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**Review of Research and Evaluation
on Service Learning
in Public and Higher Education**

by

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Introduction

While service-learning, community service and volunteer programs have been a part of schools and colleges in the United States for decades and there have been a range of research and evaluation studies, there is a general lack of solid evidence on its effects. One of the major difficulties in evaluating or researching service learning programs is the lack of agreement on what is meant by the term and exactly what it is meant to accomplish. While some programs emphasize social growth, character development or civic responsibility, others attempt to study psychological development and effects of programs on self-concept. Moral judgment studies have sought to evaluate the effects of service on moral and ego development and others have attempted to measure the effects of service on the broader community. Perhaps the most difficult arena has been in the area of intellectual, cognitive and academic effects. It has been difficult to design tight experiments to isolate the effects of service on specific academic achievements. A recent experimental study (Markus, Howard & King, 1993) of students in a university political science course provides some of the first strong evidence of the positive academic effects of service-learning.

As indicated, an additional problem with evaluation and research on service learning has been the lack of an accepted definition. Voluntary service, volunteerism, national service, community service, peer helping, community-based learning, study service, and youth service, are all terms which have been and continue to be used. With the formation of the Commission on National and Community Service and the passage by Congress of two major acts on service-learning (1990 and 1993), we shall accept the definition of programs being funded under rules from the Commission.

A service learning program provides educational experiences:

- a. Under which students learn and develop through active participation in thoughtfully organized service experiences that meet actual community needs and that are coordinated in collaboration with school and community;*
- b. That is integrated into the students' academic curriculum or provides structured time for a student to think, talk, or write about what the student did and saw during the actual service activity;*
- c. That provides a student with opportunities to use newly-acquired skills and knowledge in real-life situations in their own communities; and*
- d. That enhances what is taught in school by extending student learning beyond the classroom and into the community and helps to foster the development of a sense of caring for others.*

A challenge for evaluators and researchers in the field is the dramatically

different nature and duration of the programs that go under the guise of service learning. In another chapter in this book, we have included a listing of all of the Colorado K-12 and higher education programs funded by the State Commission with funds from the National Commission. For evaluators and researchers it is difficult to compare one-term service events for a group of eight year olds in an elementary classroom with full-time, paid programs for young adults in conservation corps. In-depth, semester-long academic courses in international settings for college students differ greatly from once-a-week volunteer visits to a senior center. Yet all of these can and do meet basic criteria for service-learning.

Krug (1991) The following cursory review is taken from the Literature Review on Service Learning conducted by Dr. James Krug (1991) at the University of Colorado. Krug's research was on the effects of service learning on four groups of high school young people: at-risk youth in a special program, student assistants (primarily minority) within the school, nature guides, and tutors at a primary school. Preliminary results indicate that, while all the experimental groups gained on measures of potency, activity involvement in the community, self-concept and other factors, the statistically significant growth at the .01 and .05 levels was found almost exclusively with the at-risk and minority young people. The control group, as predicted, did not change on the pre-post instruments.

General Surveys

Newman and Rutter (1986) The authors estimated that in 1984, approximately 27 percent of all high schools offered some form of service program, involving 900,000 students in 5,400 schools. Service took on the form of 1) school clubs or co-curricular organizations; 2) service learning credit or requirement; 3) a laboratory for an existing course; 4) a service learning class; or 5) a school-wide focus. Non-public schools were more likely to offer service, and suburban and large schools more often than urban, rural or small schools. Alternative public and Catholic were more likely than regular public or non-Catholic private schools. An estimated 6.6 percent of all high school students were involved in 1984, with 2.3 percent tied to the curriculum. This compared with 52 percent of seniors involved in team sports and 34 percent in the performing arts. Time spent was an average of four hours per week across all programs, and six hours in elective programs. Those with high school graduation requirements spent one hour per week. Schools where a majority of students were non-white were more likely to offer programs than white majority schools and three times as likely to offer community service as an elective course and award academic credit. Programs involve student in near equal proportion from the college prep., general, and vocational tracks. At-risk students and those with behavioral problems were found to be non-existent in service programs. Thirty-four percent of programs were in schools, not in the community.

