

**At A Glance:
What We Know about
The Effects of Service-Learning on College
Students
1993-2006: Fourth Edition.**

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"At A Glance" summarizes the findings of service-learning research in higher education over the past few years and includes an annotated bibliography. It is designed to provide a quick overview of where we are in the field today and a map to the literature.

I. What We Know: The Effects of Service-Learning On Students

A. Personal Outcomes

- ◆ **Service-learning has a positive effect on student personal development such as sense of personal efficacy, personal identity, spiritual growth, and moral development:**

Astin & Sax, 1998; Astin, Sax, & Avalos, 1999; *Blackwell, 1996 (dissertation)*; Boss, 1994; Driscoll, Holland, Gelmon, & Kerrigan, 1996; Eyler, Giles, & Braxton, 1997; Eyler & Giles, 1999; Fenzel & Leary, 1997; Freidus, 1997; Giles & Eyler, 1994; Gray, Ondaatje, Fricker, Geschwind, Goldman, Kaganoff, Robyn, Sundt, Vogelgesang, & Klein, 1998; *Greene, 1996 (dissertation)*; Gorman, 1994; *Ikeda, 1999 (dissertation)*; *Jordan, 1994 (dissertation)*; Keen, & Keen, 1998; Kendrick, 1996; *Loewen, 1998 (dissertation)*; Markus, Howard, & King 1993; McMahan, 1998; Ostrow, 1995; Peterson, 1998; *Rauner, 1995 (dissertation)*; Rhoads, 1997; Rockquemore & Schaffer 2000; Schmidt, 2000; *Seibold, 1998 (dissertation)*; Sledge, Shelburne, & Jones, 1993; Vogelgesang & Astin, 2000; VCU, 1997; Wade & Yarborough, 1996; Wang, 2000; Western Washington University, 1994.

- ◆ **Service-learning has a positive effect on interpersonal development and the ability to work well with others, leadership and communication skills:**

Astin & Sax, 1998; *Bacon, 1997 (dissertation)*; Dalton & Petrie, 1997; Driscoll, Holland, Gelmon, & Kerrigan, 1996; Eyler & Giles, 1999; Freidus, 1997; Giles & Eyler, 1994; Gray, et al., 1998; Juhn, Tang, Piessens, Grant, Johnson, & Murray, 1999; Keen, & Keen, 1998; *Knee, 1999 (dissertation)*; Mabry, 1998; *McElhaney, 1998 (dissertation)*; McMahan, 1998; Raskoff, 1997; *Rauner, 1995 (dissertation)*; Rhoads, 1997; *Seibold, 1998 (dissertation)*; Sledge, Shelburne, & Jones, 1993; Peterson, 1998; *Tarallo-Falk, 1995 (dissertation)*; Vogelgesang & Astin, 2000; Wade & Yarborough, 1996; *Zawacki, 1997 (dissertation)*.

B. Social Outcomes

- ◆ **Service-learning has a positive effect on reducing stereotypes and facilitating cultural & racial understanding:**

Astin & Sax, 1998; Astin, Sax, & Avalos, 1999; Balazadeh, 1996; Barber, Higgins, Smith, Ballou, Dedrick, & Downing, 1997; Boyle-Baise, 1998; Boyle-Baise & Kilbane, 2000; Bringle & Kremer, 1993; Driscoll, Holland, Gelmon, & Kerrigan, 1996; Dunlap, 1997; Dunlap, 1998; Eyler, Giles & Braxton, 1997; Eyler & Giles, 1999; Fenzel & Leary, 1997; Giles & Eyler, 1994; Gray, et al. 1998; Greene & Diehm, 1995; *Greene, 1996 (dissertation)*; Hones, 1997; *Jordan, 1994 (dissertation)*; Keen & Keen, 1998; Kendrick, 1996; *McElhaney, 1998 (dissertation)*; Myers-Lipton, 1996a; Myers-Lipton,

1996b; Ostrow, 1995; *Pickron-Davis 1999 (dissertation)*; Potthoff, Dinsmore, Eifler, Stirtz, Walsh, & Ziebarth, 2000; *Rauner, 1995 (dissertation)*; Rhoads, 1997; Vogelgesang & Astin, 2000; Virginia Commonwealth University, 1997; Western Washington University, 1994.

◆ **Service-learning may subvert as well as support course goals of reducing stereotyped thinking and facilitating cultural & racial understanding:**

Curran, 1999; Grady, 1998; *Pickron-Davis 1999 (dissertation)*.

◆ **Service-learning has a positive effect on sense of social responsibility and citizenship skills:**

Astin & Sax, 1998; Astin, Sax, & Avalos, 1999; Barber, Higgins, Smith, Ballou, Jeffrey, Dedrick, & Downing, 1997; Batchelder & Root, 1994; Dalton & Petrie, 1997; Driscoll, Holland, Gelmon, & Kerrigan, 1996; Eyler & Giles, 1999; Eyler, Giles & Braxton, 1997; Fenzel & Leary, 1997; Giles & Eyler, 1994; Gray, et al. 1998; Johnson & Bozeman, 1998; Keen, & Keen, 1998; Kendrick, 1996; Mabry, 1998; *McElhaney, 1998 (dissertation)*; Myers-Lipton, 1998; Nnakwe, 1999; Ostrow, 1995; Rice & Brown, 1998; Sledge, Shelburne, & Jones, 1993; Rhoads, 1997; VCU, 1997.

◆ **Service-learning has a positive effect on commitment to service:**

Astin & Sax, 1998; Astin, Sax, & Avalos, 1999; *Blackwell, 1996 (dissertation)*, Driscoll, Holland, Gelmon, & Kerrigan, 1996; *Eklund-Leen, 1994 (dissertation)*; Eyler & Giles, 1999; Eyler, Giles & Braxton, 1997; Fenzel & Leary, 1997; Giles & Eyler, 1994; *Greene, 1996 (dissertation)*; Keen, & Keen, 1998; *Kolcross, 1997 (dissertation)*; Markus, Howard, King, 1993; *McElhaney, 1998 (dissertation)*; Nnakwe, 1999; Oliver, 1997; Payne, 2000; Payne, & Bennett, 1999; Potthoff, Dinsmore, Eifler, Stirtz, Walsh, & Ziebarth, 2000; *Rauner, 1995 (dissertation)*; Rhoads, 1997; *Smedick, 1996 (dissertation)*; Stukas & Clary, 1998; Tartter, 1996; Western Washington University, 1994; Vogelgesang & Astin, 2000.

◆ **Volunteer service in college is associated with involvement in community service after graduation:**

Astin, Sax, & Avalos, 1999; *Smedick, 1996 (dissertation)*. 3

C. Learning Outcomes

◆ **Students or faculty report that service-learning has a positive impact on students' academic learning:**

Astin & Sax, 1998; Balazadeh, 1996; *Blackwell, 1996 (dissertation)*; Boss, 1994; *Burr, 1997 (dissertation)*; Cohen & Kinsey, 1994; Driscoll, Holland, Gelmon, & Kerrigan, 1996; Eyler & Giles,

1999; Eyler, Root, & Giles, 1998; Fenzel & Leary, 1997; Foreman, 1996; Gelmon, Holland, and Shinnamon, 1998; *Greene, 1996 (dissertation)*; *Hall, 1996(dissertation)*; *Jordan, 1996 (dissertation)*; Hesser, 1995; Knee, 1999; Markus, Howard & King, 1993; *McElhaney, 1998 (dissertation)*; McMahan, 1998; Miller, 1994; Oliver, 1997; Schmiede, 1995; Sledge, Shelburne, & Jones, 1993; Soukup, 1999; Strage, 2000; *Tarallo-Falk, 1995 (dissertation)*; Vogelgesang & Astin, 2000; VCU, 1997; Ward, 2000; Western Washington University, 1994.

◆ **Students or faculty report that service-learning improves students' ability to apply what they have learned in “the real world”:**

Bacon, 1997 (dissertation); Balazadeh, 1996; Cohen & Kinsey 1994; Eyler & Giles, 1999; Fenzel & Leary, 1997; Foreman, 1996; Gelmon, Holland, and Shinnamon, 1998; Gray, et al., 1998; *Hall, 1996 (dissertation)*; Juhn, Tang, Piessens, Grant, Johnson, & Murray, 1999; Kendrick, 1996; Oliver, 1997; Markus, Howard, & King, 1993; *McElhaney, 1998 (dissertation)*; McMahan, 1998; Miller, 1994; Nigro & Wortham, 1998; VCU, 1997.

◆ **The impact of service-learning on student academic learning as measured by course grades or GPA is mixed:**

Some studies have shown a positive impact of community service on academic learning: Astin & Sax, 1998; Tarter, 1996; Vogelgesang & Astin, 2000.

Other studies have shown a positive impact of service-learning on academic learning:

Gray et al., 1998; Markus, Howard, & King, 1993; Strage, 2000; Vogelgesang & Astin, 2000. 4

Several studies show differences in academic learning between service-learning and non service-learning students, but calculate grades differently for these two groups of students:

Balazadah, 1996; Berson & Younkin, 1998; Shastri, 1999.

Some studies show no difference between service-learning and non- service-learning control groups in academic learning:

Boss, 1994; Hudson, 1996; Kendrick, 1996; Miller, 1994; Parker-Gwin & Mabry, 1998.

◆ **Service-learning participation has an impact on such academic outcomes as demonstrated complexity of understanding, problem analysis, critical thinking, and cognitive development:**

Batchelder & Root, 1994; Eyler & Giles, 1999; Eyler, Root, & Giles, 1998; Osborne, Hammerich, Hensley, 1998.

◆ **The impact of service-learning on student cognitive moral development is mixed:**

Some studies find that service-learning contributes to moral development:

Boss, 1994; Gorman, 1994.

Other studies show no difference in moral development between service-learning and non- service-learning control groups:

Cram, 1998; Fenzel & Leary, 1997; Greene, 1996.

D. Career Development

◆ Service-learning contributes to career development

Astin & Sax, 1998; Astin, Sax, & Avalos, 1999; *Aultman, 1997 (dissertation)*; Driscoll, Holland, Gelmon, & Kerrigan, 1996; Fenzel & Leary, 1997; Greene & Diehm, 1995; Juhn, Tang, Piessens, Grant, Johnson, & Murray, 1999; Keen, & Keen, 1998; *McElhaney, 1998 (dissertation)*; Sledge, Shelburne, & Jones, 1993; *Smedick, 1996 (dissertation)*; Tartter, 1996; Vogelgesang & Astin, 2000; VCU, 1997; Western Washington University, 1994. 5

E. Relationship with Institution

◆ Students engaged in service-learning report stronger faculty relationships than those who are not involved in service-learning:

Astin & Sax, 1998; Gray et al, 1998; Eyler & Giles, 1999.

◆ Service-learning improves student satisfaction with college:

Astin & Sax, 1998; Berson & Younkin, 1998; Gray, et al., 1998.

◆ Students engaged in service-learning are more likely to graduate:

Astin & Sax, 1998; Roose, Daphne, Miller, Norris, Peacock, White, & White, 1997.

F. Processes examined in Qualitative Studies.

◆ There is a growing body of case studies that describe service-learning processes and contexts. Themes explored include:

◆ Citizenship development

Dalton & Petrie, 1997; Smith, 1994.

◆ Dealing with diversity

Boyle-Baise, 1998; Boyle-Baise & Kilbane 2000; Dunlap, 1998a; Hones, 1997; *Pickron-Davis, 1999*

(*dissertation*); Rockquemore & Schaffer, 2000; Skilton-Silvester & Erwin, 2000.

◆ **Institutional support and cohesion**

Ward K., 1996.

◆ **Transformations in orientations toward service and community**

Bacon, 1997(dissertation); Dunlap 1998b; Ostrow, 1995; Rockquemore & Schaffer 2000; *Schmidt, 2000 (dissertation)*; *Tarallo-Falk, 1995 (dissertation)*; Wade & Yarborough, 1996.

◆ **Reflection and instructional processes**

Freidus, 1997; *Hall, 1996 (dissertation)*; Hones, 1997; Ikeda, 2000; *Ikeda, 1999 (dissertation)*; Schmiede, 1995.

◆ **Self and identity**

Dunlap, 1997; Rhoads, 1997; Wang, 2000. 6

II. What We Know: The Effects of Particular Program Characteristics on Students

A. Placement Quality

◆ **Placement quality has a positive impact on student personal and interpersonal outcomes:**

Eyler & Giles, 1999; Mabry, 1998.

B. Reflection

◆ **Quality and quantity of reflective activities have an impact on student learning:**

Eyler & Giles, 1999; Gray, et al. 1998; Greene & Diehm, 1995; *Ikeda, 1999 (dissertation)*; *Loewen, 1998 (dissertation)*; Mabry, 1998.

C. Application of service

- ◆ **Application of service to academic content and vice versa has an impact on students, particularly learning outcomes:**

Boss, 1994; Batchelder & Root, 1994; Eyler & Giles, 1999; McElhane, 1999.

D. Duration and Intensity of Service

- ◆ **Duration and intensity of service have an impact on student outcomes:**

Astin & Sax, 1998; Astin, Sax, & Avalos, 1999; Mabry, 1998.

E. Exposure to Diversity

- ◆ **Diversity has an impact on students, particularly personal outcomes, such as identity development & cultural understanding:**

Eyler & Giles, 1999; Gray, et al., 1998; *Pickron-Davis, 1999 (dissertation)*.⁷

F. Community voice

- ◆ **Community voice in a service-learning project has an impact on student cultural understanding:**

Eyler & Giles, 1999; Gray, et al., 1998.

G. Feedback

- ◆ **Receiving quality feedback from professors or clients has an impact on students' self reported learning, use of skills taught in courses, and commitment to service:**

Greene, 1996; Greene & Diehm, 1995; Subramony, 2000. 8

III. What We Know: The Impact of Service-learning on Faculty

A. Faculty using service-learning report satisfaction with quality of student learning:

Balazadeh, 1996; Berson & Younkin, 1998; Cohen & Kinsey, 1994; Fenzel & Leary, 1997; Gelmon, Holland, & Shinnamon, 1998; Hesser, 1995; McMahon, 1998; Sellnow & Oster, 1997; Serow, Calleson, & Parker, 1996; *Seibold, 1998 (dissertation)*; Stanton, 1994; Ward S., 2000.

B. Faculty using service-learning report commitment to research:

Driscoll, Holland, Gelmon, & Kerrigan, 1996.

C. Faculty report lack of resources as barrier to providing service-learning:

Bergkamp, 1996 (dissertation); *Burr, 1997 (dissertation)*; Gray, et al., 1998; Hammond, 1994; National Association of State Universities and Land Grant Colleges, 1995; Robinson & Barnett, 1996; *Siscoe, 1997 (dissertation)*; Stanton, 1994; Wade & Yarborough, 1997; Ward K., 1996.

D. Faculty increasingly integrate service-learning into courses:

Burr, 1997 (dissertation); Campus Contact, 1998; Gray, et al., 1998; *Martin, 1994 (dissertation)*; Oliver, 1997; Robinson & Barnett, 1996; Sagaria & Burrows, 1995; *Siscoe, 1997 (dissertation)*; Stanton, 1994; Ward K., 1996; Ward S., 2000.

E. Lack of faculty reward is a barrier to service and service-learning partnerships:

Berman, 1999 (dissertation); *Bergkamp, 1996 (dissertation)*; Euster and Weinbach, 1994. 9

**IV. What We Know:
The Impact of Service-Learning on Colleges and
Universities**

A. Colleges and universities report institutional commitment to service-learning curriculum:

Battaglia, 1995 (dissertation); *Bergkamp, 1996 (dissertation)*; *Berman 1999 (dissertation)*; Bringle & Hatcher, 1997; Campus Contact, 1998; *Dutton, 1993 (dissertation)*; Gray et al., 1998; *Lelle, 1996*

(*dissertation*); Mandell, 1995 (*dissertation*); National Association of State Universities and Land Grant Colleges, 1995; Robinson & Barnett, 1996; Sagaria & Burrows, 1995; Oliver, 1997; Scott & Ludwig, 1995; Sellnow & Oster, 1997; Serow, Calleson, & Parker, 1996; Siscoe, 1997 (*dissertation*); Waring, 1995 (*dissertation*).

