Personal Competence (1-5)

|       |   | Post |   |   |    |   | Total |
|-------|---|------|---|---|----|---|-------|
|       |   | 1    | 2 | 3 | 4  | 5 |       |
| Pre   | 1 | 0    | 0 | 0 | 0  | 0 | 0     |
|       | 2 | 0    | 2 | 3 | 2  | 0 | 7     |
|       | 3 | 0    | 1 | 2 | 2  | 0 | 5     |
|       | 4 | 0    | 0 | 1 | 7  | 0 | 8     |
|       | 5 | 0    | 0 | 0 | 0  | 0 | 0     |
| Total |   | 0    | 3 | 6 | 11 | 0 | 20    |

Future Political Participation (1-5)

|       | Post |   |   |   |   | Total |
|-------|------|---|---|---|---|-------|
|       | 1    | 2 | 3 | 4 | 5 |       |
| Pre 1 | 3    | 1 | 0 | 0 | 0 | 4     |
| Pre 2 | 1    | 5 | 3 | 0 | 0 | 9     |
| Pre 3 | 0    | 1 | 4 | 1 | 0 | 6     |
| Pre 4 | 0    | 0 | 0 | 1 | 0 | 1     |
| Pre 5 | 0    | 0 | 0 | 0 | 0 | 0     |
| Total | 4    | 7 | 7 | 2 | 0 | 20    |

Future Political Participation (1-5)

|       | Post |    |   |   |   | Total |
|-------|------|----|---|---|---|-------|
|       | 1    | 2  | 3 | 4 | 5 |       |
| Pre 1 | 0    | 1  | 0 | 0 | 0 | 1     |
| Pre 2 | 2    | 10 | 3 | 0 | 0 | 15    |
| Pre 3 | 0    | 1  | 1 | 0 | 0 | 2     |
| Pre 4 | 0    | 0  | 1 | 1 | 0 | 2     |
| Pre 5 | 0    | 0  | 0 | 0 | 0 | 0     |
| Total | 2    | 12 | 5 | 1 | 0 | 20    |

Future Political Participation (1-5)

|       | Post |   |   |   |   | Total |
|-------|------|---|---|---|---|-------|
|       | 1    | 2 | 3 | 4 | 5 |       |
| Pre 1 | 2    | 0 | 0 | 0 | 0 | 2     |
| Pre 2 | 1    | 7 | 3 | 0 | 0 | 11    |
| Pre 3 | 0    | 2 | 5 | 0 | 0 | 7     |
| Pre 4 | 0    | 0 | 0 | 0 | 0 | 0     |
| Pre 5 | 0    | 0 | 0 | 0 | 0 | 0     |
| Total | 3    | 9 | 8 | 0 | 0 | 20    |

Future Affiliation (1-5)

|       | Post |    |   |   |   | Total |
|-------|------|----|---|---|---|-------|
|       | 1    | 2  | 3 | 4 | 5 |       |
| Pre 1 | 2    | 5  | 0 | 0 | 0 | 7     |
| Pre 2 | 2    | 10 | 1 | 0 | 0 | 13    |
| Pre 3 | 0    | 0  | 0 | 0 | 0 | 0     |
| Pre 4 | 0    | 0  | 0 | 0 | 0 | 0     |
| Pre 5 | 0    | 0  | 0 | 0 | 0 | 0     |
| Total | 4    | 15 | 1 | 0 | 0 | 20    |

Future Affiliation (1-5)

|       | Post |    |   |   |   | Total |
|-------|------|----|---|---|---|-------|
|       | 1    | 2  | 3 | 4 | 5 |       |
| Pre 1 | 4    | 1  | 0 | 0 | 0 | 5     |
| Pre 2 | 1    | 14 | 0 | 0 | 0 | 15    |
| Pre 3 | 0    | 0  | 0 | 0 | 0 | 0     |
| Pre 4 | 0    | 0  | 0 | 0 | 0 | 0     |
| Pre 5 | 0    | 0  | 0 | 0 | 0 | 0     |
| Total | 5    | 15 | 0 | 0 | 0 | 20    |