Harrison (1987) Harrison reports that among voluntary programs, most (61 percent) involved less than 10 percent of the student body. Ninety percent of student put in less than 200 hours, about half the time required by one season of high school football. Sixty five percent of service programs were within the school itself.

Whatever the actual numbers of students involved in service learning might be, the surest conclusion that can be drawn is that school-based service learning is an educational concept that has endured throughout this century, but has not become an integral part of the high school experience for more than a small group of students. In addition, few programs involve participation by at-risk and minority youth, and a majority of school-sponsored programs are focused on college bound white students.

Social Growth Investigations

Riecken (1952) Riecken studied college students involved in two months of intensive, full-time summer experiences designed to strengthen humanitarian ideals by having youths participate in physically useful labor in an economically deprived community. Using a questionnaire, he discovered participants became less prejudiced, more democratic, less authoritarian, more service oriented and developed greater ego strength.

Smith (1966) Smith, in a study of forty-four Peace Corps volunteers who taught in Ghana during a period of two years, discovered that after the first year in which the volunteers displayed initial and perhaps naive optimism, a more reasoned but no less committed moralistic philosophy emerged. They demonstrated more realism, autonomy, independence, and significantly increased levels of self-worth and

insight. In addition, they became more service oriented in terms of their own career aspirations.

Hunt and Hardt (1969) Students in a Project Upward Bound, pre-college enrichment program for high school students from poor families were involved in communal living. Both white and black groups achieved nearly identical increases in motivation, self-esteem, and academic achievement. Other researchers have indicated positive results in social growth from less intensive school service programs.

Marsh (1973) concluded that participation in community affairs as part of a high school experimental course increased, as did interest in political activities and a desire to support political issues.

Using a model based on Mosher's moral education, Newmann's citizen education and Hampden-Turner's psycho-social development, Bourgeois (1978) concluded that democratic values were accepted by young teenagers, an urgency for personal competence existed, and community activities helped to develop civic competence.

Wilson (1974) examined open-mindedness and a sense of political efficacy in a community based alternative education program. Wilson concluded that because the learning environment became one of openness, changed authority relationships between students and teachers, and student self-selection of the subject matter and process of curriculum, the findings of greater open-mindedness and political efficacy on the part of participants were able to occur.

Corbett (1977) studied the effects of high school students' participation in a year long community program which aimed to develop student commitment to the solution of social problems. He found that during the first year when the program was teacher centered and directed, student moral and psycho-social development was non significant, but in the second year, when it became student centered and reflective in nature, significant gains on personality measures and emotional and task competence were found. He concluded that students who worked with individuals in providing service developed more commitment to the solution of social problems than did the students whose volunteer work was focused upon group leaders situations.

Stockhaus (1976) sought to determine if twenty hours of helping in social service agencies would positively affect self-esteem, political efficacy, social responsibility, and community responsibility in high school seniors. Stockhaus found that participants in one school developed greater senses of social responsibility, community responsibility, and altruism, than did non-participants and controls, but that strong support for community involvement programs to bring about positive changes in citizenship attitudes was lacking. Changes were too small to be of practical significance.

Broudy (1977) delineated problems which limited the effective development of moral/citizenship, experiential and service learning programs in the public schools. They included heterogeneity of values and life styles, discrepancies between educational objectives and community behaviors, discrepancies between structured classroom teaching and students' informal community learning, and community experiences of differing intensity and quality.

Conrad and Hedin (1982) found that students in service and other experiential programs developed more favorable attitudes toward adults and also toward the type of organizations and people with whom they were involved.

Luchs (1981) reported that high school students involved in community service gained a more positive attitude toward others, a greater sense of efficacy, and higher self-esteem than non-participating comparison students.

Calbrese and Schumer (1986) reported lower levels of alienation and isolation, and fewer disciplinary problems among junior high school youth involved in service as part of a program for students with behavioral difficulties.