B. Colleges and universities report availability of service-learning programs:

Battaglia, 1995 (*dissertation*); Bringle & Hatcher, 1997; Campus Contact; 1998; Dutton, 1993 (*dissertation*), Gray et al., 1998; Lelle, 1996 (*dissertation*); Mandell, 1995 (*dissertation*); National Association of State Universities and Land Grant Colleges, 1995; Robinson & Barnett, 1996; Sagaria & Burrows, 1995; Scott & Ludwig, 1995; Sellnow & Oster, 1997; Serow, Calleson, & Parker, 1996; Siscoe, 1997 (*dissertation*).

C. Few colleges and universities require service-learning in the academic core:

Antonio, Astin, & Cress, 2000; Gray et al., 1998; Sagaria & Burrows, 1995.

D. Community service affects student retention:

Astin & Sax, 1998; Roose, Daphne, Miller, Norris, Peacock, White, & White, 1997.

E. Institutions report enhanced community relations:

Battaglia, 1995 (*dissertation*); Driscoll, Holland, Gelmon, & Kerrigan, 1996; Gray et al., 1998.

F. Lack of faculty reward is a barrier to service and service-learning partnerships:

Berman, 1999; Bergkamp, 1996; Euster and Weinbach, 1994. 10

V. What We Know: The Impact of Service-Learning on Communities

A. Satisfaction with student participation:

Clarke, 2000 (*dissertation*); Cohen & Kinsey, 1994; Driscoll, Holland, Gelmon, & Kerrigan, 1996;

Ferrari and Worrall, 2000; Foreman, 1996; Gelmon, Holland & Shinnamon, 1998; Gray, et al., 1998; Greene and Diehm, 1995; National Association of State Universities and Land Grant Colleges, 1995; Nigro & Wortham, 1998; Ward & Vernon, 1999.

B. Service-learning provides useful service in communities:

Clarke, 2000 (dissertation); Cohen & Kinsey, 1994; Bringle & Kremer, 1993; Driscoll, Holland, Gelmon, & Kerrigan, 1996; Gelmon, Holland & Shinnamon, 1998; Gray et al., 1998; Henderson & Brookhart, 1997; Nigro & Wortham, 1998; Ward & Vernon, 1999; Western Washington University, 1994.

C. Communities report enhanced university relations:

Clarke, 2000 (dissertation); Driscoll, Holland, Gelmon, & Kerrigan, 1996; Gray, et al., 1998. 11

Annotated Bibliography of Service-Learning Research, 1993-2006: Third Edition

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Explanation of terms used in tabled summaries:

Quantitative - study employing surveys or measures subjected to statistical analysis

Qualitative - study examining programs or processes using qualitative methods

Description - study that describes elements of or people involved in service or service-learning classes and programs

Process - study that examines the processes of growing and learning through service

Outcomes - study that predicts and tests for specific student, faculty, or community outcomes either between or within groups

Evaluative - study evaluating a comprehensive service-learning program

NR - sample size not reported

(#%) - response rate

Astin, A. W., & Sax, L. J. (1998). How Undergraduates are Affected by Service Participation. *Journal of College Student Development, 39(3), 251-263.*

Methodology	Quantitative
Purpose	Description; Outcomes
Sample	Students
Original Sample	11,822
Final Sample	3,450 (29%)
Study Design	Pre/post survey, Quasi-experimental
Data Sources	Survey self-report, Institutional records
Outcome Variables	Civic responsibility; Educational attainment; Life skills

This national survey of 42 institutions was sponsored by Learn and Serve America (LSAHE). LSAHE programs engage students in tutoring, working with the homeless, the poor and the elderly; improving neighborhood environments and community health; and preventing crime. Using data from the Cooperative Institutional Research Program Freshman (CIRP) Survey, SAT and ACT scores, and enrollment data, thirty-five student outcomes were measured in five student cohorts from 1990-1994. Follow-up surveys were also administered to students in 1995. Service participation was the independent variable and control variables included freshmen year pre-tests, service propensity, major, race, ethnicity, gender, and structural characteristics of the institution.

Even when controlling for freshmen year pre-tests, service propensity, academic major, race, ethnicity, gender, and structural characteristics of the institution, all 35 student outcome measures were favorably influenced by service participation. These included academic outcomes (GPA, retention, degree completion, amount of interaction with faculty, and increase in knowledge); civic responsibility (commitment to life goals of helping others, promoting racial understanding); and life skills (critical thinking, interpersonal skills, leadership skills, social self-confidence, knowledge of different races or cultures, and conflict resolution skills). Increases in knowledge, civic responsibility and life skills were

measured by student self-report.

The analysis also indicated that the more time devoted to service the more positive the effect on students. Whether a student volunteered in high school was the most important predisposing factor for students to participate in college level service-learning. Other factors included leadership ability, 13 involvement in religious activities, commitment to participation in community action programs, tutoring other children, being a guest in a teacher's home, and being a woman. 14

Astin, A. W., Sax, L. J., & Avalos, J. (1999). Long Term Effects of Volunteerism During the Undergraduate Years. *Review of Higher Education*, 22(2), 187-202.

Methodology	Quantitative
Purpose	Description; Outcomes
Sample	Students and Alumni
Original Sample	27,064
Final Sample	12,376 (45.7%)
Study Design	Pre/post survey
Data Sources	Survey self-report
Outcome Variables	Behaviors; Values

For this study, students completed three surveys administered through the Cooperative Institutional Research Program (CIRP) of the Learn and Serve Institutions. The first survey was conducted in 1985 with entering freshmen, the second survey was given four years later in 1989, and the third survey was administered to the now former students in 1994-95. Freshman scores on behavioral and value variables, as well as reasons for entering college were controlled for in data analysis. The independent variable was volunteerism.

Results indicated that students who spent six or more hours a week in volunteering during their last year of college were almost twice as likely to perform volunteer work after college. Nine years after graduating, the frequency of volunteering still correlated with the amount of volunteering during high school. Volunteering was associated with the following thirteen behavioral and value outcomes: attending graduate school, donating money to the undergraduate college, frequency of socializing with diverse people, helping others in difficulty, developing a meaningful life philosophy, promoting racial understanding, participating in community action programs, participating in environmental cleanup, a sense of efficacy, highest degree earned, hours spent volunteering, career preparation, and degree aspirations.

Bacon, N. A. (1997). The Transition from Classroom to Community Contexts for Writing. *Unpublished Dissertation*, University of California, Berkeley.

Methodology	Qualitative
Purpose	Process
Sample	Students
Original Sample	75
Final Sample	72

Study Design	Case Study
Data Sources	Interviews; E-mail; Observations; Course evaluations; Papers

This case study examined 72 students' experiences of writing for community organizations through a service-learning course at one university. Students' transitions from academic to non-academic writing were analyzed in order to understand their writing processes. This assessment of writing, learning environment, and outcomes was carried out over the course of two years. Several research questions guided this research project, namely: what is the relationship between students' proficiency in school writing tasks and their success as writers in the community and are they able to draw upon prior knowledge of writing; how do students draw upon the social milieu of the community organizations to construct new knowledge about their topics and appropriate writing practices and discourse conventions; does the composition curriculum support this transition; and how do students' experiences in turn affect the theory of writing that informs the curriculum?

Data sources included group interviews, classroom observations, electronic mail, student papers, and course evaluations. Interviews were conducted with six students who were selected based upon their writing proficiency, the kinds of community writing (CSW) tasks they performed, and such demographic data as age, sex, and ethnicity. Interviews occurred at the beginning, middle, and end of the semester. In addition to student interviews, each of the course instructors and site supervisors was interviewed. Observations, email, and course evaluations were analyzed to frame the learning context and interactions. Finally, student papers were assessed for the development of writing skills.

Results indicated that students' performance on community writing tasks was correlated to their academic writing capacity. Students who were strong academic writers performed in CSW tasks better than students who were poor academic writers. A second finding was that students succeeded in writing texts that met the community organization's needs. However, learning to write in new settings involved a complex interaction of knowledge, attitudes, behavior, and emerging identity. Students needed to construct a substantive body of knowledge and an awareness of the topic, comprehend the conventions of an unfamiliar genre, and gain an understanding of how community members worked together. A third finding was that the CSW course failed to provide sufficient support to students as they moved from academic to non-academic writing. This CSW course prompted one of the instructors to adjust her theory of writing and her curriculum goals.

Balazadeh, N. (1996). *Service-Learning and the Sociological Imagination: Approach and Assessment*. Paper presented at the National Historically Black Colleges and Universities Faculty Development Symposium, Memphis, TN.

Methodology	Quantitative; Qualitative
Purpose	Outcomes
Sample	Students
Original Sample	NR
Final Sample	84
Study Design	One shot; Quasi-experimental
Data Sources	Grades; Essays
Outcome Variables	Learning; Cultural Awareness

Undergraduate sociology students at Rust College, a historically black institution, were given the opportunity to connect with the elderly in institutional settings in order to promote a generational connection between the college and a local nursing home. During the 1995-96 academic year, students in three sociology courses participated in service-learning activities for one semester. Within each course, students elected a traditional program or a program that included this structured service-learning component (26 out of 84). Service-learning served as the independent variable. The service-learning component constituted 30 percent of the student's final grade and was a formal part of the curriculum

Overall, the instructor/researcher reported that students in service-learning had better grade performance than their peers who selected the standard option of instruction and grading. Ten of the 26 service-learning students received a course grade of "A", while eight of the 58 non service-learning students received an "A". Another ten of the 26 service-learning students received a course grade of "B", while nine of the 58 non-service-learning students received a "B". Grades in the control group were based upon different assignments and are thus are not comparable.

Students' self-assessment of learning was gleaned from their reflective essays and indicated that the experience expanded their sociological imagination. Included in the report are a course description, the evaluation instrument, a description of the service-learning experience, the required student journal entry form, student reflection paper outlines, and the final evaluation report form.

Barber, B. R., Higgins, R. R., Smith, J K., Ballou, J. K., Dedrick, J., & Downing, K. (1997). *Democratic Theory and Civic Measurement: A Report on the Measuring Citizenship Project.* Paper presented at the Campus Compact, Denver.

Methodology	Quantitative
Purpose	Outcomes
Sample	Students and Program participants
Original Sample	NR
Final Sample	551
Study Design	Pre/post survey
Data Sources	Whitman Center Measure
Outcome Variables	Civic skills

This report discusses the results of a national study for which the Whitman Center Measure was administered to participants of 22 college, military, nonprofit, and high school service programs. The researchers gathered data from seven college service-learning programs (volunteers=202, non-volunteers 287), and 3 Public Allies programs (an affiliate of Americorps, n=62). The study included five historically black, colleges and universities (HBCUs). It sought to examine the effects of service-learning on civic skills.

Researchers used the Whitman Center Measure to measure relatively subtle short term changes in action skills of respondents in their views on democracy, civic skills, alienation from local government and racial tolerance. The researchers found broad preferences for a participatory view of democracy for all service-learners, and a significant increase in self-estimation of civic skills among college

service-learning volunteers. Service-learning volunteers also demonstrated small improvements in mean scores for religious tolerance, racial tolerance, and civic participation, while non-service-learning volunteers did not. Researchers also discovered a significant decrease in political alienation among youth in the Americorp-affiliated service program. African Americans were more significantly alienated from local government than whites on both pre and post scores, and women showed greater preference than men for a participatory view of democracy at both pre- and posttest.

Batchelder, T.H., and Root, S. (1994). Effects of an Undergraduate Program to Integrate Academic Learning and Service: Cognitive, Prosocial Cognitive, and Identity Outcomes. *Journal of Adolescence*, 17, 341-355.

Methodology	Quantitative
Purpose	Outcomes
Sample	Students
Original Sample	226
Final Sample	96 (42.5%)
Study Design	Pre/post; Quasi-experimental
Data Sources	Survey-self report; Journals; Essays
Outcome Variables	Decision making processes; Level of reasoning; Occupational identity

This research study at a private college compared service-learning students to a traditional class (48 students in each group) and controlled for pre-test differences. The researchers sought to examine the influence of service-learning and varieties of service-learning experiences (the independent variables) had on: student moral cognitions through the decision making process students used in response to needs; the level of reasoning used; and the development of occupational identity (the dependent variables). The study also tested the hypothesis that students' perceptions of characteristics of service-learning courses predicted positive changes in the dependent variables.

Student journals were scored for prosocial decision-making, level of prosocial reasoning, and occupational identity processing. In addition, at the beginning and end of the semester students wrote for thirty minutes on their expected Responses to Situations (RS). Their responses were scored on eight dimensions that reflected higher order complex thinking. Finally, students completed an Evaluation of Service-learning (ESL).

The study found significant gains for the service-learning students on complex cognitive variables, including a greater resolve to act in the face of acknowledged uncertainty and a greater awareness of the multiple dimensions and variability involved in dealing with social problems. Service-learning students also significantly increased their prosocial decision making, prosocial reasoning, and occupational identity processing skills. Both on-site supervision and academic factors, such as instruction, were important mediators of service-learning outcomes. The quality of instruction, measured through a combination of questions from the ESL, impacted students' awareness of obstacles to solutions and how to address problems. Likewise, the quality of on-site supervision affected students' complexity of thought and awareness of multiple solutions.

Berger, J.B., Milem, J.F (2002), The Impact of Community Service Involvement on Three Measures of Undergraduate Self-Concept. NASPA Journal. 40 (1) 85-92.

Methodology:	Quantitative
Purpose:	Outcomes
Sample:	Students
Final Sample:	441
Study Design:	One shot: Quasi-experimental
Data Sources:	Questionnaire
Outcome variables:	Self-concept

The purpose of this study was to increase the understanding of how community service involvement affects the development of undergraduate and self-concept. The study investigates the effects of community service involvement in terms of time spent by students at the site, the types of service activities, and student motivation for service on the development of undergraduate self-concept. The sample consists of a group of students from United Methodist-affiliated colleges that participated in the 1992 CIRP (Cooperative Institutional Research Program) Freshmen Survey and the 1996 college Student Survey. The final sample included 441 students, a 53% response rate. 67% of this sample was female and 89% was Caucasian. The survey gathered information regarding: students entry characteristics, student involvement behaviors, reasons for community service, and types of community service (academic, religious, co-curricular, and off campus). The researchers measured self-concept in three ways: academic ability, achievement orientation, and psycho-social wellness. Scales were developed for each variable. A regression equation was used to estimate the effects of community service participation on the development of self-concept.

A regression equation was used to analyze the results. This equation predicted that academic ability accounted for 32% on the development of a positive self-concept. Being white and previous involvement in community service also were positive predictors on the development of positive self-concept. The only type of community service involvement that showed significant effects on achievement orientation was involvement in religiously-oriented community service. Higher levels of involvement in community service did not have a positive effect on student self-concept. Researchers attributed this to the fact that this study only looked at the student's fourth year in college rather than all four years. There was a strong relationship between participation in community service in high school and participation in community service four years later in college. The highest participation of service was in academic service compared to any other type. This suggests that a college classroom provides an appropriate educational forum for encouraging involvement in service. The researchers conclude with illustrating that service-learning practitioners may need to shift focus on studying how much the student is participating in service-learning to why/how students become involved.

Berman, G. L. (1999). Antecedents and Strategies for the Successful Implementation of Service Learning Programs in Higher Education. *Unpublished Dissertation, University of Massachusetts, Boston.*

Methodology	Quantitative; Qualitative
Purpose	Description
Sample	Full-time faculty
Original Sample	105 Institutions
Final Sample	55 institutions (3 chosen for case study)
Study Design	One shot; Case study
Data Sources	Survey self-report
Outcome Variables	Citizenship skills

This largely descriptive dissertation project centered on the following questions: 1) what antecedents are necessary to effectively implement of service-learning programs in American institutions of higher education; 2) what factors are challenges or impediments to successful implementation; 3) how do different institutions respond to such challenges and manage implementation; 4) are there factors common to all successful implementations that can be transferred to other colleges and universities; and 5) who are the key players involved in such endeavors? These questions were operationalized into three suppositions. The first was that there are internal and external factors, or antecedents, that help to successfully implement service-learning programs in American colleges and universities. The second was that decision-making and problem-solving strategies also play a role in successful implementation. The third was that communication, collaboration and cooperation enhance the process and help bring successful implementation about. In addition to exploring these questions and hypotheses, this study examined whether institutional adherence to the principles laid out in the 1989 Wingspread Special Report, “Ten Principles of Good Practice for Combining Service and Learning,” contributed to the level of successful implementation at each college or university.