Future Affiliation (1-5)

|       | Post |    |   |   |   | Total |
|-------|------|----|---|---|---|-------|
|       | 1    | 2  | 3 | 4 | 5 |       |
| Pre 1 | 6    | 4  | 0 | 0 | 0 | 10    |
| Pre 2 | 0    | 10 | 0 | 0 | 0 | 10    |
| Pre 3 | 0    | 0  | 0 | 0 | 0 | 0     |
| Pre 4 | 0    | 0  | 0 | 0 | 0 | 0     |
| Pre 5 | 0    | 0  | 0 | 0 | 0 | 0     |
| Total | 6    | 14 | 0 | 0 | 0 | 20    |

Political Efficacy (1-5)

|       | Post |   |   |    |   | Total |
|-------|------|---|---|----|---|-------|
|       | 1    | 2 | 3 | 4  | 5 |       |
| Pre 1 | 0    | 0 | 0 | 0  | 0 | 0     |
| Pre 2 | 1    | 1 | 0 | 0  | 0 | 2     |
| Pre 3 | 2    | 0 | 1 | 4  | 0 | 7     |
| Pre 4 | 0    | 1 | 1 | 7  | 1 | 10    |
| Pre 5 | 0    | 0 | 0 | 0  | 1 | 1     |
| Total | 3    | 2 | 2 | 11 | 2 | 20    |

Political Efficacy (1-5)

|       | Post |   |   |   |   | Total |
|-------|------|---|---|---|---|-------|
|       | 1    | 2 | 3 | 4 | 5 |       |
| Pre 1 | 0    | 0 | 1 | 0 | 0 | 1     |
| Pre 2 | 0    | 0 | 0 | 0 | 0 | 0     |
| Pre 3 | 0    | 4 | 4 | 1 | 1 | 10    |
| Pre 4 | 0    | 3 | 2 | 3 | 1 | 9     |
| Pre 5 | 0    | 0 | 0 | 0 | 0 | 0     |
| Total | 0    | 7 | 7 | 4 | 2 | 20    |

Political Efficacy (1-5)

|       | Post |   |   |   |   | Total |
|-------|------|---|---|---|---|-------|
|       | 1    | 2 | 3 | 4 | 5 |       |
| Pre 1 | 0    | 0 | 2 | 0 | 0 | 2     |
| Pre 2 | 2    | 2 | 1 | 0 | 0 | 5     |
| Pre 3 | 0    | 2 | 4 | 1 | 0 | 7     |
| Pre 4 | 0    | 2 | 0 | 4 | 0 | 6     |
| Pre 5 | 0    | 0 | 0 | 0 | 0 | 0     |
| Total | 2    | 6 | 7 | 5 | 0 | 20    |

Non-School Social Responsibility (1-5)

|       | Post |   |   |    |   | Total |
|-------|------|---|---|----|---|-------|
|       | 1    | 2 | 3 | 4  | 5 |       |
| Pre 1 | 0    | 0 | 0 | 0  | 0 | 0     |
| Pre 2 | 0    | 0 | 2 | 0  | 0 | 2     |
| Pre 3 | 0    | 0 | 0 | 4  | 0 | 4     |
| Pre 4 | 0    | 0 | 2 | 11 | 1 | 14    |
| Pre 5 | 0    | 0 | 0 | 0  | 0 | 0     |
| Total | 0    | 0 | 4 | 15 | 1 | 20    |

Non-School Social Responsibility (1-5)

|       | Post |   |    |   |   | Total |
|-------|------|---|----|---|---|-------|
|       | 1    | 2 | 3  | 4 | 5 |       |
| Pre 1 | 0    | 0 | 0  | 0 | 0 | 0     |
| Pre 2 | 0    | 0 | 0  | 0 | 0 | 0     |
| Pre 3 | 0    | 0 | 8  | 4 | 0 | 12    |
| Pre 4 | 0    | 0 | 4  | 4 | 0 | 8     |
| Pre 5 | 0    | 0 | 0  | 0 | 0 | 0     |
| Total | 0    | 0 | 12 | 8 | 0 | 20    |

Non-School Social Responsibility (1-5)

|       | Post |   |    |   |   | Total |
|-------|------|---|----|---|---|-------|
|       | 1    | 2 | 3  | 4 | 5 |       |
| Pre 1 | 0    | 0 | 0  | 0 | 0 | 0     |
| Pre 2 | 0    | 0 | 1  | 0 | 0 | 1     |
| Pre 3 | 0    | 0 | 8  | 2 | 0 | 10    |
| Pre 4 | 0    | 0 | 5  | 4 | 0 | 9     |
| Pre 5 | 0    | 0 | 0  | 0 | 0 | 0     |
| Total | 0    | 0 | 14 | 6 | 0 | 20    |