In summary, the literature findings on social outcomes as a result of students' involvement in experiential and service learning programs are mixed. Intensive, full-time, communal living programs have generally proven to be more successful in changing attitudes; these programs, also, have usually included older students who may have already committed themselves to achieving program objectives, primarily because they entered the programs in a voluntary mode. Too many of the studies suffer from small sample size, lack of strict controls, previous volunteer experiences on the part of students and uneven quality of students' experiences in the program.

Psychological Development Investigations

A number of research studies have concentrated upon the study of student s psychological development as a result of participation in experiential education and service learning programs. Taking full responsibility for one s own actions, developing a sense of self-esteem and ego strength, reaching a high level of moral reasoning, and becoming psychologically mature were seen to be key determinants for success in school and for active involvement in positive citizenship (Stockhaus, 1976). Unfortunately, traditional school curricula frequently not only do not promote these aims, but conversely, appear to negatively affect them (Goodland and Klein, 1990; Martin, 1975; Cusick, 1973; Silberman, 1972; Bidwell, 1965; Jackson, 1968; Surges, 1979; Coleman, 1961).

Advocates of experiential education and service learning programs believe that development of psychological strength will occur more strongly in such programs than in traditional school programs (Conrad, 1982; Coleman, 1974; Dewey, 1938; Frankena, 1965; Piaget, 1970; Schwebel and Ralph, 1973; Rogers, 1969; Rich, 1962; Kohlberg, 1970; Erikson, 1968).

Bontempo (1979) conducted field interviews with student and coordinators, and studied program documents from the various schools. Her conclusions were that this type of learning was clearly grounded in consistent philosophies of learning and was making valuable and extensive use of community resources in students education. Students enrolled demonstrated positive self-concepts and help increase students feelings of self-worth.

Kazungu (1978) concluded that voluntary youth helping experiences promoted a more positive self-concept among youth and significantly helped to improve the community.

Sager (1973) studied twenty-two high school seniors who volunteered for nine weeks during their summer vacations at state hospitals. Young people increased their self-esteem and self-confidence significantly on 30 or 34 sub-scales on seven personality inventories. In addition, they were more self-accepting, felt more adequate and worthwhile in human interactions with their peers and with the persons they were helping.

Kelly (1973) found that therapeutic helping behavior generated positive changes in self-concept and other self-perceptive dimensions on the part of the helper. He found that students who helped on a one-to-one personal level underwent significantly greater positive changes in self-concept and other related measure than did those in more general types of service activities.

In order to determine whether self-concept of students who had experienced school behavioral problems of apathy, vandalism, and delinquency would be improved by enrollment in a voluntary curriculum with a traditional school setting, Martin (1977) employed a case study approach to a year long study of thirty male and female high school students. By the end of the year, student behavior had positively changed as measured by teacher interviews and by students own self-reflections as reported to the research. Both teachers and students believe that students had also developed more positive self-concepts as their former negative behaviors became socially acceptable.

Exum (1978), in addition to investigating interpersonal behaviors and ego-development. Also studied were the results of systematic reflective discussions of college students helping experiences upon the development of self-concept. Conclusions indicated that a combination of actual experiences and systematic reflective discussions were the most important components in the curriculum and that participants showed significant growth in self-concept and ego-development.

Rutter and Newman (1989) found that the potential of service to enhance social responsibility was dependent on the presence of a reflection seminar. The opportunity to discuss their experiences with teachers in small peer group settings greatly impacted whether they reported a positive interaction with the community.

Saunders (1976) investigated whether or not junior and senior high school student tutors would demonstrate a positive attitude change in self-concept, in reading and toward school when compared to student non-tutors. While no significant difference was found, Saunders concluded that the program had an effect on maintaining positive attitudes.

Soat (1974) examined college students in an introductory psychology course as to whether one s cognitive style and self-concept were related to expressed willingness to help others. He found no significant relationships.

In summary, the research evidence does give some indication that experiential and service learning programs may have a positive effect upon the development of a positive self-concept in those students involved in such a program. More research must be done in order for that evidence to be definitive.