In order to answer the questions above, the researcher used the service-learning questionnaire and a modified case-study approach. Surveys were mailed to a random sample of 105 institutions of the 522 members of the Campus Compact at Brown University, and 55 institutions responded. Three of the responding institutions were chosen for case study because they had had differing levels of success in implementing their service-learning programs and varied in their application level of the 10 Wingspread Principles. For the case study, administrators, faculty, staff, students, and community-agency liaisons were interviewed. Additional documentary material for analysis came from college catalogues, brochures, course syllabi, institutional records, and other internal and external documents.

The findings are discussed in two sections. The first of these was devoted to laying out the survey data relating to how service-learning was managed at each of the responding institutions. Such data included where service-learning centers are housed, whether adequate resources were made available to faculty and staff involved in service-learning, approaches to problem solving, and adherence to the Wingspread Conference’s 10 principles.

A discussion of each of the five research questions formed the next section. Antecedents necessary to effectively implement service-learning programs in colleges and universities included solid staffing

and a tendency toward collaborative approach to problem solving, and rational and/or collegial modes of problem solving. Factors that were challenges or impediments to successful implementation included chaotic institutional organization, poor staff and faculty training in service-learning theory and pedagogy, and lack of faculty incentives to engage in service-learning. Key players involved in successful service-learning programs tended to be organized into teams and/or have relationships throughout the university with all interested parties. Factors common to all successful service-learning programs were congruence with organizational goals, a clear articulation of mission, faculty driven plans for program implementation, creative means to integrate service with study, long-term goals and plans, and open communication systems.

Berson, J. S., & Younkin, W. F. (1998). *Doing Well by Doing Good: A Study of the Effects of a Service-Learning Experience on Student Success*. Paper presented at the American Society of Higher Education, Miami, FL.

Methodology	Quantitative
Purpose	Outcomes
Sample	Students
Original Sample	NR
Final Sample	286
Study Design	One shot; Quasi-experimental
Data Sources	Survey-self report; Grades; Course evaluations; Interviews; College Records
Outcome Variables	Grades, Satisfaction, Attitudes, Faculty Expectations.

This study's sample consisted of 286 students in six community college taking courses in a range of disciplines. Each of the six courses had a control section that was taught traditional subject matter, and an experimental section that had a 20 hour per semester service-learning requirement. The courses were American History, Sociology, College Preparatory English, and Introduction to English Composition.

Students self-selected into sections of these courses without knowledge of the service-learning requirement. Multiple measures were used to assess student success, such as grades, class attendance, course evaluations, and assignments. Data were collected through surveys, college records, focus groups and interviews. Faculty expectations were also assessed regarding outcomes, faculty reflections and students' attitudes about the course.

Results indicated that service-learning students achieved significantly higher mean final course grades (.26 difference) when compared to the control group. However grade composition was not the same for each course. Service-learning subjects also reported a significantly greater level of satisfaction with the course, the instructor, the reading assignments, and the grading system. Service-learning faculty reported that class discussions were more stimulating, included more student involvement and were more challenging academically.

Berthiaume, J. L. (1999). *Community Service Learning Perceptions of Selected Students Attending a University in the Southeast Region of the United States*. *Unpublished*

Dissertation, University of Southern Mississippi.

Methodology	Quantitative
Purpose	Description
Sample	Students
Original Sample	NR
Final Sample	541
Study Design	One shot
Data Sources	Survey self-report

This project was designed to determine whether there was a relationship between university students' perceptions of service-learning and the independent variables of residential environment, student academic classification, age, race, gender, and family status.

In order to discover whether such relationships existed, the author developed a 48 item survey and administered it to 541 students at a university in the Southeastern region of the United States. A bivariate multiple regression did not find that residential environment (greek housing, on-campus dorms, and the like) significantly predicted student perceptions of student learning. A regression equation that included student academic classification, age, race, gender, and family status did predict student perception of service-learning. However, in this equation, gender was the only variable to achieve statistical significance. Female students were more apt to support service than male students. Since the analyses showed little in the way of statistical significance, the author concluded that not enough information existed to develop an accurate profile of those students who routinely engaged in community service projects.

Blackwell, A. P. (1996). Students' Perceptions of Service Learning Participation in the College of Health and Human Sciences at The University of Southern Mississippi. *Unpublished Dissertation, The University of Mississippi.*

Methodology	Quantitative
Purpose	Description
Sample	Students
Original Sample	150
Final Sample	142 (96%)
Study Design	One shot
Data Sources	Survey-self report

The purpose of this research project was to examine the perceptions of students regarding their involvement in service-learning and compare their perceptions based upon demographics, such as age, gender, classification, school affiliation, and outside employment. Two questions guided the study. Do students perceive that service-learning both enhances classroom learning and is a valuable component of their coursework, and, do students differ in their perceptions of service-learning based on age, gender, classification, school affiliation, or outside employment?

The sample (n=142) was drawn from both undergraduate and graduate students enrolled in courses with a service-learning component. Faculty administered the survey instrument to students following

service experiences. The survey captured demographic variables, students' rationale for taking the course, number of hours volunteered, and perceptions of the effects of service-learning. Results indicated that students strongly supported the notion of service-learning in college. Eighty-five percent of students believed that service-learning should be incorporated into more classes. The majority of students also reported that service-learning strengthened understandings of class lectures and reading and made them more interested in seeking future volunteering opportunities. Ninety-three percent indicated that service-learning helped them grow intellectually and emotionally.

The study found little difference in students' perceptions based upon age. However, female students consistently had higher scores than did male students, particularly in attitudes about dealing with people.

Blieszner, R., & Artale, L.M. (2001). Benefits of intergenerational service-learning to human services majors. *Educational Gerontology, 27*, 71-87.

Methodology:	Quantitative, Qualitative
Purpose	Outcomes
Sample	Students
Original Sample	NR
Final Sample	214
Data Sources	Pre- and post-questionnaires data and answers to open-ended questions
Outcome Variable	Personal social values, civic attitudes and academic achievement

The purpose of this study was to look at what effects an intergenerational service-learning experience might have on college students. Two questions asked were “to what extent does service-learning in aging agencies affect personal and social values and civic attitudes about volunteerism?” and “to what extent do students perceive that this form of experiential learning affects their knowledge and attitudes about older adults and aging processes?” Data was collected from students enrolled, throughout four semesters, in an undergraduate gerontology course. For the Issues in Aging course, service-learning was an alternative to a research project. Data from each of the four classes were combined because there was little variation amongst classes.

The university’s Service-Learning Center’s pre- and post-course questionnaires were used to collect quantitative data regarding general service-learning effects on only the students who chose service-learning (n=117). The instructor developed open-ended questions to explore course-specific effects. The analysis of the common effects of service-learning is based on parallel items from the pre- and post-course questionnaires. Factor analysis of data from identical surveys administered in 23 courses through fall 1997 was used. All open-ended answers were read three times, common concepts were grouped, and categories were refined.

There was no significant change in Personal Social Values or Civic Attitudes. There was a significant decrease in the students’ perception of service-learning’s usefulness toward

understanding course material. Open-ended responses presented many important aspects of students' service-learning experiences. Student comments reflected learned course material, positive attitudes about aging, personal development, commitment to civic responsibility, and contributing to the community.

Boss, J. A. (1994). The Effect of Community Service on the Moral Development of College Ethics Students. *Journal of Moral Development*, 23(2), 183-198.

Methodology	Quantitative
Purpose	Outcomes
Sample	Students
Original Sample	NR
Final Sample	71
Study Design	Pre/Post survey; Quasi-experimental
Data Sources	Survey-self report; Grades; DIT measurement scale
Outcome Variables	Moral development; Class participation; Learning

In this study, one section of a two-section course was selected randomly to complete 20 hours of community service over the semester and to keep a journal as part of the course requirements. The other section formed the control group and had different assignments in place of the service requirement. The total sample was comprised of 71 students; 37 females and 34 males. The mean age was 20.3. The researcher hypothesized that moral development would increase more over the course of the semester for the community service group than for the control group.

On post-test, students in the service-learning section scored significantly higher on their Defining Issues Test (DIT) scores than did the control group (pre- to post- mean gain was 8.61 for first group, 1.74 for the second). In the experimental group, 51% of the students were using principled moral reasoning compared to 13% in the control group. Grades were similar for both classes. Class participation through discussion was also positively correlated with the students' DIT test scores within the experimental group ($p < 0.01$). Students in the experimental group also assigned higher ratings of their improvement as moral people in course evaluations.

Boyle-Baise, M. (1998). Community Service Learning for Multicultural Education: An Exploratory Study with Preservice Teachers. *Equity and Excellence in Education*, 31(2), 52- 60.

Note For another report using some of these data, see Grady (1998)

Methodology	Qualitative
Purpose	Description
Sample	Students
Original Sample	NR
Final Sample	65
Study Design	Case study
Data Sources	Interviews; Essays; Survey self-report

This interpretive case study focused on the meanings students took from a community service learning component of a multicultural education course. Subjects were 65 pre-service elementary and secondary school teachers. Data sources included pre- and post-service questionnaires (containing mostly demographic data), 25 group interviews, projects from inquiry teams, and reflective essays. Two professors taught the sections and facilitated the field experiences, which were located in sites serving culturally diverse and low-income populations.

The data was analyzed for themes using constant comparative analysis. Findings include the fact that many pre-service teachers felt more aware of issues involved in teaching in culturally diverse classrooms and felt more comfortable with the prospect as a result of their service-learning experience. Another finding was that a critical concern for inequity was absent from students reflective pieces. Prospective teachers also needed more opportunities for reflection with service-learning.

Boyle-Baise, M., & Kilbane, J. (2000). What Really Happens? A Look Inside Service-Learning for Multicultural Teacher Education. *Michigan Journal of Community Service Learning, 7, 54-64.*

Methodology	Qualitative
Purpose	Description
Sample	Students
Original Sample	24
Final Sample	24
Study Design	Case study
Data Sources	Interviews; Essays; Survey self-report; Observations

This case study used ethnographic techniques to examine what happens, and what pre-service teachers think about what happens, within a credited community service learning component for a multicultural education course. Subjects were 24 pre-service teachers. Data included interviews of prospective teachers, reflective essays, and observations. One author served as participant observer and collected data while the other taught the course. Both analyzed all data to develop themes, first individually and then together.

Data analysis showed that though pre-service teachers "played it too safe" for multicultural education (i.e. their behaviors during service activities were "just enough to fit in" to the service context), service did challenge students' deficit notions about those from lower SES groups and stereotypical views of those from other racial and ethnic groups. Overall, the authors concluded that service-learning aided in the preparation of teachers able to work in culturally diverse contexts.

Bringle, R.G.; & Kremer, J. F. (1993). Evaluation of an Intergenerational Service-Learning Project for Undergraduates. *Educational Gerontology, 19(5), 407-16.*

Methodology	Quantitative, Qualitative
Purpose	Outcomes
Sample	Students

Original Sample	NR
Final Sample	44
Study Design	One shot; Quasi-experimental
Data Sources	Survey-self report; Interviews; Focus groups
Outcome Variables	Attitudes

This research focused on service-learning and the elderly. Three groups of students formed the sample. Fourteen students received training and visited homebound elderly eight times as a part of an Intergenerational service-learning program. Another group of ten students were required to meet with an older person at least twice for a minimum of three hours per visit. A third group of students enrolled in an upper-level social psychology class without a service-learning requirement formed the control group (n=20). All students completed several measures at the end of the semester: a differential scale with contrasting descriptive concepts focused on perceptions of the elderly (awful-nice, powerful-powerless); a questionnaire evaluating attitudinal changes regarding the elderly; and a quiz called "Facts on Aging".

Compared to the non service-learning group, both visitation groups had significantly more positive attitudes toward the elderly and toward their own aging process. Telephone interviews were also conducted with the elderly clients and the majority of their reactions were very positive. Overall, these clients found student visits to be quite helpful.

Brown, L.H. & Roodin, P.A. (2001). Service-learning in gerontology: An out-of-classroom experience. *Educational Gerontology, 27, 89-103.*

Methodology	Qualitative
Purpose	Outcomes
Sample	Students
Original Sample	NR
Final Sample	NR
Study Design	Pre- and Post-
Data Sources	Informal discussions and qualitative analysis of students' summaries

The State University of New York at Oswego has been engaged in service-learning to address the social isolation of older adults in the rural community. The goal of SUNY Oswego's service-learning program is to provide both worthwhile educational and personal experiences to students and positive benefits to older adults seeking social contact. This study addresses the goal for students by evaluating student's judgment of their service-learning experiences using (a) informal discussions of students' uncertainties about service-learning at the beginning of their placement experiences and (b) qualitative analysis of students' final summaries in their own words at the end of their placements. Multiple steps were involved to code for emergent themes. Data was collected from 104 students over two consecutive semesters.

In students' initial reactions to service-learning, they were less than enthusiastic and even somewhat angry to be required to participate. Several negative issues were identified by students: (a) time commitment, (b) implementation, (c) developing relationships with older adults, (d) reluctance because of previous negative experiences, and (e) fears of negative reactions and other emotional issues. Upon qualitative content analysis of the students' final reactions, six theme categories emerged: (a) insights about aging, (b) personal growth and understanding, (c) service and volunteering, (d) long-term care, (e) career skills and consolidation, and (f) integration of course work with service-learning experiences. Students also showed a heightened sensitivity to the importance of service on behalf of and volunteering with elderly people. The service-learning activity helped students to gain a better understanding of the concepts of gerontology being presented through texts and lecture.

Burnett, J.A., Hamel, D., Long, L.L. (2004). Service learning in graduate counselor education: Developing multicultural counseling competency. *Journal of Multicultural Counseling and Development*, 32(3), 180-191.

Methodology	Qualitative, Quantitative
Sample	Students
Purpose	Outcomes
Original Sample	11
Final Sample	11
Study Design	One Shot
Data Sources	Reflection journals, evaluations, satisfaction survey, multicultural learning survey
Outcome Variables	Multicultural counseling knowledge, examination of cultural bias

This six-week summer course on multicultural counseling emphasized the examination of personal and institutional prejudice and the needs of a number of diverse populations. The eleven students enrolled in the course spent four hours each week in class for lecture, experiential learning (role plays, etc.) and peer learning (reflection in small groups based on service site). In addition, students spent four hours each week at a community service of their choosing from a list developed before the semester began. Prior to the beginning of the class, someone (the article does not say who) met with the various community service agencies to determine their interest in building service-based, culturally sensitive programs and to set goals for the project. Throughout the experience, students kept a journal to include personal reflections and development as well as, feelings about diverse groups. Students also completed a site evaluation and satisfaction and multicultural learning surveys at the end of the six weeks. Researchers conducted means and standard deviations of the quantitative measures and content analysis of the qualitative data. No analysis was conducted to determine statistical significance.

Students reflected that service-learning was powerful, empowering, and meaningful in their multicultural learning process. They cited a heightened awareness of themselves in relation to others as a primary outcome. Students self-reported on level of knowledge of

the agency population, multicultural learning, and satisfaction on a 5-point Likert scale. The mean score for knowledge was 4.27 (no standard deviation was given). All 11 students rated “The course helped me examine my own cultural biases” with a 5. The mean for the item “This course has helped me learn about multicultural counseling competency” was 4.82 and the standard deviation was .36. The mean for “I would take another course that utilized service-learning” was 4.64 with a standard deviation of .86. Categories: A2, B1, F2

Burr, K. L. (1997). Problems, Politics, and Possibilities of a Progressive Approach to Service Learning in a Community College: A Case Study. *Unpublished Dissertation, Oklahoma State University.*

Methodology	Qualitative
Purpose	Process
Sample	Students; Community members
Original Sample	NR
Final Sample	8 Students (Community members NR)
Study Design	Case study
Data Sources	Survey-self report; Interviews; Journals

This dissertation examined the impact of integrating a progressive approach to education incorporating experience, awareness, and service-learning for community college students in an architecture and construction course. Eight students enrolled in the course, for which they conducted an in-depth architectural study of the local downtown area. The primary research objective of this study was to determine if progressive education provided an effective learning methodology in the community college setting. The study also addressed problems that students and faculty had when they incorporated this new and different pedagogy, and political issues were examined relating to how the progressive and traditional approaches were received and implemented. Interviews were conducted with students, during which they responded to questions about what they felt, experienced, and learned in the course. Focus groups with students were also conducted in order to understand student learning processes. Community and city leaders responded to a survey that addressed their reaction to the relevance and professionalism of the student project.