School Responsibility (1-5)

|       | Post |   |   |   |   | Total |
|-------|------|---|---|---|---|-------|
|       | 1    | 2 | 3 | 4 | 5 |       |
| Pre 1 | 0    | 0 | 0 | 0 | 0 | 0     |
| Pre 2 | 0    | 2 | 2 | 0 | 0 | 4     |
| Pre 3 | 0    | 0 | 5 | 1 | 0 | 6     |
| Pre 4 | 0    | 0 | 1 | 5 | 2 | 8     |
| Pre 5 | 0    | 0 | 0 | 1 | 1 | 2     |
| Total | 0    | 2 | 8 | 7 | 3 | 20    |

Social Responsibility (1-5)

|       | Post |   |    |   |   | Total |
|-------|------|---|----|---|---|-------|
|       | 1    | 2 | 3  | 4 | 5 |       |
| Pre 1 | 0    | 0 | 0  | 0 | 0 | 0     |
| Pre 2 | 0    | 3 | 1  | 0 | 0 | 4     |
| Pre 3 | 0    | 1 | 7  | 1 | 0 | 9     |
| Pre 4 | 0    | 0 | 3  | 3 | 0 | 6     |
| Pre 5 | 0    | 0 | 1  | 0 | 0 | 1     |
| Total | 0    | 4 | 12 | 4 | 0 | 20    |

Social Responsibility (1-5)

|       | Post |   |    |   |   | Total |
|-------|------|---|----|---|---|-------|
|       | 1    | 2 | 3  | 4 | 5 |       |
| Pre 1 | 0    | 0 | 0  | 0 | 0 | 0     |
| Pre 2 | 0    | 4 | 3  | 0 | 0 | 7     |
| Pre 3 | 0    | 4 | 6  | 1 | 0 | 11    |
| Pre 4 | 0    | 1 | 1  | 0 | 0 | 2     |
| Pre 5 | 0    | 0 | 0  | 0 | 0 | 0     |
| Total | 0    | 9 | 10 | 1 | 0 | 20    |

Personal Competence (1-5)

|       | Post |   |   |    |   | Total |
|-------|------|---|---|----|---|-------|
|       | 1    | 2 | 3 | 4  | 5 |       |
| Pre 1 | 0    | 0 | 2 | 0  | 0 | 2     |
| Pre 2 | 0    | 1 | 2 | 2  | 0 | 5     |
| Pre 3 | 0    | 1 | 2 | 3  | 0 | 6     |
| Pre 4 | 0    | 0 | 1 | 5  | 0 | 6     |
| Pre 5 | 0    | 0 | 0 | 0  | 1 | 1     |
| Total | 0    | 2 | 7 | 10 | 1 | 20    |

Personal Competence (1-5)

|       | Post |   |    |   |   | Total |
|-------|------|---|----|---|---|-------|
|       | 1    | 2 | 3  | 4 | 5 |       |
| Pre 1 | 1    | 1 | 0  | 0 | 0 | 2     |
| Pre 2 | 0    | 0 | 0  | 1 | 0 | 1     |
| Pre 3 | 0    | 2 | 9  | 3 | 0 | 14    |
| Pre 4 | 0    | 0 | 2  | 1 | 0 | 3     |
| Pre 5 | 0    | 0 | 0  | 0 | 0 | 0     |
| Total | 1    | 3 | 11 | 5 | 0 | 20    |

Personal Competence (1-5)

|       | Post |   |   |    |   | Total |
|-------|------|---|---|----|---|-------|
|       | 1    | 2 | 3 | 4  | 5 |       |
| Pre 1 | 0    | 1 | 0 | 0  | 0 | 1     |
| Pre 2 | 0    | 1 | 0 | 0  | 0 | 1     |
| Pre 3 | 0    | 1 | 2 | 5  | 0 | 8     |
| Pre 4 | 0    | 0 | 2 | 6  | 0 | 8     |
| Pre 5 | 0    | 0 | 1 | 0  | 1 | 2     |
| Total | 0    | 3 | 5 | 11 | 1 | 20    |