Moral Judgment Studies

Alexander (1977) investigated whether or not moral thinking, ego development, and the lessening of prejudice in youth could be changed by an alternative education curriculum. Significant changes were discovered in moral reasoning, ego development and lessening of prejudice.

Edwards (1974) studied experiential education as it relates to moral development, and explored the influence of environment upon moral reasoning development. Studying one hundred three high school and university students in Kenya, she confirmed the following hypotheses relating to the effects of intellectual and social experiences. 1) Students who attended multicultural secondary schools displayed higher levels of moral judgment than did students who attended ethnically homogeneous schools. 2) An atmosphere of mutual trust and cooperation stimulated students in pre conventional (stages one and two) reasoning postures to develop toward more adult postures (stages three and four). 3) Students who resided at boarding schools displayed more stages three and four moral reasoning than did students living at home. 4) Students who studied law and social sciences displayed more stages three, four and five moral reasoning development than did students who studied primarily science and engineering.

Reck (1978) attempted to determine whether or not participation in a school service learning program was positively related to moral development, whether the amount of time given to service was related to students positive moral development, and whether students with little experience in service activities experienced more moral development than students with more prior experience. On only two of sixteen variables was there significant difference between experimental and control groups. 1) Students who pretested low in moral development demonstrated greatest gains in the posttest. 2) Students who served only during the program in their assigned tasks showed significant growth.

Mosher (1977) concluded that moral and ego development can be enhanced by service earning programs with the most powerful being those that combine discussion of moral issues with the experiences.

Although the research results in the area of moral judgment are mixed, they do tend to indicate that experiential and service learning programs may have an impact upon the development of moral judgment. What has not been answered are the questions of what are consistently effective ways in which moral judgment may be developed; what types of students will benefit from what programs; and what formats will be most successful.

Intellectual Learning Investigations

Houser (1974) recorded significant gains in an experimental group versus a control group in the development of both reading skills and self-concept at the seventh and grade level, with students participating in a student-aide program involving elementary school students.

Lewis (1977) recorded significant gains in his investigation of whether learning by doing (experiential learning) was as effective a method of teaching subject matter concepts to adolescents and adults as was expository learning. Although, in a number of situations, expository learning was effective, learning by doing coupled with receipt of procedural knowledge learned both by declarative and procedural knowledge was more effective.

Hedin (1987) in a comprehensive meta-analysis on peer tutoring by high school students involved in service found increases in reading and math achievement scores both on the part of the tutor and tutee. Although the achievement score increases in reading and math were modest, the author defends the analysis on the basis that small increases are evident with most learning and growth in general.

Hamilton and Zeldin (1987) found that when the measuring instrument is a general test of knowledge, there is usually no difference between students in service programs and those in conventional classrooms who do not participate. Consistent gains in factual knowledge have been found, however, when researchers have used tests designed to measure the kinds of information students were more likely to encounter in their field experiences (Hamilton, 1987).

Braza (1974) studied fifteen experimental and eight control group students in an attempt to discover significant gains in knowledge, behavior, and attitudes recorded as a result of a community based service learning procedure. Control group students

received traditional classroom instruction in health problems of disadvantaged groups, while the experimental group students were given intensive community experiences. Posttest results demonstrated that both methods were equally effective in promoting knowledge gains; in addition, both groups expressed essentially identical increased commitment to the study of health problems of disadvantaged persons.

Markus, Howard and King (1993). The authors report results of an experiment in integrating service learning into a large undergraduate political science course. Students in service-learning sections of the course were significantly more likely than those in the traditional discussion sections to report that they had performed up to their potential in the course, had learned to apply principles from the course to new situations, and had developed a greater awareness of societal problems. Classroom learning and course grades also increased significantly as a result of students participation in course-relevant community service. Finally, pre- and post survey data revealed significant effects of participation in community service upon students personal values and orientations. The experiential learning acquired through service appears to compensate for some pedagogical weaknesses of classroom instruction.