The analysis yielded four key findings. The first was that students felt this progressive approach to education was effective. Students reported experiencing global learning because many means to gain knowledge were offered, and multiple applications for their learning were provided. Second, students in the course encountered problems with having insufficient time to complete necessary work during the summer session and in traveling long distances to service-sites. Furthermore, the researcher/instructor and the students struggled with how to conduct equitable assessments. Third, while the community and city leaders had positive responses to the project, the time constraints of the summer course made for problems with the city's schedule. Finally, the faculty member faced some challenges in obtaining support from the institution to implement a new and progressive model in a setting where traditional lecturing was the norm.

Camacho Madsen, Michelle. (2004) Power and Privilege: Community Service Learning in Tijuana. *Michigan Journal of Community Service Learning*. Volume 10, No. 3, 31-42.

Methodology	Qualitative
Sample	Students
Original Sample	30
Final Sample	30
Study Design	Case Study
Measures	Self-Reports
Outcome Variables	Learning, Civic Responsibility, Social Attitudes, Critical Thinking, Affect, and Attitude about Equality of Opportunity

Program Characteristics: Duration and intensity of service have an impact on student outcomes; and Diversity has an impact on students, particularly personal outcomes, such as identity development & cultural understanding.

Social Outcome: S-L may subvert as well as support course goals of reducing stereotyped thinking and facilitating cultural & racial understanding.

This study was an inductive analysis designed to raise questions regarding societal inequalities in a challenged zone (U.S.-Mexico borderlands) from written reflections of 30 service-learners in a course titled: “ Sociology of the Border” at the University of San Diego in California. The course provided students a historical perspective of the evolution of the borderlands, challenges of undocumented immigration, and facts about the social and economic contributions of Mexicans in the United States.

The research question revolved around the dilemma of teaching a sampling of privileged students to safely examine, understand and relate to an undocumented segment of a neighboring population. The study examined the community service-learning context as a tool that provided an interactive opportunity for students to work in migrant labor camps and community development projects in Tijuana. Three themes guided the students’ written work: (1) Constructing Self and Other, (2) Feelings of “Foreign-ness”, and (3) Examining Subjectivities.

The immersion experiences offered students many opportunities to hear and to see differently the inequities of the scale endured by undocumented migrant workers. Students report that their preconceived notions were subject to rethinking. Based on the review of student written reflections (prose, poetry, essays, and journal entries), the author suggests that sustained service-learning interactions coupled with conscientious reflection with one community member over the duration of the academic period will provide a more realistic experience of learning than a single visit.

Cashel, M.L., Goodman, C., & Swanson, J. (2003). Mentoring as Service-learning for Undergraduates. *Academic Exchange Quarterly*, 7, 106-111.

Methodology	Quantitative and qualitative
Sample	Mentors, mentees, and parents
Original Sample	NR
Final Sample	NR
Study Design	One shot
Measures	Surveys
Outcome Variables	Parent, youth, and mentor satisfaction

This study evaluated the service-learning component of a mentoring program, which is based upon the Juvenile Mentoring Program (JUMP), created by the Office of Juvenile Justice and Delinquency Prevention (OJJDS). The JUMP program brings together high risk youth with trained and supervised mentors as a way to safeguard healthy development. Mentors must be eighteen years old with no criminal record, as confirmed by a background check, and participate for at least six months.. They must submit an application and provide previous employment, volunteer, and youth experience; furthermore, mentors are required to average three hours a week with their mentees and participate in monthly group activities.

The evaluation seeks outcome variables such as satisfaction with program, reports of delinquency, school attendance, and grade reports, parent reports of social, emotional, and behavioral functioning. For the service-learning part of the evaluation, satisfaction surveys were given to mentors, youth, and parents to measure outcomes.

Positive satisfaction results from the surveys, combined with other outcome data (fewer police incidents and better social behaviors) indicate the success of this program. 71.9% of the mentees indicated that their mentors helped them “a lot,” while 75% indicated that their mentors understood them “a lot,” and 68.8% like being with their mentors “a lot.” According to the parents satisfaction survey, 53.3% found their children’s mentor to be “a lot” helpful while 30% believed they were “pretty much” helpful. 43.3% of the parents thought the mentors were “a lot” helpful in encouraging their children to improve grades and 53.3% rated the mentors in being helpful in discouraging fights. 76.6% of parents believed that the mentors were helpful in making available the opportunity for fun, safe, and valuable fun and 76.7% of parents stated their general satisfaction with the mentoring program. While 75% of the mentors responded to the question “how well do you get along with your youth,” with “a lot,” a mere 12% felt they were “a lot” helpful to their youth. The evaluation indicates that mentors perhaps “underestimate” the value that youth and parents place on the mentoring relationship.

In order to determine the correlation between program satisfaction and success of the mentoring match, Pearson correlation coefficients were calculated. It indicated that the more time parents spent with their child’s mentor, the more satisfied they were. Similarly, youth who spent more time each month with their mentors were more satisfied and more often wanted to stay in the program for the next year. The final outcome variable was how many students wished to participate in the program; there was a steady rise in program involvement. Most found the program to be very beneficial. This

particular program has been successful in meeting its goals and objectives, and the community has responded equally well. During the past four years, it has served 85 students with 25% participating for two or more years.

Cohen, J. & Kinsey, D. F., (1994). Doing Good and Scholarship: A Service-Learning Study. *Journalism Educator*, 48(4), 4-14.

Methodology	Quantitative
Purpose	Outcomes
Sample	Students
Original Sample	217
Final Sample	167 (76.9%)
Study Design	One shot
Data Sources	Survey-self report; Portfolios
Outcome Variables	Learning; Application (both self-reported)

Two hundred twenty students enrolled in a journalism course were given the option of participating in a service-learning project for this study. They were then divided into experiential and non-experiential service project groups led by seminar leaders. Experiential service groups interacted directly with students in elementary and high school classrooms, while non-experiential service groups did not have direct contact with the community. Rather, they analyzed media for content or prepared public relations materials. Students attended a weekly seminar and were graded based on team effort. One hundred and sixty seven of the students completed a twelve-item questionnaire after completing their projects (88-experiential service; 79 non-experiential service) asking about reactions to and learning in the course. In addition to these data, researchers gathered and analyzed evaluations from site representatives, seminar leaders, and course instructors.

Overall, nearly one-half of the students indicated that compared to traditional assignments, their projects were more useful in placing classroom material in a meaningful context. Three-fourths of the seminar leaders agreed. Eighty-four percent of the students rated the projects as "very" or "somewhat helpful," while 58% of the seminar leaders rated the projects as "very helpful." In addition, 69% of the students reported that projects helped them learn about the same amount as or more than they learned by doing other assignments. Even more seminar leaders (75%) than students had this positive reaction to projects.

The experiential groups had significantly higher self reports that: their projects helped them develop a sense of the relationship of communication principles to the real world. They also reported that learning exercises were more effective and more learning occurred than in traditional courses, and that projects placed learning in a more meaningful context than did other assignments. In their evaluations, a significant number of students in experiential groups reported on their positive motivation to work on community projects and felt that such projects were an effective use of time. Evaluations from seminar leaders in experiential groups echoed those of the students. Site leaders unanimously encouraged institutions to continue in the formation of university/community relationships and all indicated interest in continuing community projects.

Conner, D.B. (2004) The effects of course-related service projects in a child development course. *College Student Journal*, 38(3), 462-71.

Methodology	Qualitative, Quantitative
Sample	Students, Staff, Teachers
Purpose	Outcomes
Original Sample	NR
Final Sample	70 students, staff and teachers nr
Study Design	One Shot, One-Group, Pre-Post
Data Sources	Classroom discussion, formal papers, Likert-scale and open-ended evaluations.
Outcome Variables	Learning, Attitudes

This study examined the outcomes of a semester of service with the Head Start program on students enrolled in a child development class in two different semesters. The optional service activity substituted for 40% of the course requirements. Qualitative data were obtained from students, staff, and Head Start teacher, from classroom discussions, and from two formal papers involving theory and application. Quantitative data came from Likert-scale evaluations at the end of the first semester (n=17) and at the beginning and end of the second semester (n=53). The quantitative scales measured their knowledge of Head Start and child development and their attitudes toward the program and clients. Researchers performed one-way ANOVAs on the Likert-scale survey and content-analyzed qualitative data.

Students reported that they were able to make meaningful connections between classroom learning and real child behaviors and that they gained insight into early childhood teaching and education. Students demonstrated an increased knowledge of Head Start, but the study does not report on student performance as a result of the service.

Cram, S. B. (1998). The Impact of Service Learning on Moral Development and Self-Esteem of Community College Ethics Students. *Unpublished Dissertation*, University of Iowa.

Methodology	Quantitative
Purpose	Outcomes
Sample	Students
Original Sample	111
Final Sample	65 (58%)
Study Design	Pre/post survey; Quasi-experimental
Data Sources	Survey-self report
Outcome Variables	Moral development; Self-esteem

This study examined the extent to which service-learning impacted the growth of moral development and self-esteem (the dependent variables) among community college students in three ethics classes.

Three sections of an ethics course taught by the same instructor were asked to participate. There were approximately 37 students in each section (n=111). For one section of the ethics course, the instructor incorporated service-learning into the course requirements. The other two sections did not participate in service-learning. For purposes of analysis, participation in service-learning served as the independent variable, while the control variables were age, GPA, gender, course load, and grades.

Two questionnaires, the Defining Issues Test (DIT) and the Self-Esteem Questionnaire were administered at the beginning of the semester and again at its conclusion. No significant differences between service-learning and non-service-learning students were found for either moral development or increased self-esteem.

Cuban, S. & Hayes, E. (2001). Perspectives of five library and information studies students involved in service learning at a community-based literacy program. *Journal of Education for Library and Information Science, 42, 86-95.*

Methodology	Qualitative
Purpose	Outcomes
Sample	Students
Original Sample	NR
Final Sample	5
Study Design	Case studies
Data Sources	Journals, reflection papers and interviews
Outcome Variables	Problematic experiences and insights

The students in these five case studies worked closely with adult learners in a community literacy agency and attended class once a week to discuss their experiences and their reactions to the readings and lectures. The course students took was entitled “Adult Literacy and Community Service”. Students taking this course were interested in literacy and public library issues. Their problematic experiences and insights are examined through sources such as their journals, reflection papers, and interviews.

The data used in this study were drawn from a larger investigation of course outcomes for tutors. Data on tutor beliefs and experiences were gathered from diverse sources. A purposive sample of five library education students was selected for this study because of their diverse academic backgrounds, same semester enrollment, and a common tutoring site. Data were analyzed in relation to themes and categories.

The tutors were initially apprehensive about their abilities to teach and compensate for what they perceived as negative past schooling experiences of adult learners. Many were ambivalent about their roles and determined that they felt limited in making a difference in their students’ lives. Most students focused more on acceptance and fitting in to cultural norms rather than challenging the system of literacy provision.

Curran, J. M. (1999). *College Students' Attitudes Towards Mental Retardation: A Pilot Study.*

Paper presented at the Biennial Meeting of the Society for Research in Child Development, Albuquerque, NM.

Methodology	Quantitative
Purpose	Outcomes
Sample	Students
Original Sample	NR
Final Sample	152
Study Design	Pre/post; Quasi-experimental
Data Sources	Survey self-report; Attitude measurement scales
Outcome Variables	Social attitudes

These two related studies employed quasi-experimental designs to examine college students' attitudes toward people with mental retardation. College students enrolled in "Psychology of Mental Retardation," were assigned randomly to a service section (n=59) or a control group section (n=29). Students in the control groups completed an assignment designed to take 20 hours to complete. Those in the service group worked with people with mild to profound levels of mental retardation in group homes, day treatment programs, integrated day care, or residential school settings for 20 hours over the semester. Students kept reflective journals and filled out anonymous surveys about their experiences.

Data analysis revealed that both the experimental and control groups changed their attitudes significantly over the course of the semester on two of the four subscales of the Community Living Attitude Scale (CLAS-MR), empowerment and exclusivity. Respectively, these subscales measure feelings about whether persons with mental retardation should be allowed to make important life decisions, and whether they should be excluded from community life (to protect others from them). The latter subscale changed in a negative direction as students seemed to grow concerned with how to actually deal with persons with MR. However, students were more inclined to allow person with MR to make important life decisions. No pre- to posttest difference was found for the sheltering subscale (persons with MR should be sheltered from community life for their own protection) or the similarity subscale (persons with MR are like others in their life goals and basic human rights).

There was a significant between-group difference at posttest on the exclusivity scale only. Service students were less negative about the need to exclude persons with MR from community life than the control group. A content analysis of the journals, however, revealed that service students had positive attitudes about the service experience and toward people with mental retardation.

In a second study, the viewpoints of 48 students enrolled in the "Psychology of Mental Retardation," course were contrasted with those of 25 students taking a consumer economics course. These students also completed the CLAS-MR prior to and following the course and service experience. At pretest, there were no significant differences between the two groups on the exclusion, sheltering, or similarity subscales, but students taking the mental retardation course scored higher on the empowerment subscale. Attitudes of students who completed the Psychology of Mental Retardation Class changed significantly over the course of the semester. They were more positive toward empowerment, and less positive toward sheltering. They were also, however, more exclusive and their attitudes remained unchanged regarding similarity.

The author notes that her course helped people overcome some stereotypical thinking as reflected in the changes in the empowerment subscale, but may have increased other student stereotypes, as those reflected in the exclusion subscales. As noted above, the service-learning experience did not affect scores on the CLAS-MR.

Dalton, J. C. & Petrie, A. M. (1997). The Power of Peer Culture. *Educational Record*, 78(3-4), 18-24.

Methodology	Qualitative
Purpose	Process
Sample	Students
Original Sample	NR
Final Sample	7
Study Design	Case study
Data Sources	Interviews; Focus groups

Seven college students at Florida State University recognized on campus for exemplary character and service were interviewed about how college student peer groups both inhibit and encourage development of character and civic responsibility. Volunteering was highly regarded by respondents. The positive peer ethos around community service was an important source of motivation and promoted becoming more involved in its leadership.

Dinkelman, T. (2001). Service learning in student teaching: “what’s social studies for?” *Theory and Research in Social Education*, 29, 617-639.

Methodology	Qualitative
Purpose	Process
Sample	Students
Original Sample	10
Final Sample	2
Study Design	Case Study
Data Sources	Interviews, observations, assignments and other written work

This study examined the extent to which notions of democratic citizenship developed in the personal theory of teaching held by one preservice social studies teacher during a semester of student teaching. The research presented the question of whether his incorporation of service learning into curriculum would help him develop ideas about the role of social studies and what it means to educate for democratic citizenry. The researcher used a qualitative case study methodology. Two volunteer preservice teachers were selected from a group of ten just beginning student teaching. Both students received instruction on implementing service-learning “modules” at their student teaching sites. This article focuses on one particular case study.

A variety of data were collected from semi-structured interviews, on-site observations, interviews with university supervisor, and assignments and other written work. Data analysis was directed by the naturalistic research paradigm, and included a watchful connection of two types of analytical categories. The first were codes predetermined by long-standing issues resulting from service-learning research. The second coding categories were derived from actual data collected.

At the end of the semester, the preservice teacher considered service-learning to be the most powerful curriculum he taught. He also identified student-learning outcomes from service-learning consistent with the idea's rationale. However, the research exposed little influence of service-learning experiences on the understandings he held of social studies as a form of democratic civic education.

Dorfman, L.T., Murty, S.M., Ingram, J.G., Evans, R. J. (2002). Incorporating Intergenerational Service-Learning into an Introductory Gerontology Course. *Journal of Gerontology Social Work*. 39, 219-240.

Methodology	Quantitative; qualitative
Purpose	Outcomes
Sample	Students
Final Sample	49
Study Design	One shot, Quasi-experimental
Data Sources	Questionnaire, open-ended questions
Outcome variables	Student attitude

The goal of this service-learning study was to incorporate service learning into an introductory social work gerontology class, "Basic Aspects of Aging," at the University of Iowa. The researchers wanted to study the impact of the students who participated in the optional service component to those who did not. Thirteen of the forty-nine students opted to participate in the service learning and were paired with elders for visiting and oral history at nursing homes and semi-living sites. The students were divided into two groups and each group went to the site four times for an average of four hours each session. In the analysis, the researchers assessed the change in attitude of all the students with an evaluation given before and after the course. The service learning students also had to complete open-ended questions before and after the course. The used a quantitative and qualitative analysis to interpret the data.