School 7 (N=20)

Future Political Participation (1-5)

|       |   | Post |   |   |   |   | Total |
|-------|---|------|---|---|---|---|-------|
|       |   | 1    | 2 | 3 | 4 | 5 |       |
| Pre   | 1 | 1    | 0 | 0 | 0 | 0 | 2     |
|       | 2 | 0    | 4 | 0 | 1 | 0 | 5     |
|       | 3 | 0    | 4 | 6 | 1 | 0 | 11    |
|       | 4 | 0    | 0 | 2 | 0 | 0 | 2     |
|       | 5 | 0    | 0 | 0 | 0 | 0 | 0     |
| Total |   | 1    | 9 | 8 | 2 | 0 | 20    |

Future Affiliation (1-5)

|       |   | Post |    |   |   |   | Total |
|-------|---|------|----|---|---|---|-------|
|       |   | 1    | 2  | 3 | 4 | 5 |       |
| Pre   | 1 | 3    | 2  | 0 | 0 | 0 | 5     |
|       | 2 | 0    | 15 | 0 | 0 | 0 | 15    |
|       | 3 | 0    | 0  | 0 | 0 | 0 | 0     |
|       | 4 | 0    | 0  | 0 | 0 | 0 | 0     |
|       | 5 | 0    | 0  | 0 | 0 | 0 | 0     |
| Total |   | 3    | 17 | 0 | 0 | 0 | 20    |

Political Efficacy (1-5)

|       |   | Post |   |   |   |   | Total |
|-------|---|------|---|---|---|---|-------|
|       |   | 1    | 2 | 3 | 4 | 5 |       |
| Pre   | 1 | 0    | 0 | 0 | 0 | 0 | 0     |
|       | 2 | 0    | 1 | 2 | 0 | 0 | 3     |
|       | 3 | 0    | 2 | 3 | 0 | 0 | 5     |
|       | 4 | 0    | 3 | 3 | 4 | 0 | 10    |
|       | 5 | 0    | 0 | 0 | 1 | 1 | 2     |
| Total |   | 0    | 6 | 8 | 5 | 1 | 20    |

Non-School Social Responsibility (1-5)

|       |   | Post |   |   |    |   | Total |
|-------|---|------|---|---|----|---|-------|
|       |   | 1    | 2 | 3 | 4  | 5 |       |
| Pre   | 1 | 0    | 0 | 0 | 0  | 0 | 0     |
|       | 2 | 0    | 0 | 0 | 0  | 0 | 0     |
|       | 3 | 0    | 0 | 2 | 4  | 0 | 6     |
|       | 4 | 0    | 0 | 4 | 10 | 0 | 14    |
|       | 5 | 0    | 0 | 0 | 0  | 0 | 0     |
| Total |   | 0    | 0 | 6 | 14 | 0 | 20    |

Social Responsibility (1-5)

|       |   | Post |   |   |   |   | Total |
|-------|---|------|---|---|---|---|-------|
|       |   | 1    | 2 | 3 | 4 | 5 |       |
| Pre   | 1 | 0    | 0 | 0 | 0 | 0 | 0     |
|       | 2 | 0    | 2 | 1 | 0 | 0 | 3     |
|       | 3 | 0    | 3 | 3 | 1 | 0 | 7     |
|       | 4 | 0    | 0 | 4 | 5 | 0 | 9     |
|       | 5 | 0    | 0 | 0 | 0 | 1 | 1     |
| Total |   | 0    | 5 | 8 | 6 | 1 | 20    |

Personal Competence (1-5)

|       |   | Post |   |   |    |   | Total |
|-------|---|------|---|---|----|---|-------|
|       |   | 1    | 2 | 3 | 4  | 5 |       |
| Pre   | 1 | 0    | 0 | 2 | 0  | 0 | 2     |
|       | 2 | 0    | 0 | 0 | 0  | 0 | 0     |
|       | 3 | 0    | 1 | 1 | 0  | 0 | 2     |
|       | 4 | 0    | 0 | 0 | 12 | 2 | 14    |
|       | 5 | 0    | 0 | 0 | 1  | 1 | 2     |
| Total |   | 0    | 1 | 3 | 13 | 3 | 20    |