Thus the findings on intellectual learning and participation in experiential and service learning programs are mixed. It may be that positive intellectual outcomes are found most frequently for tutoring because it is the form of service learning that is most school like, and the knowledge and skills examined are most like those the tutors have been using. In the instances when students in other forms of experiential and service learning have been tested for gains in factual knowledge, the results have been less conclusive. In most cases, the test instruments used to measure intellectual gain were developed by the same individual responsible for the service learning program, therefore raising questions of researcher bias and lack of test validity.

Community Impact and Effects on Those Served

Ellington (1978) studied the effects of contact with and education about the elderly in three experimental classes of high school seniors. Although no differences were discovered between students who received only contact with the seniors and the control group, and none were discovered between the attitudes of the two groups receiving inductive and deductive teaching, the study did find that a combination of contact with the seniors and learning about their problems appeared to positively change young peoples attitudes.

Glass and Trent (1989) concluded that adolescents attitudes toward the elderly can be changed through classroom experiences.

Owens (1979) sought to determine whether or not student attitudes toward academic and vocational goals would change in a positive direction after involvement in a year long service learning program. He concluded that students in the experimental group experienced significantly larger attitudinal changes than did the control group in the areas of more positive self-confidence and more clarity in educational direction and career paths.

Shoup (1978) sees service learning as viable alternatives to the set secondary curriculum, and as valuable methods for expanding the traditional classroom experiences to promote citizenship attitudes.

Clayman (1968) in a study of training pre-service teachers to become familiar with community resources discovered that although student teachers were committed to using the community as a resource, supervision of their activities was complex and difficult.

Conrad (1979) chose eleven experiential and service learning programs from various cities for intensive study. The eleven programs from nine schools involved more than six hundred students in nine experimental and four control groups; foci included community service, outdoor adventure, career exploration and community action. The overall conclusions of the study were that experiential education and service learning programs can promote social, psychological and intellectual development, that they appear to do so more effectively than classroom-based programs, and that the key factors in promoting growth are: 1) that the experiences be significant and provide for the exercise of autonomy; 2) there be opportunity for active reflection on the experience.

Keene (1975) examined whether students involved in an elective sociology high school course where classroom instruction was coupled with five hours of volunteer direct experience per week for one semester at various social agencies, would have

a more positive attitude change toward poverty and minority problems than students who took only a required political science and economic course. She found no significant difference in the groups, but the experience was perceived as positive by parents, students and the community, so was continued.

Newman (1978) found negative results on attitudes when elementary students were placed in contact with severely emotionally disturbed children, as compared to those who received classroom instruction of handicapped children.

Tobler (1986) conducted a meta-analysis of 143 studies on drug prevention programs and found that peer helping programs were identified as the most effective on all outcome measures.

Sprinthall and Sprinthall (1987) reporting on a series of studies of high school students engaged as teachers, tutors and peer counselors observed that in addition to other gains, many students had developed higher level counseling skills than those achieved by graduate students in counseling.

The findings on community impact and the effects on those served are primarily positive, indicating that young people enrolled in experiential education and service learning programs which focus upon making a difference in terms of community do, in fact, positively affect community members. In addition, the attitudes of young people frequently are significantly changed in the process of helping others.

Evaluation of Colorado Service Learning Programs

Kraft, Goldwasser, Swadener, Timmons (1993). The evaluation of Service-Learning Colorado was conducted by a team of researchers from the University of Colorado at Boulder. It looked at all K-12 Serve-America, the Youth and Conservation Corps and the Higher Education programs funded from grants made by the Commission on National and Community Service to the Colorado State Commission. In order to give the readers a sense of the wide range of possible outcomes of service-learning, the following table indicates the impact domains, participant and teacher attitudes, participant behaviors and institutional and community impacts which were looked at in the Colorado research.