On the 'General attitude toward elderly', the service-learning students showed a more positive attitude on the post-test than non-service learning students. There were no significant differences in the "attitude toward community service" between the groups. The service-learning students disagreed strongly that 'volunteering makes no sense due to no money,' while non-service students level of disagreement was significantly less. There was significant difference between attitudes; service students had a more positive

attitude toward “working with older people” category. Overall, the open-ended results indicated a positive change in the students’ attitude toward the elderly. A significant number of students indicated that they felt an increase in the amount they valued a relationship with the elderly, an increase in their interest to find a career to work with the elderly, and a decrease in their fear of growing old. The only negative response from these questions was regarding the amount of paper work they were responsible for compared to the non-service learning students.

**Dorfman, L.T., Murty, S.A., Ingram, J.G., Evans, R.J., Power, J.R. (2004).
Intergenerational service-learning in five cohorts of students: Is attitude change robust? *Educational Gerontology*, 30, 39-55.**

Methodology	Qualitative, Quantitative
Sample	Students
Purpose	Outcomes
Original Sample	NR
Final Sample	59
Study Design	Pre-Post, multiple cohorts
Data Sources	Student Attitudinal scales, open ended responses
Outcome Variables	Attitudes toward the elderly, attitudes toward working with older people, fear of aging.

This study sought to find the effect of service-learning on students’ general attitudes toward the elderly, their attitudes toward working with older people, and their fear of their own aging. In each of five semesters, the students participated in a semester-long one-on-one service experience with an elderly person at a local nursing home, assisted living facility, or semi-independent apartment complex. The students met with their partner four times throughout the semester for approximately four hours to do friendly visiting, reminiscing, or oral histories. Student attitudes were measured at the beginning and end of the service experience using two attitudinal scales adapted from the Foundation for Long Term Care. Students also completed several open-ended questions at the beginning and end of the semester. Researchers used two-tailed paired-samples *t*-tests and ANOVAs to assess attitudinal change for the five cohorts. Open-ended responses were analyzed and coded by theme and category by two independent coders whose interrater reliabilities ranged from .79 to .89.

Results were obtained for the all five cohorts taken together and were then separated out to measure the attitude change in individual cohorts. Because of their small size, cohorts 4 and five were combined into one group. Overall, the posttest indicated positive attitudinal change in general attitudes toward the elderly only. Looking at each cohort separately, only cohorts 1 and 2 displayed statistically significant increases in attitudes toward the elderly. Furthermore, cohort 1 showed significant positive changes in attitudes toward working with older people and decreased fear of getting old.

Qualitative results indicated that a majority of students had increased their understanding of older

people. There was a notable reversal in student attitudes toward nursing homes in some cohorts, but not in others, possibly due to different experiences each semester. Finally, students across cohorts showed more positive attitudes about their own aging.

Dorsey, B. (2001). Linking theories of service-learning and undergraduate geography education. *Journal of Geography, 100, 124-132.*

Methodology	Qualitative
Purpose	Description
Sample	Students
Original Sample	NR
Final Sample	NR
Study Design	Case Study
Data Sources	Course assessment and reflection feedback

In this case study of a service-learning project, Geography students partnered with a recently incorporated municipality facing problems similar to other U.S. cities encountering extraordinary expansion. One of several objectives of the course was to identify community goals and objectives, then incorporate them into a comprehensive plan. Another objective was to effectively communicate the primary components of a draft comprehensive plan via cartographic, geographic information systems (GIS), written and oral presentation. This project occurred in Spring 1999.

The first step in the process of establishing meaningful service-learning objectives was to identify a community need. In Spring 2000, the city articulated further needs and another service-learning project developed. Students were charged with the goal of preserving the community's rural character. Groups of 2 or 3 teamed up with community members and professionals. Participants chose a section of the project based on their interests.

The author suggests possibilities for eliciting service reflection by students. These also correspond with the service-learning project objectives included in the article. Dorsey also shares many theories that were bridged to practice through the service-learning experience. Based on assessment and reflection feedback, students underwent few difficulties identifying important planning theories, but had difficulty addressing local land use problems relevant to the theory. Several participants went on either to work with professional planning agencies, or to pursue graduate studies in planning.

Draper, A.J. (2004). Integrating project-based service-learning into an advanced environmental chemistry course. *Journal of Chemical Education*, 81(2), 221-224.

Methodology	Quantitative
Sample	Students
Purpose	Outcomes
Original Sample	12 in group 1, 8 in group 2
Final Sample	12 in group 1, 8 in group 2
Study Design	Two-group, post test
Data Sources	Course Evaluations
Outcome Variables	Critical thinking skills, understanding of course concepts, intellectual curiosity, perception of course.

Eight students in an advanced environmental chemistry course participated in community-based research service projects throughout the course of the semester. Each project included environmental sampling and analysis of drinking water, soil, or air quality in response to community requests. Students participated in lectures on ethics and literature reviews in addition to the standard lectures in environmental chemistry from the professor. Students were graded based on their deliverables for the project and their performance on other homework and quizzes.

Anonymous post-course evaluations provided the outcome data for the study. The evaluations consisted of questions rated on a 5-point scale (1 = strongly disagree to 5 = strongly agree). Mean scores from the course were compared with the responses (n = 12) to post-course evaluations from the same course in the previous semester. The previous semester's course had not included a service-learning component, but had been structured in the typical reading-lecture-exam format. The author performed a one-way analysis of variance to determine the statistical significance of the changes. Students also provided responses to open-ended questions on the evaluation.

There was a statistically significant increase in students' responses to the following statements: "the instructor stimulated intellectual curiosity", "the instructor communicated subject matter clearly", "and the course helped me become a critical thinker." For the following two statements, there was an increase, though it was not statistically significant: "I gained an understanding of the concepts in this field" and "the course was well organized." The rest of the questions pertained only to the instructor's effectiveness and the difference between the two groups was minimal. Finally, students' open-ended responses emphasized that they had learned the material better because they were able to apply it in a real world setting, and that they took newfound pride in their work because they were delivering it not only to a professor, but also to the community.

Driscoll, A., Holland, B., Gelmon, S., & Kerrigan, S. (1996). An Assessment Model for Service-Learning: Comprehensive Case Studies of Impact on Faculty, Students, Community, and Institutions. *Michigan Journal of Community Service Learning*, 3, 66-71.

Methodology	Quantitative; Qualitative
Purpose	Process; Description; Outcomes
Sample	Students
Original Sample	4 classes
Final Sample	4 classes
Study Design	Pre/Post survey; Case study
Data Sources	Survey-self report; Interviews; Focus groups; Document analyses
Outcome Variables	Varied by sample type

These researchers presented a comprehensive case study model of service-learning assessment at Portland State University as a response to the need to measure impact of service-learning among four constituencies: students, faculty, community agencies and institutions. These case studies blended qualitative and quantitative measures in order to determine the most effective and practical tools for measuring the impact of service-learning. Four service-learning courses served as the sample for this pilot study.

Researchers identified multiple variables, indicators and measures to examine the hypothesis that participation in service-learning would have a positive impact on all four constituencies. They employed three methods of data collection: in-person assessments, independent reflection measures, and reviews of existing documentation.

Preliminary findings supported the legitimacy of the predicted impact variables for students, community agencies, and faculty. Service-learning affected students in their: awareness and involvement in the community; personal development; academic achievement; and sensitivity to diversity. The impact on community agencies was evident in that they perceived an effect on their capacity to serve clients, received economic and social benefits, and were satisfied with student interactions. Finally, faculty members felt that community service experiences could be fertile ground for research and other scholarly work.

Dunlap, M. R. (1998a). Voices of Students in Multicultural Service-Learning Settings. *Michigan Journal of Community Service Learning*, 5, 56-67.

Methodology	Qualitative
Purpose	Process
Sample	Students
Original Sample	44
Final Sample	30 (68%)
Study Design	Case study
Data Sources	Journals

Thirty journals with entries guided by semi-structured questions were analyzed for multicultural themes that emerged from the semester-long service-learning course "Introduction to Child Development: Social World of the Child." The researcher identified three predominant themes from these journals: 1) awareness of personal philosophy regarding racial issues; 2) concerns regarding specific multicultural or race-related incidents; and 3) resources that students relied upon to put their

experiences into a larger perspective.

Dunlap, M. R. (1998b). Adjustment and Developmental Outcomes of Students Engaged in Service Learning. *Journal of Experiential Education*, 21(3), 147-153.

Methodology	Qualitative
Purpose	Description
Sample	Students
Original Sample	44
Final Sample	43 (97%)
Study Design	Case study
Data Sources	Journals

This study analyzed reflection journals of students enrolled in a service-learning-based child-development course at Connecticut College. Forty-four students took the course, and 43 agreed to have their journals analyzed. Twenty-two of these journals were chosen randomly for study, yielding 407 pages of text for analysis. The “topical codes 2” method was utilized and required that each sentence be coded for major issues. Eighty five themes emerged, such as initial adjustments and rapport building, setting limits on child behavior, dealing with expectations of others, remembering childhood experiences, experiencing emotions related to service experience, have concern over child gender role development issues, and closure issues. Authors hope that exposing new students to previous students reflections on their experience will offer them examples of what it feels like to be a service learner.

Dunlap, M. R. (1997). The Role of the Personal Fable in Adolescent Service-Learning and Critical Reflection. *Michigan Journal of Community Service Learning*, 4, 56-63.

Methodology	Quantitative; Qualitative;
Purpose	Process; Description
Sample	Students
Original Sample	44
Final Sample	27 (61%)
Study Design	Case study
Data Sources	Content analysis of journals

This study explored the prevalence of the desire to accomplish a heroic mission among older adolescents. The 44 college students who made up the study sample served 2-4 hrs/week at a service site for 12 weeks of 16- week semester. Twenty-seven reflection journals were subject to a content analysis with 85 themes coded for. Results included the fact that 30% of these service-learning students saw themselves as heroes and desired to make a significant contribution to the quality of life for children and families; 50% expressed guilt over their level of privilege and opportunity; and 56% expressed awareness of the complexity of social problems within the community.

Eickhoff-Shemek, J. (2001). Learning risk management through service-learning. *Exercise Standards and Malpractice Reporter, 15, 65-72.*

Methodology	Qualitative
Purpose	Outcomes
Sample	Students
Original Sample	NR
Final Sample	NR
Study Design	One-shot
Data Sources	End-of-semester evaluation
Outcome Variables	Perspectives on learning and general experiences with service-learning project

In Spring 2001, students in a “Risk Management for Health/Fitness Professionals” course at University of Nebraska at Omaha conducted a service-learning project at a local community fitness center. The first half of the semester focused on learning pertinent law through readings, lectures, and discussions. The second half focused on learning risk management through the service-learning project. In order to complete a risk management audit, students needed access to certain information and documents. Therefore, confidentiality was important in the design of this project. The purpose of the project was to provide meaningful practical experience for students and provide helpful information to the fitness center director on whether it was complying with the ACSM standards. The 13 students enrolled in the class were divided into six groups for audit purposes. At the end of the semester, students completed an evaluation form, including open-ended and likert scale questions.

Overall, the students indicated that the project was a positive learning experience. Of the class, 85% of the students strongly agreed that the project will benefit the community fitness center in their future risk management efforts. In relation to the project, 85% disagreed that they would have learned more if more time was spent on lecture/discussion instead of the service-learning project. When asked what was the most significant thing they learned or experienced, answers included: gaining practical experience; learning published standards; understanding the steps of a risk management plan; being able to apply what was learned; and learning the crucial time commitment of a risk management audit.

Eklund-Leen, S. J. (1994). A Study of the Relationship of Student Co-Curricular Activity, Intensity of Involvement and Other Selected Variables to Attitude and Estimated Behavior Toward Community Involvement Among College Students. *Unpublished Dissertation, Kent State University.*

Methodology	Quantitative
Purpose	Description
Sample	Students
Original Sample	NR

Final Sample	177
Study Design	One shot
Data Sources	Survey-self report

This study explored the relationship between community college students' co-curricular activity involvement, student leadership roles, and community service participation. Intensity of involvement in student organizations was examined, as were attitudes, and estimates of behavior concerning community involvement (the dependent variable). The sample (n=177) was drawn from three populations in the following manner: 1) student leaders from college organizations were invited to participate; 2) student members of college organizations were randomly selected; and 3) students not involved in any college organizations were randomly selected.

The author developed the Campus and Community Involvement Questionnaire for this study. It measured three scales: intensity of involvement; attitude toward community involvement; and plans for future involvement.

Analysis revealed that there were significant differences between student leaders and both members and non-members of college organizations in the intensity of both co-curricular and curricular involvement in volunteer or community service work,. There were also significant relationships between intensity of involvement and attitude toward community involvement and intensity of involvement and estimates of future community involvement. While there were no significant differences between men and women, there were differences between African Americans and Whites, with the latter scoring higher on attitudes about and estimates of future community involvement.

Elwell, M.D. & Bean, M.S. (2001). The efficacy of service-learning for community college ESL students. *Community College Review*, 28, 47-61.

Methodology	Qualitative
Purpose	Outcomes
Sample	ESL students
Original Sample	NR
Final Sample	28
Study Design	One shot
Data Sources	Participant observations, interviews, questionnaires
Outcome Variables	Student benefit

Very little research has been done on college-level English as a Second Language (ESL) students participating in community service-learning projects. In Spring 2000, Elwell incorporated service-learning into an ESL course at Foothill College. Twenty-eight students were earning Title V degree applicable credit by taking an ESL intermediate level reading class. The course began at the proficiency level students were at. For the second half of the quarter, they were to read *Of Mice and Men*. In addition, students were required to do research on topics such as the Great Depression, the life of John Steinbeck, the history and geography of the Salinas Valley in Monterey County, California, and conditions of California itinerant and migrant workers. Elwell discovered a short-term

service project collecting supplies such as food, infant care necessities, and school items for children and adults – in response to the devastating freeze of 1998, leaving thousands of migrant workers and their families without economic resources. Elwell chose to utilize ethnographic methods of inquiry including participant observation; informal, unstructured interviews; and a questionnaire. In the questionnaire, the ORID Model of Inquiry was used.

Data from this study revealed that students had greatly benefited from the blend of community service-learning into ESL curriculum. In a matter of weeks, the students improved greatly in their capacity to speak, listen, read, and write in English. Before the community service-learning project, students were dreading the group research project. However, as a result of the project they set a high standard for their research presentations. Students also saw themselves as valuable, contributing members of society. This community service-learning project was highly beneficial on several levels: academic, personal and societal.

Ender, M. G., Martin, L., Cotter D. A. Kowalewski, B. M. & Defiore, J. (2000). Given an Opportunity to Reach Out: Heterogenous Participation in Optional Service-Learning Projects. *Teaching Sociology*, 28, 206-219.

Methodology	Quantitative
Purpose	Description
Sample	Students
Original Sample	NR
Final Sample	413
Study Design	One shot
Data Sources	Survey-self report

In this study, researchers offered students the option of performing a service or another project as a part of the course requirements in 11 sociology courses taught between 1993 and 1995. Sociodemographic and other survey data were collected from the students on the last day of class. These were analyzed to determine whether there were significant relationships between choosing the service option and sex, prior service activities, employment status, residential status, and/or race/ethnicity. The only variable significantly related to choosing the service option was academic major, with social science students being less likely to choose service than other students. This finding may be due to the fact that many more of these students worked. There was also a significant interaction between employment status and residential status. Off-campus students who worked were less likely than other groups to choose a service option. In contrast to other studies, males were as likely to perform service as females, though they only comprised approximately 30% of the sample.

Erickson, G. (2004). Community health nursing in a nonclinical setting: Service-learning outcomes of undergraduate students and clients. *Nurse Educator*, 29(2), 54-57.

Methodology	Qualitative
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Sample	Students
Purpose	Outcomes, process
Original Sample	NR
Final Sample	13
Study Design	Case Study
Data Sources	In-depth semi-structured interviews
Outcome Variables	Student learning, attitudes
Process Variables	Group development

This study focused on both the process and the outcomes of a community-based service-learning project in a clinical component of the nursing education core. Students worked as a group to design a service intervention in a public housing income for low-income seniors and disabled individuals. They were encouraged to engage in group planning for how they could develop relationships with the residents that could meet their disease-prevention and health-promotion needs. While the project was not specifically related to a course, as a practicum, it built on student knowledge in their core courses. Data for this study were collected by observation of group interaction. The experimentors kept notes on dialogue during group meetings and student reactions to the service-learning project.

Researchers found that the group proceeded through the 5 stages of group development described by Tuchman and Jensen: forming, storming, norming, performing, and adjourning. Student statements indicated that they experienced a growth in cultural sensitivity and improved communication skills.