School 8 (N=18)

Future Political Participation (1-5)

|       |   | Post |   |   |   |   | Total |
|-------|---|------|---|---|---|---|-------|
|       |   | 1    | 2 | 3 | 4 | 5 |       |
| Pre   | 1 | 0    | 1 | 0 | 0 | 0 | 1     |
|       | 2 | 1    | 2 | 1 | 1 | 0 | 5     |
|       | 3 | 0    | 1 | 2 | 1 | 0 | 4     |
|       | 4 | 1    | 2 | 0 | 2 | 1 | 6     |
|       | 5 | 0    | 0 | 0 | 1 | 1 | 2     |
| Total |   | 2    | 6 | 3 | 5 | 2 | 18    |

Future Affiliation (1-5)

|       |   | Post |    |   |   |   | Total |
|-------|---|------|----|---|---|---|-------|
|       |   | 1    | 2  | 3 | 4 | 5 |       |
| Pre   | 1 | 1    | 0  | 0 | 0 | 0 | 1     |
|       | 2 | 1    | 13 | 0 | 0 | 0 | 14    |
|       | 3 | 0    | 2  | 1 | 0 | 0 | 3     |
|       | 4 | 0    | 0  | 0 | 0 | 0 | 0     |
|       | 5 | 0    | 0  | 0 | 0 | 0 | 0     |
| Total |   | 2    | 15 | 1 | 0 | 0 | 18    |

Political Efficacy (1-5)

|       |   | Post |   |   |   |   | Total |
|-------|---|------|---|---|---|---|-------|
|       |   | 1    | 2 | 3 | 4 | 5 |       |
| Pre   | 1 | 0    | 1 | 0 | 0 | 0 | 1     |
|       | 2 | 1    | 1 | 3 | 1 | 0 | 6     |
|       | 3 | 0    | 0 | 0 | 1 | 0 | 1     |
|       | 4 | 0    | 3 | 0 | 4 | 1 | 8     |
|       | 5 | 0    | 0 | 1 | 0 | 1 | 2     |
| Total |   | 1    | 5 | 4 | 6 | 2 | 18    |

Non-School Social Responsibility (1-5)

|       |   | Post |   |   |    |   | Total |
|-------|---|------|---|---|----|---|-------|
|       |   | 1    | 2 | 3 | 4  | 5 |       |
| Pre   | 1 | 0    | 0 | 0 | 0  | 0 | 0     |
|       | 2 | 0    | 0 | 0 | 1  | 0 | 1     |
|       | 3 | 1    | 0 | 1 | 1  | 0 | 3     |
|       | 4 | 0    | 0 | 2 | 7  | 1 | 10    |
|       | 5 | 0    | 0 | 0 | 1  | 3 | 4     |
| Total |   | 1    | 0 | 3 | 10 | 4 | 18    |

Social Responsibility (1-5)

|       |   | Post |   |   |   |   | Total |
|-------|---|------|---|---|---|---|-------|
|       |   | 1    | 2 | 3 | 4 | 5 |       |
| Pre   | 1 | 0    | 0 | 0 | 0 | 0 | 0     |
|       | 2 | 0    | 0 | 1 | 0 | 0 | 1     |
|       | 3 | 0    | 2 | 3 | 2 | 0 | 7     |
|       | 4 | 0    | 0 | 0 | 2 | 2 | 4     |
|       | 5 | 0    | 0 | 0 | 2 | 4 | 6     |
| Total |   | 0    | 2 | 4 | 6 | 6 | 18    |

Personal Competence (1-5)

|       |   | Post |   |   |   |   | Total |
|-------|---|------|---|---|---|---|-------|
|       |   | 1    | 2 | 3 | 4 | 5 |       |
| Pre   | 1 | 0    | 1 | 0 | 1 | 0 | 2     |
|       | 2 | 0    | 0 | 0 | 0 | 0 | 0     |
|       | 3 | 0    | 0 | 4 | 1 | 0 | 5     |
|       | 4 | 0    | 0 | 2 | 5 | 2 | 9     |
|       | 5 | 0    | 0 | 0 | 1 | 1 | 2     |
| Total |   | 0    | 1 | 6 | 8 | 3 | 18    |