Legend:

I = Interviews;

O = Observation;

PP = Pre-Post Instruments;

D = Documentary Evidence (Journal, videos, tapes, photos, news articles, student records)

S = Surveys

Impact Domains	Serve America	Higher Education	Youth/ Cons. Corps
Participant Attitudes			
Civic/Social Responsibility	O/I/PP	PP	O/I/P
Self Esteem	O/I/PP	PP	O/I/P
Leadership	O/I/PP	PP	O/I/P
Poverty	O/I/PP	PP	O/I/P
Career Aspirations	O/I/PP	PP	O/I/P
Moral Development	O/I	PP	O/I/P
Empowerment	O/I/PP	PP	O/I/P
Service/Community	O/I/PP/D	PP/D	O/I/D/P
Gender	O/I/PP	PP	O/I/P
Alienation	O/I/PP	PP	O/I/P
Social Justice	O/I/PP	PP	O/I/P
Race	O/I/PP	PP	O/I/P
Efficacy	O/I/PP	PP	O/I/P
Environment	O/I/PP	PP	O/I/P
Peers	O/I/PP	PP	O/I/P
Elderly	O/I/PP	PP	O/I/P
Younger Children	O/I/PP	PP	O/I/P
Handicapped	O/I/PP	PP	O/I/P

Family	O/I/PP	PP	O/I/P
Reflection	O/I/PP	PP	O/I/P
Cross-cultural Exp.	O/I/PP	PP	O/I/P

Teacher/Professor/Director Attitudes

Above List of Attitudes Plus Relationship to Academic Learning.	O/I/PP	PP	O/I/P
Rewards for Service Learning.	O/I/PP	PP	O/I/P
Students	O/I/PP	PP	O/I/P
Time Spent	O/I/PP	PP	O/I/P
Caring and Compassion	O/I/PP	PP	O/I/P

Participant Behaviors

Attendance	D	--	--
Grade Point Average	D	PP	--
Basic Skills Scores	D	--	D
Service Performed	O/D	O/D	O/D
Interpersonal Relationships	PP/S	PP/S	O/I/S
Group Interaction	O/D	O/D	O/I/D

Institutional and Community Impacts

Connections to Curriculum	O/I/D	D	--
Institutionalization	O/I/D	D	--
Teacher/Professor/Director Behaviors	O/I/D	D	O/I/D
Services delivered	D	D	D
Community Awareness	D/S	D/S	O/D/S
Reflection	D/S/I	D/S	O/D/S

Over 2000 students and staff from middle school through higher education responded to the pre and post attitude survey which follows. The survey instrument was developed by the researchers and based on previous research on the effects of service-learning. Among the results of the pre/post attitude survey were the following.

1. There were few items on which the students made statistically significant gain in positive attitudes toward service, possibly due to the short time frame of most of the programs, often only once a week for 6-8 weeks.
2. Teachers, all of whom had received grants to administer service learning programs, were significantly more committed on almost all items to the goals of service learning than were their student participants.
3. There were few statistically significant differences between middle school service learning participants and those in high school as far as their attitudes toward items on the service-learning instrument. This could be seen as a surprising finding as research by the Search Institute (1993), found that high school students were significantly less committed to serving others than young students in grades 6-8.
4. Students in higher education tended to be more positive in their attitudes towards service-learning than students at the younger grades.
5. Short-term service learning experiences did not have a statistically significant effect either way on attitudes of students.
6. On almost all attitudinal items, girls were significantly more positive in the attitudes to service and related values than were boys.

Attitude Survey of Students and Staff

Legend: 1 = SA = Strongly Agree
 2 = A = Agree
 3 = N = Neutral
 4 = D = Disagree
 5 = SD = Strongly Disagree