Evangelopoulos, N., Sidorova, A., & Riolli, L. (2003) Can Service-Learning Help Students Appreciate an Unpopular Course?: A Theoretical Framework. *Michigan Journal of Community Service Learning*. Volume 9, No. 2, 15-23.

Methodology	Quantitative
Sample	Students
Original Sample	180
Final Sample	159
Study Design	Longitudinal, Quasi-Experimental
Measures	Pre/Post Surveys
Outcome Variables	Learning, Attitudes

Program Characteristic: Receiving quality feedback from clients has an impact on students' self-reported learning, use of skills taught in courses, and commitment to service. Learning Outcome: Students report that S-L has a positive impact on students' academic learning.

This longitudinal study set out to test a theoretical model referred to as Course Acceptance Model (CAM) derived from the commonalities shared with the premise of the Technology Acceptance Model (TAM). The four propositions of CAM include:

1. Perceived ease of course material will have a direct positive effect on the perceived usefulness of course materials.
2. Perceived usefulness and perceived ease of course material will have a direct positive effect on favorable attitudes toward the course.
3. Favorable attitude toward the course will have a direct positive effect on intentions to use the course material in the future.
4. Perceived usefulness of course material will have a direct positive effect on intentions to use the course material in the future.

The authors put forth a fifth proposition: Participation in service-learning projects will have a positive effect on the perceived usefulness of course material.

The quasi-experimental study involved undergraduate students (pre-test $N=180$, post-test $N=159$) enrolled in a business statistics course in a medium-sized public university in an unspecified location in the Western United States. Students self-selected to participate in a service-learning project that addressed a community identified need or an optional research project (used for the control group) on a subject of interest to the student, raising concerns regarding selection bias. The goal of the study is a comparison between service-learning and other types of projects that involved the application of course material. Class presentations, reflective written proposals, e-mail communications of reflections, and a final written project report were collectively analyzed to detect changes in student perceptions and attitudes.

Researchers find per the fifth proposition that students who participated in service-learning perceived usefulness of course material leading to improved attitudes toward the course and stronger intentions for future use of the course material. The overall results of the study (Chronbach's alpha between 0.89 – 0.94) validated the fifth proposition. The findings suggest that what made the difference for the service-learners is that identified sources in a real-world setting cared enough to receive outcomes of their course material.

Eyler, J. S. & Giles, D. E., Jr. (1999). *Where's the Learning in Service-Learning?* San Francisco, CA: Jossey-Bass, Inc.

Methodology	Quantitative; Qualitative
Purpose	Outcomes
Sample	Students
Original Sample	2462
Final Sample	1535 (62%)
Study Design	Pre/Post; Quasi-experimental
Data Sources	Survey-self report; Problem-solving interviews; Attitude measurement scales; Interviews
Outcome Variables	Citizenship skills & attitudes; Personal development outcomes; Learning; Problem analysis; Critical Thinking; Cognitive development

This book summarizes results of three studies designed to assess the impact of service-learning and alternative models of service-learning on college students. The data sets included: a pre- post-semester

survey of about 1500 students (1100 of whom participated in service-learning and 400 of whom did not) from 20 colleges and universities across the US; in-depth pre- and post-semester problem solving interviews with 66 students from 6 colleges and universities; and in-depth interviews of 65 college students from 6 other institutions that explore student views of the nature of reflection in service-learning. The first two studies were sponsored by FIPSE; the Corporation for National Service sponsored the last study. Analysis of the survey was performed using hierarchical multiple regressions controlling for SES, gender, previous service, minority status, the pre-test measure, and closeness to college faculty. Results were that service-learning had a positive impact on such outcomes as personal development, social responsibility, interpersonal skills, tolerance and stereotyping, learning, and application of learning.

A second analysis, which examined the impact of program characteristics on outcomes using only the service-learning sample of 1100 students, showed that the quality of service-learning classes impacts outcomes significantly. Program characteristics such as a placement quality, link between the academic subject matter and service, written and oral reflection, diversity, and community voice were predictive of many student outcomes.

In the problem solving interviews, students had the chance to demonstrate their analysis of a social problem linked to their service. Over the course of a semester, students in service-learning classes in which service and academic study were continuously and closely linked showed significantly more change in the complexity of their problem analysis, their assessment of the locus of problem and solution and in their critical thinking ability than did students in programs with little linkage between the service option and the course of study or students with no service options. Students in the well integrated service-learning courses were also more likely to apply subject matter knowledge to their problem analysis and to have well developed practical strategies for community action. In both the survey and the single interviews, students reported greater learning when they had higher quality experiences. The pre/post-semester interview data also support this finding.

Eyler, J. S., Giles, D. E., Jr., & Braxton, J. (1997). The Impact of Service-Learning on College Students. *Michigan Journal of Community Service Learning*, 4, 5-15.

Methodology	Quantitative
Purpose	Outcomes
Sample	Students
Original Sample	2462
Final Sample	1535
Study Design	Pre/post; Quasi-experimental
Data Sources	Survey self-report; Problem-solving interviews
Outcome Variables	Citizenship skills; Personal outcomes; Learning

The Comparing Models for Service-learning FIPSE research project gathered data from over 1500 students at 20 colleges and universities. T-tests for independent samples compared service and non-service students on pre-test measures. Hierarchical linear multiple regression was used for analysis of service-learning impact over the semester. Group equivalence was achieved by statistically controlling for rival hypotheses to service-learning impact.

Though several studies were included in the project; this one examines the impact of service-learning on outcomes and pre-service differences. Students who chose service-learning differed from those who did not in the target attitudes, skills, values, and understanding of social issues. Participation in service-learning and closeness to faculty increased student's belief in personal efficacy, and that can solve problems.

Service-learning was also predictive of a career of valuing people, of volunteering and of attempting to influence the political system. Service-learning was also predictive of: students' post-test assessments of their political participation skills and their tolerance for others; students' ability to place themselves in someone else's shoes; and students' ability to remain open to new ideas. Finally, service-learning may have also facilitated faculty-student relationships. Based on their findings, the authors recommend including service-learning in the core curriculum rather than keeping it a co-curricular option.

Eyler, J. S., Root, S., & Giles, D. E. Jr. (1998). Service-Learning and the development of expert citizens: Service-learning and cognitive science. In R. G. B. & D. K. Duffy (Eds.), *With Service in Mind: Concepts and Models for Service-Learning in Psychology*. Washington DC: American Association for Higher Education.

Methodology	Qualitative
Purpose	Process; Outcomes
Sample	Students
Original Sample	24
Final Sample	24
Study Design	One shot; Quasi-experimental
Data Sources	Problem-solving interviews
Outcome Variables	Problem-solving capacity

Twenty-four students from four colleges were interviewed for this study. Three students were not participating in service, seven were beginners or novices, seven were benchmark students who had been involved in extensive service and were leaders in community service, and seven students were involved in community service and a course-based service-learning program, the last two groups were considered community service "experts." The goal was to see if extensive participation in service and service-learning was associated with more complex problem solving capacity.

In interviews, students were asked to identify and analyze causes of a social problem that came from their community service. Interviews were analyzed for dimensions of expertise from the expert/novice literature. Four dimensions emerged that differentiated novice and expert student responses to questions about community problems: 1) how elaborate representations of a community problem were and whether or not the problem was represented in historical terms; 2) attribution of the problems' source/locus; 3) inclusiveness and depth of solution; and 4) sophistication of procedural knowledge.

Fenzel, L. M. & Leary, T. P. (1997). *Evaluating Outcomes of Service-Learning Courses at a Parochial College*. Paper presented at the Annual Meeting of the American Educational

Research Association, Chicago, IL.

Methodology	Quantitative; Qualitative
Purpose	Outcomes
Sample	Students
Original Sample	NR
Final Sample	190
Study Design	One shot; Quasi-experimental
Data Sources	Survey self-report; Interviews; DIT; Social and Personality Responsibility measurement scale
Outcome Variables	Social responsibility; Moral development

Two studies were conducted at a parochial college to address the benefits to students who performed service as part of their curricular studies. In the first study, 28 students in an introductory philosophy service-learning course were compared with 28 students in a course without service-learning. The data sources used to assess dependent variables of social responsibility and moral development were interviews, course evaluations, the Social and Personal Responsibility Scale (SPRS) and the Defining Issues Test (DIT). The independent variable was service-learning for the first study.

In the second study, 134 students in six service-learning classes at different course levels (84 in 100 and 200 level courses, and 50 students in a 300 level course) completed questionnaires that rated their service experiences, the extent and quality of the training they received, whether service contributed to learning their course material, and the likelihood of their continuing service. Pretests indicated that 48% students had no previous service involvement, while 25% reported 1 or 2 prior service experiences, and 27% reported 3 or more previous service experiences.

Results from the first study's quantitative analysis of the SPRS and DIT indicated that students in the service section did not show greater gains in attitudes toward personal and social responsibility or in moral judgment. However, content analysis of the interviews revealed that students felt more compassion toward the disadvantaged, were more commitment to community work, and held a greater belief that they could make a difference. This analysis also suggested that courses which include reflection as a central feature stimulate students' thinking about issues of justice and faith and can affect student plans about postgraduate school and work. In course evaluations, service-learning students also reported that they were more satisfied with their courses.

In the second study, students enrolled in upper level courses reported integrating experience and philosophy through application of theory to real-life situations significantly more often than did students in lower level courses. Most of these upper level students had more experience with service as leaders. Seventy-six percent of students rated the community service component as "very good", and 69% of students reported interest in continuing their participation in service.

Fenzel, M.L., Peyrot, & M., Speck, S., Gugerty, C. (2003). Distinguishing Attitudinal and Behavioral Differences Among College Alumni Who Participated in Service-Learning and Volunteer Service. Paper presented at the Annual Meeting of the American Educational Research Association, Chicago, IL.

Methodology	Quantitative
Sample	Alumni
Original Sample	1108
Final Sample	480(43.4%)
Study Design	Chi-square tests and multiple regression
Measures	Survey
Outcome Variables	Attitude towards social responsibility; post-college community service

This research examined the continued effects of undergraduate participation in service-learning and general community service on the service-related attitudes and behaviors of alumni. Researchers conducted phone surveys with two groups of alumni from an east coast Jesuit Catholic liberal arts college. The first group consisted of 92 alumni, who graduated between 1992 and 1999, and while in college, were enrolled in at least one service-learning course and had a working phone number. The second group included a random sample of 1016 alumni from the same institution who graduated between 1995 and 1999, and with a phone number. After five phone attempts, 42 service-learning alumni and 531 random sample alumni were not reached or did not wish to participate (54 alumni).

Service-learning alumni in this study were those who declared in the phone survey that they were enrolled in at least one service-learning course during college. Similarly, non-service learning alumni were those who responded negatively to the question during the phone survey. Community service alumni were those who took part in any type of community service that was not part of class while in college. Non-community service alumni were those who did not participate in any service activities during college. There is some overlap between service-learning and community service groups.

The phone survey was created and conducted by the Loyola College Center for Social and Community Research. The survey used a 5-point subscale, similar to that of the Likert scale to. Chi-square tests were performed to determine the involvement of alumni in their communities who participated in service learning and community service while in college. A multiple regression analysis was conducted to determine the effects of engaging in service-learning and non-class related community service as an undergraduate on current social justice attitudes and service behaviors.

Results show that participation in both general community service and service-learning as undergraduates positively predicted alumni attitudes towards personal and social responsibilities, as well as alumni involvement in post-college community service and service-related careers. In addition, service-learning participated exerted an effect over

and above that accounted for by community service participation, although effect sizes were relatively small.

Fenzel, M., & Peyrot, M. (2005). Comparing College Community Participation and Future Service Behaviors and Attitudes. *Michigan Journal of Community Service Learning*. Volume 12, No. 1, 23-31.

Methodology	Quantitative
Sample	Alumni
Original Sample	745
Final Sample	481
Study Design	Phone Survey
Measures	Phone Survey
Outcome Variables	Attitudes, Behaviors

Processes in Qualitative Studies: Transformations in orientations toward service and community. Social Outcome: S-L has a positive effect on commitment to service.

Two groups of alumni (122 who graduated between 1992-1999 and 1,1315 who graduated between 1995-1999) of an east coast Catholic liberal arts college were chosen for a phone survey in spring 2001 to assess long-term effects of service participation. Out of 745 alumni reached by phone, 481 served as final participants. The study examined (i) whether college participation in service-learning and community service was associated with subsequent service-related attitudes and behaviors one to six years after graduation, (ii) whether participation in service-learning made a unique contribution to social justice attitudes and service behaviors exhibited as alumni, and (iii) whether service-related outcomes were related to the quality of the service-learning experience.

Demographic data included gender, ethnicity, religion, marital status, status of employment, level of education, current annual income, year of graduation, major, service during college, and high quality service-learning. Using a five-point Likert-type scale, three behavioral outcome variables and three attitude outcome variables were also measured.

Results for Categories of Undergraduate Service Participation and Alumni Service Attitudes and Behaviors were analyzed through Chi-Square and One-Way ANOVA Analyses. Results for predicting Alumni Service-Related Outcomes were attained through Logistic Regression Analyses. Findings reflected that alumni were active in service (60.1.% performed service in the last year). Also, 46.1% held a service field job and 32.2% were members of various community organizations. Since graduating, 6.7% had participated in a major service immersion experience. Alumni also exhibited positive attitudes (mean near 4 relative to a maximum score of 5) toward social and personal responsibility for others in need in addition to service-related behaviors. Findings reflected that participation in both general community service and service-learning as undergraduates was positively associated with alumni attitudes toward social and

personal responsibility as well as alumni involvement in post-college community service and service-related careers. Service-learning participation exerted an effect over and above that accounted for by community service participation. Positive relationships of service-learning with outcomes generally were limited to courses that provided high-quality experiences (more hours of service, more reflection activity, and more integration of service into the course).

Ferrari, J. R., and Worrall, L. (2000). Assessments by Community Agencies: How “the Other Side” Sees Service-Learning. *Michigan Journal of Community Service Learning* 7, 35-40.

Methodology	Quantitative
Purpose	Description
Sample	Community Based Organization Supervisors
Original Sample	NR (for 135 students)
Final Sample	30 (for 109 students, 80.7%)
Study Design	One shot
Data Sources	Supervisory evaluations

For this study researchers asked 30 supervisors at community based organizations (CBOs) to fill out performance evaluations of 135 upper division students enrolled in courses at a Midwestern university with a 20-25 hour service component. Students were aware that their performance was to be evaluated and that they would not be graded on the performance review.

An exploratory factor analysis was performed and produced two useful factors. The first of these might be called student service skills. The items loading on this factor were: working relationship with client/s; appropriate respect for clients; sensitivity to client’s needs; presenting an appropriate image to clients; and constructive attitude about working with clients. The second factor could be labeled work skills, and the items loading on this factor were attendance; punctuality; dependability; and good quality work. The alphas for these factors showed high reliabilities at 0.91 and 0.87. The mean score per item was greater than or equal to 4.4, indicating a possible ceiling effect. A two by two ANOVA showed no interaction between or main effects for sex of supervisor or sex of student.

A content analysis was performed on the four percent of evaluations that included written comments. Seven themes emerged from this analysis: 1) student was helpful to agency; 2) student was sensitive to clients’ needs; 3) student was friendly to clients and staff; 4) the students showed empathy toward clients; 5) student relationships with clients were appropriate and positive; 6) student was interested in providing services to clients; and 7) student was dedicated to his or her work. CBO supervisors, on the whole, were impressed with students’ helpfulness, sensitivity, friendliness, compassion, and actions.

Fitzgerald, T. M. (1996). The College Student Community Service Volunteer: High School Program, Locus of Control and Field Dependence-Independence. *Unpublished Dissertation, Lehigh University.*

Methodology	Quantitative
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Purpose	Description
Sample	Students
Original Sample	NR
Final Sample	71
Study Design	One shot
Data Sources	Survey self-report; Group Embedded Figures Test; Nowicki- Strickland Adult Locus of Control Scale

This quantitative, descriptive study investigated the high school community service experiences and current characteristics of students who performed community service in college. It was guided by five different questions about the relationships between: 1) types of high school community service programs and tendency to volunteer in college; 2) the academic majors of students who volunteered and measures of field dependence and field independence; 3) academic majors of students who volunteered and measures of locus of control; 4) types of college volunteer experiences and measures of field dependence and field independence; and 5) types of college volunteer experiences and measures of locus of control. The sample (n=71) included full-time day students that participated in community service at least twice during the school year and who agreed to participate in the study. At the end of the school year, data were gathered from a student demographic survey and two instruments. The Group Embedded Figures Test (GEFT) assessed academic majors, and the Nowicki-Strickland Adult Locus of Control Scale measured locus of control.

Results indicated that more than three-fourths of student volunteers came from high schools with community service organizations. There were no significant differences in mean scores on the GEFT for student volunteers based upon academic major or by volunteer experience. Measures for locus of control also indicated no significant difference by academic major or by volunteer experience. Thus, the type of volunteer experience does not seem to be related to traits of field dependence or independence.

Foreman, C. W. (1996). *Service-Learning in the Small Group Communication Class*. Paper presented at the Annual Meeting of the Speech Communication Association, San Diego, CA.

Methodology	Qualitative
Purpose	Process
Sample	Students
Original Sample	NR
Final Sample	25-30 (<i>not specified exactly</i>)
Study Design	Case study
Data Sources	Journals

In a case study of an experiential learning project, five community non-profit agencies were invited to a small-group communication class and asked to describe a "problem" they needed help solving. Most of the problems were related to image, communication, or publicity. After listening to agency presentations, students selected one of the organizations to serve. Students were divided into small groups for this purpose. This study examined the value of service-learning for the groups in this class.

To determine if students learned anything from the small group service experience, two written projects, a journal and a final reflection paper were given as assignments. In the journal writing assignment, students noted specific details about individual and group development. In the final paper assignment, students detailed specific lessons learned about small group communication. Faculty reported from their assessment of written works that most students learned by applying communication principles in the group experience. During the final class presentation, students presented their projects to representatives from community agencies. Students indicated an overwhelming positive response to the learning experience. Likewise, feedback from community agencies was positive in regard to the services provided.

Freidus, H. (1997). *Reflection in Teaching: Development Plus*. Paper presented at the Annual Meeting of the American Educational Research Association, Chicago, IL.

Methodology	Qualitative
Purpose	Process
Sample	Students
Original Sample	NR
Final Sample	5
Study Design	Case study
Data Sources	Portfolios

This case study was undertaken to explore the progress of one cohort of graduate students at Bank Street College of Education (New York) involved in a service-learning class, and aimed to document the ways in which the portfolio process facilitated reflective teaching. Portfolios included artifacts students found useful to their development, personal and theoretical themes linking these artifacts, and student presentations. Portfolios for the study were gathered from a subgroup of five 1996-97 candidates for graduation who had completed their supervised field work and were working full or part-time in school, daycare, or community service settings. As students reflected in discussion peer-group meetings about the portfolio process, several themes emerged: trust in self, in others, and in the process. Only when they began to feel safe were students willing to take risks. A second theme was synergy--as students bonded with each other, their energy provided support for one another. Third, students began to understand the development of the process. The findings suggest that reflective practice develops in the context of conversations that occur in an environment of trust.

Garbuio, J. A. B. (1999). *Alternative Spring Break and Social Responsibility: Is There a Relationship?* Unpublished Dissertation, University of Southern California, Los Angeles.

Methodology	Quantitative; Qualitative
Purpose	Description
Sample	Students; Alumni
Original Sample	32 Students; 107 Alumni
Final Sample	25 Students (78%); 21 Alumni (19.6%)
Study Design	One shot; Case study

This project focused on the relationship between social responsibility and an immersion service-learning experience. This experience was defined as an opportunity not simply to work in but also to live the life of a community for a period of time. Specifically, the author studied students involved in an Alternative Spring Break (ASB) program that worked with a group of Navaho Indians in Arizona. The researcher had four related questions: 1) how will the students (past and present) involved in a service-learning immersion experience (Alternative Spring Break) score on a measure intended to reveal where a student is in his or her development of social responsibility, and does the measure chosen accurately reflect these students' level of social responsibility development; 2) is there a correlation between the phases of social responsibility and the type of participation in service-learning activities; 3) will pre and post-trip interviews reveal a subtle shift in language and thought processes related to social responsibility; and 4) how many students will use the reflection component of the (1998) Navaho Nation ASB, and will reflection lead to higher scores on the measure?

In order to answer these questions, a mixed methodology was used. Olney and Grande's "Scale of Social Responsibility Development" (SSRD), a measure derived from the developmental phases of Delve, was used to measure social responsibility, defined here as an understanding of the responsibilities inherent to citizenship, a grasp of social injustice and its causes, and a commitment to work towards social equity. It included three scales, Exploration, Realization, and Internalization. These scales reflect a continuum, or phases of growth. Demographic data and information regarding past service experience were also collected from the then current students and alumni. Most students also granted the researcher pre- and post-trip interviews. The sample consisted of 32 then current students and 107 alumni who participated in the ASB program with the Navaho group in Arizona.

Results from the survey show that in answer to research question one, most students involved in the Navaho Nation had scores indicating that they had reached the "Internalization" level of social responsibility. This had been expected. Since these students had freely chosen to participate in an immersion service-learning experience, they were hypothesized to already have high scores on the SSRD. There was, however, a greater range of scores among the alumni sample. Analyses related to question two revealed that a correlation between the phases of social responsibility and the type of participation in service-learning activities did not exist. Those with more consistent community service experience did have higher social responsibility scores. However, the researcher did not indicate whether the differences were statistically significant. Interviews intended to answer research question three revealed that 15/18 students felt that the ASB experience confirmed their understandings and conceptions of citizenship, and 14 students felt that their ideas of social responsibility had changed.

All in all, however, very little difference in pre- to post-trip attitudinal change was noted. In answer to question four, 10 of the 18 students interviewed did not write in their reflective journals. There was not a difference in social responsibility scores between journal writers and those choosing not to write. Most participants noted that a closing session around the campfire served as a reflection experience.

Gelmon, S. B., Holland, B. A., & Shinnamon, A. F. (1998). *Health Professions Schools in Service to the Nation: Final Evaluation Report*. San Francisco, CA: Community Campus Partnerships for Health.

Methodology	Qualitative
Purpose	Evaluative
Sample	Institutions
Original Sample	20
Final Sample	17 (85%)
Study Design	Case studies
Data Sources	Surveys; Focus groups, Interviews; Direct observation; Activity Logs; Syllabus review; Journals; Vitae; Institutional reports and records

This document reports the results of a long-term evaluative project of the Health Profession Schools In Service to the Nation Program (HPSISN). HPSISN was a multi-site, multi-year program created to explore service-learning as a tool for curricular reform for schools educating health professionals, and was sponsored by the Corporation for National Service and Pew Charitable Trusts. Grantees wrote progress reports at six month intervals, which were used as the basis for a case study for each site. These case studies were augmented with site visits, interviews, focus groups, observations, surveys, and document reviews.

The evaluators of the HPSISN were asking five research questions: 1) how has the HPSISN project affected university-community partnerships with respect to service-learning in the health professions; 2) though the HPSISN program, how has the introduction of service-learning into health professions education affected the readiness of students for a career in the health professions; 3) to what extent have faculty embraced service-learning as an integral part of the mission of health professions education; 4) as a result of the HPSISN grant, how has the institution's capacity to support service-learning in the health professions changed; and 5) what impact does service-learning in the health professions have on the community partners?

Data collected to answer Question 1 reveal that the HPSISN project affected university-community partnerships positively when the community partners were granted authentic and specific roles to play in student learning and in the institution. In addition, students benefited when community partners were involved with orientation and preparation prior to service.

Question 2 was harder to answer. The evaluation team found that students' sense of self as a provider of health services was positively impacted by service-learning experiences. However, the evidence was unclear as to how much students learned about basic health systems from service-learning, and a majority of students reported that service-learning did not help them clarify their career goals.

On investigating Question 3, the evaluators found that most faculty felt that service-learning had a largely positive impact on student learning and faculty-student interactions. Key to strong faculty involvement was the organization of service-learning. The most successful programs had visible upper-level faculty leadership, and regular and sustained faculty development activities related to service-learning.

The institutions' capacities to support service-learning in the health professions (Question 4) changed in some sites more than others. HPSISN goals were advanced more effectively at institutions where there was broad-based commitment to service-learning among leadership and across the institution, and that had an infrastructure to support service-learning. Institutions that had strong definitions of service-learning appeared to have a better chance at sustaining their programs over time.

Overall, data indicate that for Question 5, service-learning in the health professions has a positive effect on/for the community partners. Most partners felt that service-learning helped students see how classroom learning could be applied in the everyday world, and reported that the experience was more beneficial (economically and socially) than burdensome to the agency. Partners also experienced a heightened awareness of the university, in both positive and negative senses. While they reported being happy with the partnership, partners were sometimes dismayed by educational institutions' bureaucratic and political natures.

Overall, the evaluation found service-learning to be a powerful tool for influencing student attitudes toward the role of service in their lives. The service-learning experience was also fulfilling for faculty members and community partners. Challenges not easily overcome centered on issues of institutionalization, confusion over the distinction between service-learning and clinical training, and strategies for involving students and faculty not already inclined toward service.

Giles, D. E., & Eyler, J. S. (1994). The Impact of a College Community Service Laboratory on Students' Personal, Social and Cognitive Outcomes. *Journal of Adolescence*, 17, 327-339.

Methodology	Quantitative
Purpose	Outcomes
Sample	Students
Original Sample	72
Final Sample	72 (100%)
Study Design	Pre/post
Data Sources	Survey, self-report; Attitude scales
Outcome Variables	Social/personal responsibility; Perceptions of community participants

This study examined changes in social and personal responsibility as the result of a service-learning experience. Seventy-two students in a course entitled "Community Service Laboratory" at Vanderbilt University spent the first five weeks of small seminar groups talking with representatives from social service agencies, and the final eight weeks volunteering three hours a week at these agencies. To uncover changes in social and personal responsibility as a result of this experience, students responded to surveys based upon the Social and Personal Scales from the Markus study (1993), and also responded to open-ended questions related to conceptions of issues that clients faced, and about their own learning expectations and perceptions. These surveys were administered three times: at the beginning of the semester; five weeks after students site selection; and at the conclusion of the course.

The surveys showed that students experienced significant increases in their beliefs that people can make a difference and that they should be involved in community service (particularly in leadership and politics), and in their commitment to perform volunteering activities. They also developed more positive perceptions of the people they worked with and an increased commitment to continue service.

Gorman, M. (1994). Service Experience and the Moral Development of College Students. *Religious Education*, 89(3), 422-31.

Methodology	Quantitative
Purpose	Outcomes
Sample	Students
Original Sample	NR
Final Sample	70
Study Design	Pre/post; Quasi-experimental
Data Sources	DIT Measurement Scale
Outcome Variables	Moral development

This study reported the impact of service-learning on the moral development of 70 undergraduate students involved in two different classes: one service-learning class (10-12 hours per week) and one non service-learning class. The Defining Issues Test (DIT) was used to determine the impact of service-learning on moral development. Students participating in the service-learning experience showed significantly higher rates of growth on the moral development measure than those who did not participate.

Grady, K. (1998). *Constructing the Other Through Community Service Learning*. Bloomington: Unpublished manuscript, University of Indiana.

Note For another article using some of these data, see Boyle-Baise (1998)

Methodology	Qualitative
Purpose	Description
Sample	Students
Original Sample	NR
Final Sample	65
Study Design	Case study
Data Sources	Interviews; team report documents

This exploratory study examined the reactions that 65 European American pre-service teachers had to a 20 hour community service learning (CSL) component of a multicultural education course. The project was designed to: 1) provide preservice teachers with experience in cross-cultural interaction; 2) give prospective teachers the chance to learn about low-income and ethnic minority communities; and 3) strengthen understanding of the course goals of heightening cultural consciousness, intercultural competence, and combating prejudice and discrimination.

Students were organized into twelve teams with four to six members each. Data collected were from 24 team interviews and team-written reports on the community agency in which groups worked. Four major conceptual categories were constructed from this data: poverty and poor parenting; we really are all the same; charity, not change; and reconstructing beliefs about the other.

The analysis showed that community service learning in relationship to multicultural education both supported and subverted the goals of the course. For many of the preservice teachers, deficit notions about low-income families and families of color were reinforced. However, service-learning created a new awareness of diversity for a few of the students. The author concludes that differential power

relationships and issues of privilege that come with being European American and middle class need to be carefully considered if service-learning is to facilitate the development of teachers sensitive to multicultural issues.

Greene, D., & Diehm, G. (1995). Educational and Service Outcomes of a Service Integration Effort. *Michigan Journal of Community Service Learning*, 2, 54-62.

Methodology	Quantitative
Purpose	Outcomes
Sample	Students; Community members
Original Sample	40 Students; Community members NR
Final Sample	40 Students (100%)
Study Design	Pre/post; Quasi-experimental
Data Sources	Survey, self-report; Interviews
Outcome Variables	Attitudes regarding health and aging; Community satisfaction

Forty students in a survey course on human diseases participated in this quasi-experimental study that employed a between-group design and was intended to assess the effects of service-learning on perceptions of the elderly. Twenty four students elected to participate in the service-learning component and were randomly assigned to two groups: one group involved weekly journal writing with written feedback (n=11); the other group involved weekly journal with feedback only given as a check mark (n=13). Sixteen students with no service-learning were the control group. Students responded to entrance and exit surveys that measured the degree of stereotypical perception regarding elderly people in a nursing home. Service-learning students paired with an older adult for a weekly visit. Older adults also completed surveys.

Service and non service-learning groups held similarly stereotypical views of the elderly at pretest. The posttest survey revealed that that 70.8% of the students involved in service-learning felt the experience broadened their perspectives on aging, and 50% of this group held less stereotypical images of the elderly than at pretest.. An analysis of variance indicated that there was a significant difference between service-learning groups who received different types of feedback on their journals.

That is to say, the students receiving written feedback had a significantly greater awareness of the contribution the older adults made to their learning than those who received only a check mark for completion. There was agreement between student respondents and elderly residents regarding how enjoyable and how great an educational opportunity the experience was.

Greene, D. P. (1996). Moral Reasoning, Student Development, Reciprocity and Quality of Life in a Service Learning Experiment. *Unpublished Dissertation*, Colorado State University.

Methodology	Quantitative
Purpose	Outcomes
Sample	Students; Community members
Original Sample	NR

Final Sample	98 Students
Study Design	Pre/post; Quasi-experimental
Data Sources	Survey, self-report
Outcome Variables	Moral development; Psychosocial development; Awareness of reciprocity

This study investigated the effect of service-learning on students' moral and psychological development, as well as its effects on service recipients in four occupational therapy programs. Two of these professional health programs incorporated service-learning and two programs did not (student n = 98).

One of the service-learning groups focused on elderly adult issues and the other group focused on individuals with disabilities. A mix of research methods were used to examine the following hypotheses: 1) service-learning students will exhibit a significant gain in moral and psychosocial development; 2) service-learning students will demonstrate a greater involvement in the learning process than non-service students; 3) both service-learning students and service recipients will indicate an increased awareness of reciprocity; and 4) service-learning students will demonstrate a heightened awareness of social issues related to the population with whom they served and more frequently mention quality of life issues than non-serving students.

All students responded to the following pre- and post-surveys; the Student Developmental Task and Lifestyle Inventory (SDTLI), the Sociomoral Reflection Measure (SRM), and the Stages of Concern Questionnaire (SCQ). Service learning students also wrote reflections in their journals after each site visit, while non-service students responded to essays regarding a social issue. In addition, service recipients responded to outcome, entrance, and exit surveys.

Analysis of the three surveys indicated that compared to the non-service students, there was significant developmental and psychosocial changes in both service-learning student groups. However, service-learning did not significantly impact students' moral reasoning abilities or their development of mature relationships. Analysis of reflective journals revealed that: 1) students in the service-learning groups attached an ever-increasing importance to their service-learning experience; 2) there was an awareness of reciprocity between student groups and their service recipients; 3) service-learning students affirmed the educational value of their experiences; and 4) service-learning students increased their awareness of diversity and quality of life issues for service recipients.

Haines, Dana Lee. (2002). A study of Community College Student Attitudes Related to Service-Learning. Doctoral Dissertations of Baylor University, pp. 1-122.

Methodology	Quantitative; Qualitative
Purpose	Outcomes
Sample	Students
Final Sample	39
Study Design	One shot: Quasi-experimental
Data Sources	Questionnaire, writing sample, reflection papers

Outcome variables	Community service, student attitudes toward involvement, student attitude toward life skills, and student attitudes toward civic engagement
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This research study was designed to determine the effect of service-learning on student attitudes toward community service, student attitudes toward involvement, student attitudes about life skills, and student attitudes toward civic engagement. The research was conducted on students at Mesa Community College in Arizona. There were two groups: 23 students (10 male and 13 female) with a service-learning component and 16 students (8 male and 8 female) without a service-learning component in their course. The researchers used an evaluation questionnaire, a writing sample, and reflection papers to assess the effect of service-learning.