Student	Student	Staff
Pretest	Posttest	Posttest
Mean	Mean	Mean

Item			
1. People are poor because of lack of effort.	3.22	3.12*	3.76
2. Individuals have a responsibility to help solve our social problems.	2.48	2.54	1.57
3. People have little control over being poor.	3.25	3.31	2.95
4. The problems of unemployment and poverty are largely the fault of society rather than the fault of individuals.	2.91	2.98	2.70
5. It is important to help others even if you don't get paid for it.	1.86	1.83	1.57
6. People should only help people they know, such as close friends and relatives.	3.85	3.90	4.27
7. It is the responsibility of the community to take care of people who can't take care of themselves.	2.67	2.80*	2.16**
8. It is my responsibility to do something about problems in our community.	2.59	2.59	1.72**
9. I feel uncomfortable around people with handicaps.	3.67	3.67	3.91
10. Success in life is not really dependent on how hard I work.	3.72	3.83*	3.87
11. I decide what to buy because of what a product does (or does not do) to the environment.	2.82	2.90*	2.32
12. I am happy with who I am.	1.79	1.79	--
13. I don't worry much about others less fortunate than myself.	3.71	3.79	4.17
14. I try to stay in good physical shape.	1.93	1.92	1.98
15. We should preserve our environment even though there is pressure to develop it.	1.94	2.00	1.56
16. I think I can make a contribution to solving some of the problems our nation faces today.	2.41	2.37	1.83
17. Using land for parks and wilderness is a waste of valuable land.	4.22	4.17	4.65
18. Maybe some people do not get treated fairly, but that is not my concern.	3.89	3.83	4.37
19. It takes too much time to recycle newspapers, cans and bottles.	4.28	4.22	4.33
20. I don't think or worry much about what's going on in the world because I can't do anything about it.	3.91	3.88	4.36
21. People should give some of their time for the good of other people.	1.97	2.00	1.64
22. My involvement in the community improves the lives of others.	2.40	2.30*	1.81

23. I have helped out on special projects in my community.	3.05	2.49*	2.02
24. I feel comfortable around people who are from different races than me.	1.90	1.85	1.72
25. People from other cultures should try to fit in to American culture.	3.14	3.10	2.91
26. My family supports my involvement in community service.	2.38	2.23*	- -
27. Being around elderly people makes me uncomfortable.	3.85	3.84	4.10
28. Women need an education just as much as men do.	1.46	1.49	1.13
29. Adults don't give kids credit for being as capable as they are.	2.71	2.76	1.98
30. Reflecting on my experiences makes them more meaningful.	2.37	2.39	1.62
31. Getting an education will help me get the job I want.	1.46	1.43	- -
32. I enjoy learning in school.	2.30	2.36	- -
33. I value being the member of a team.	2.01	1.98	1.63
34. Learning to work alone is more important than learning to work in a group.	3.30	3.35	3.83
35. I feel that my teachers care about me.	2.37	2.49*	- .-
36. What I learn from my teachers means a lot to me.	2.26	2.29	- -
37. When I work on group projects in school, I only like working with my friends.	2.91	2.91	- -

Questions on Staff Questionnaire only.

a. I feel that the students I work with care about me.	- -	- -	1.95
b. I don't mind spending the extra time to structure service-learning programs in the community.	- -	- -	1.99
c. It is important for students to develop a sense of caring and compassion for others.	- -	- -	1.36
d. Service should be closely tied into the curriculum.	- -	- -	2.04
e. My fellow teachers or co-workers support my service learning activities for students.	- -	- -	1.99
f. I enjoy teaching and/or being around students.	- -	- -	1.30

* Statistically significant difference at the .05 level between pre and post survey for students.

** Statistically significant difference at the .05 level between pre and post survey for staff. Pre test means not listed.

Bold/Italicized: Statistically significant difference at the .01 level between the post survey for students and the post survey for staff. Items 4, 5, 6, and 27 are significant at the .05 level.

Self-Concept Inventory

Read the following sentences and circle that which best describes you.

- Legend: 1 = A = Always
 2 = AL = A Lot
 3 = S = Sometimes
 4 = SE = Seldom
 5 = N = Never

Item	Pre Survey Mean	Post Survey Mean
1. People feel good when they are around me.	2.40	2.32*
2. I talk with people who may feel left out.	2.54	2.49
3. I help people see that things can change.	2.65	2.63
4. I help people talk to each other.	2.81	2.78
5. People try to copy how I act.	3.42	3.33
6. I listen to and understand people around me.	2.17	2.21
7. I like to help others meet their goals.	2.51	2.52
8. I complete things that I start.	2.26	2.25
9. I try new things.	1.93	1.93

* Statistically significant at the .05 level between the pre and post surveys

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