The results indicated that there was no difference between the students enrolled in the course with service learning and those without service-learning with respect to perception of community service, civic involvement life skills, and civic engagement. There was a statistically significant difference between community service involvement during that semester compared to prior semesters for students that participated in the service learning. A significant difference was noted when comparing the student's voting record for the service-learning students. Writing samples from the non-service-learning students contained common themes such as establishing responsibility, experiencing personal growth, and college entrance. The service-learning students' writing samples contained common themes such as involvement in community service, career decisions, and personal development. Fourteen of the twenty-three service-learning papers indicated that their experience had impacted their educational and career paths. Researchers conclude that there was some impact on the students by service-learning but a greater effect could be seen if the course was more associated with the service-learning. This would more likely ensure a connection of a subject matter to the actual service-experience.

Hall, L. R. (1996). Transforming the "Empty Assignment Syndrome": A Study of Rhetorical Contexts for Service-Learning Composition Students. *Unpublished Dissertation, Arizona State University.*

Methodology	Qualitative
Purpose	Process
Sample	Students
Original Sample	10
Final Sample	9 (90%)
Study Design	Ethnographic case study
Data Sources	Student papers; Interviews; Observations; Questionnaires

This qualitative study addressed the assumption that service linked with composition courses provides students with an opportunity to perform better than they would when writing 'empty assignments'. The following five related questions guided this research project. 1) What types of reflection do students engage in regarding their learning experiences in the community? 2) In what ways and to

what degree do students incorporate ideas brainstormed in an Electronic Forum into their formal written assignments? 3) How effectively do students incorporate their experience into their formal texts? Do they, for example, synthesize their research and internship experience effectively to develop their main ideas? 4) Do students have more positive attitudes toward writing papers that could be read by a 'genuine' audience? Similarly do students' attitudes toward writing change during the semester? 5) Are students able to transfer what they learn from their research and writing in English 102 to their activities in their internship?

To answer these questions, ten students from two freshman service-learning composition classes taught by the same instructor were invited to participate in this ethnographic study, and nine agreed. Students in these courses were required to tutor 'at risk' students for six to eight hours a week. Students received training in how to mentor and had follow-up trouble-shooting sessions with graduate interns. These interns were also involved in assessing students' written assignments. These included: summaries of articles on tutoring techniques and self esteem issues for 'at risk' children; a critical analysis of an argument on self esteem issues; recommendations on effective tutoring techniques to future students; and recommendations for techniques that improve children's self-esteem.

The researcher was a participant-observer in both course sections. Data were collected from the following sources: rough drafts of papers, peer editing notes, final papers, teacher's evaluation sheets, free-writing exercises, pre- and post-interviews, classroom observations, pre- and post-questionnaires, and transcripts from instructor conferences with subjects and the researcher.

The researcher found that student writing was affected by learning through tutoring experiences. Students performed better in their writing when they addressed "real" readers, such as future students, than when they addressed the instructor. Students' informal reflections focused mostly on their relationships with tutored students and on behavioral problems, while their formal papers focused on activities. They also demonstrated concern about helping to improve the tutored students' self-esteem. An additional finding was that the strategies that students learned through their tutor training proved to be valuable in developing strategies to work with the children.

Halfacre, A.C., Owens, K.A., Zimmerman, K.S., & Hart, Z.H. (2004). The green building project: Promoting political science learning through a collaborative research approach. *Political Science and Politics*, 37(2), 297-302.

Methodology	Qualitative
Sample	Students
Purpose	Process, Outcomes
Original Sample	NR
Final Sample	6
Study Design	Case Study
Data Sources	Student Journals, Semi-Structured Interviews
Outcome Variables	Presentation and communication skills, problem solving ability, mediation skills

This case study examined the learning process for students engaged in a campus-outreach service-learning project at the College of Charleston. Four undergraduate and two graduate students participated in a summer-long renovation of an historic building on the school's campus. This project was not related to a specific course. The project emphasized green building, a collection of land-use, building design, and construction strategies that reduce the negative impacts on the environment and increase sustainability. The students spent approximately 45 hours per week for the duration of the summer working together and with community volunteers to plan and execute the renovation.

Students were required to keep a journal throughout the summer and participated in post-renovation interviews with a graduate student who was not involved in the project. The graduate student then content-analyzed the journals and interview transcripts to pull out major themes regarding the learning process for the students involved in the service-learning opportunity.

Journal data indicated that students benefited from participation in collaborative instruction and debate with both faculty and community members, facilitating the development of mediation and communication skills. Students also developed problem solving skills as they managed many often competing schedules and budgets. The project afforded students the opportunity to apply learning from a variety of disciplines including political science, the social sciences, mathematics, art, and biology. Finally, the active participation in this project management process allowed students to develop their presentation and public speaking skills as well.

Hanks, R.S. & Icenogle, M. (2001). Preparing for an age-diverse workforce: Intergenerational service-learning in social gerontology and business curricula. *Educational Gerontology*, 27, 49-70.

Methodology	Qualitative
Purpose	Outcome
Sample	Students
Original Sample	65
Final Sample	64
Study Design	Quasi-experimental?
Data Sources	Statewide survey; pre- and post-tests
Outcome Variables	Student attitudes toward older workers

Project ALIGN (the Alabama Intergenerational Network for Service-Learning) provides opportunities for University of South Alabama students in business and the social sciences to work with older workers in a community-based training program. Through project ALIGN, partnerships were built with two training programs sponsored by SARPC. Courses for this study were selected on the basis of appropriateness of course content to project goals and appropriateness of service-learning to course objectives. Two courses were selected as pilot courses (Social Gerontology and Employee Training and Development). Service-learning was already a component of these courses. Mature worker participants were chosen on the grounds of current work assignments and

seniority in the training program. SARPC provided a list of 139 potential participants in the Mature Staffing Program. Almost 10% (13) chose to participate. Of the 67 Senior Aide Program trainees SARPC identified, 25 participated. One withdrew, leaving only 24. Student participants self-selected for Project ALIGN by registering for the courses. Thirty-four students were enrolled in Employee Training and Development. Thirty-one were enrolled in Social Gerontology. However, one refused to participate in service-learning activities.

Three instruments were developed to assess attitudes toward aging and mature workers (statewide telephone survey, a student participant questionnaire, and a questionnaire of mature worker's perceptions). The USA Polling Group conducted a statewide survey of attitudes toward older and younger workers, before Project ALIGN began. Over a three-day period, 425 telephone interviews were conducted.

The responses to the statewide survey provided a benchmark measure against which the attitudes of the project participants could be interpreted. Analysis revealed a significant difference in attitudes toward mature workers before the project began; however the postproject analysis discovered no significant difference. Scores indicated that students had a slightly positive attitude toward mature workers, but their attitudes were significantly more negative than the attitudes of the mature workers. After the project, students showed stronger disagreement with each negative item and stronger agreement with most of the positive items. No statistically significant difference was found between the sociology and business students.

Henderson, J. E. & Brookhart, S. M. (1997). *Service-Learning for Aspiring School Leaders: An Exploratory Study*. Paper presented at the Annual Meeting of the American Educational Research Association, Chicago, IL.

Methodology	Qualitative
Purpose	Description
Sample	Students
Original Sample	NR
Final Sample	35
Study Design	Case study
Data Sources	Survey, self-report

This paper presented findings of a study that examined the effects and extent of aspiring school administrators' involvement in a service-learning practicum. Thirty-five students in an educational leadership doctoral program completed this service-learning experience as a requirement of the program.

Students were required to submit a report that described the dates, location, and descriptions of the practicum, the number of hours served, the number of people they estimated to have benefited directly and indirectly from their service, the anticipated benefits to the organization and its clients, the benefits the students derived from the experience, and any problems or difficulties they encountered. All students worked in economically challenged areas, though their service sites and tasks varied

widely.

To analyze this data, the researchers developed coding categories and applied them to the student benefit and problems sections of the reports. They found that participation seemed to enhance aspiring school leaders' attitudes toward service-learning and enable these students to assess the benefits of service-learning to the organizations and individuals served. The most frequently encountered barriers students reported were time and client resistance. The authors hope this data will be useful to school administrators and future administrators who wish to understand the benefits and problems inherent to service-learning programs.

Hodge, G.; Lewis, T.; Kramer, K.; and Hughes, R. (2001). Collaboration for excellence: Engaged scholarship at Collin County Community College. *Community College Journal of Research and Practice*, 25, 675-90.

Methodology	Qualitative; Quantitative
Purpose	Outcomes
Sample	Students
Study Design	Survey and focus groups
Original Sample	NR
Data Sources	Retention and success rates, survey and focus group data
Final Sample	NR
Outcome Variables	Student outcomes, promotional and program needs, measuring success and institutionalization of collaboration concept

In order to combat civic disengagement, Collin County Community College District developed a project involving service learning and learning community programs. CCCCD took learning communities (integrating two or more courses around an interdisciplinary theme and enrolling the same student cohort) courses and improved them with service, fashioning deeper learning for students, and promoting civic engagement and citizenship. Most of the learning communities classes integrate a service learning component into the established theme. Since learning communities and service learning began at CCCCD, effectiveness has been measured with qualitative and quantitative data. Retention and success rates, surveys and focus group data are used to assess student outcomes, among other results.

This study found that retention rates, between 1997 and 2000, in learning communities were 13% higher than the average retention rate as a whole. The success rate (earning a D or better) in learning communities, from 1995 to 2000, was 10% higher than the college's overall success rate. Results of student service learning surveys indicated that students were able to incorporate practical learning into their academic study, tasks they performed were satisfactorily meaningful, and they would recommend service learning.

Hones, D. F. (1997). *Preparing Teachers for Diversity: A Service-Learning Approach*. Paper presented at the Annual Meeting of American Educational Research Association,

Chicago, IL.

Methodology	Qualitative
Purpose	Process
Sample	Students
Original Sample	6
Final Sample	3 (50%)
Study Design	Case study
Data Sources	Course evaluations; Interviews; Portfolios

This study attempted to track the evolution of student thinking about diversity issues as a result of being enrolled in an introductory teacher education course entitled "Human Diversity, Power, and Opportunity in Social Institutions." This course required reading, writing, discussion, and a 10-week service-learning project in the community. The students enrolled in this course were mostly middle class, European Americans from small towns and suburbs in Michigan. Students volunteered in settings that brought them into contact with diverse ethnic, socioeconomic, and linguistic groups. Of the six students the teacher/researcher decided to focus on, three constructed exemplary stories using narrative analysis to describe how their lives were affected by their community experiences. For this study, the researcher decided to profile these three stories and code them for emergent themes.

The stories revolved around the setting of someone whose background differed from their own, and discussed diversity and the roles the student played in the school and community served. The author suggested that the narrative is a form through which preservice teachers can better interpret the educational lives of diverse learners and their own roles in those lives. By linking their personal stories with those of children and adults in schools and communities, preservice teachers learned to recognize the needs, aspirations, and contributions of diverse Americans. Student also felt the experience enhanced their career development and heightened their awareness of diversity.

Horn, L. J., Premo, M. D., & MPR Associates. (1995). *Profile of Undergraduates in U. S. Postsecondary Education Institutions: 1992-1993*. Berkeley, CA: MPR Associates.

Methodology	Quantitative
Purpose	Description
Sample	Students
Original Sample	NR
Final Sample	66,000
Study Design	One shot
Data Sources	Interviews

The US Department of Education conducted Computer Assisted Telephone Interviews that asked students to respond to a survey for the 1992-93 National Postsecondary Student Aid Study. The survey collected comprehensive information about enrollment patterns, student characteristics and educational aspirations, as well as community participation (n = 66,000). The sample included students enrolled in public and private four-year and two-year institutions. It profiled what kinds of students performed community service and how often it was performed per week. Seventy one percent

of the males and 67% of the females performed no service, and most of the rest volunteered between one to over five hours per week. Asian/Pacific Islanders (22.3%) and Hispanics (23.4%) volunteered in smaller percentages than did American Indian/Alaskan natives (35.6%), Blacks (28.7%) and Whites (32.8%). High income and high parental education levels were correlated with the likelihood of students performing service.

Hubbert, Kimberly. (2002). Service Learning and Learning Communities. Information Analyses, pp. 1-12.

Methodology	Qualitative
Purpose	Outcomes
Sample	Students
Final Sample	30
Study Design	One shot: Quasi-experimental
Data Sources	Reflection journal, final paper, group presentation
Outcome Variables	Attrition rate

This paper argues that service-learning and learning communities can help student retention. The researcher uses two courses at Cerritos College to study the effects of having service learning on students. In conjunction with their readings, undergraduates taking Speech 100 and English 100 were also required to choose an organization where they would like to volunteer ten group hours and five individual hours. The students had to keep a group journal and write a group paper that summarized their experience. Finally, they had to present a power point presentation that critically assessed their experience.

The researcher found that the group presentations were all enthusiastic and enlightening. A majority of the reflection journals indicated critical thinking and appreciation of service. Further, students even returned to sites to continue volunteering after completing required hours. The class had a low attrition rate. Only two students out of thirty dropped the course. The author concludes that the low attrition rate can be explained not only by the cohesion students' felt within their groups as well as the actual community service project.

Hudson, W. (1996). Combining Community Service and the Study of American Public Policy. Michigan Journal of Community Service Learning, 2, 33-42.

Methodology	Quantitative
Purpose	Outcomes
Sample	Students
Original Sample	NR
Final Sample	51
Study Design	Pre/post; Quasi-experimental
Data Sources	Attitude scales

Outcome Variables Attitudes; Values; Learning
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This study examined the impact of service-learning on attitudes, values, and learning for students (n = 32) enrolled in two sections of an American public policy course with a service requirement. A European politics course with no service requirement was used as a control group (n=19). The author hypothesized that at the end of the semester students in the public policy courses would score higher in their levels of concern for others and civic commitment than at pretest, and that public policy students would change more along these dimensions than students in the European politics course. Pre and post service measures were adopted from Markus, Howard and King to test these hypotheses. However, paired t-tests on pre- and post-course scores found no statistically significant differences on any items on the survey either for the experimental or control course.

However, students' perception of how the course affected them increased for those in public policy when compared to the control group. Despite the lack of statistically significant results, the researcher perceived that service-learning students were more empowered.

Jarvis, C., James, V.L., Giles, J.G., & Turner, C.J. (2004). Nutrition and nurturing: A service-learning nutrition pharmacy course. *American Journal of Pharmaceutical Education*, 68 (2), 1-8.

Methodology	Qualitative, Quantitative
Sample	Students
Purpose	Outcomes
Original Sample	NR
Final Sample	173
Study Design	One Shot
Data Sources	Reflection Assignments, student self-assessment survey, final examination
Outcome Variables	Communication skills, leadership skills, appreciation for diversity

This study evaluated a service-learning class of first-year pharmacy students who participated in weekly one-hour nutrition lessons at a low-income elementary school. The service learning class was designed to meet criteria set forth by the American Association of Colleges of Pharmacy (AACCP) for experiential education. The objectives of the course were to enhance student outcomes in the categories listed above. Data was collected from three structured reflection assignments – including one pre-reflection assessing personal stereotypes and expectations – a 5-point Likert scale self-assessment of the outcome variables, and a final nutrition examination. Reflections were scored based on a predetermined rubric and content-analyzed for major themes. Researchers calculated the percentage of students who rated each self-assessment item at each level, reporting only these percents in the article.

All 173 students earned satisfactory grades on reflection assignments, qualitatively demonstrating social and contextual awareness, social responsibility, communication skills, and ethical decision making. On the self-assessment survey, 85%, 87%, and 80% of students agreed or strongly agreed

that the service-learning experience contributed to their communication skills, leadership skills, and appreciation for different cultures and socioeconomic groups, respectively.

Johnson, S. D., & Bozeman, M. (1998). *Service Learning and the Development of Social Responsibility*. Paper presented at the Annual Convention of the Central States Communication Association, Chicago, IL.

Methodology	Qualitative
Purpose	Outcomes
Sample	Students
Original Sample	NR
Final Sample	56
Study Design	Pre/post; Quasi-experimental
Data Sources	Survey, self report; Measurement scales
Outcome Variables	Social responsibility

This study made use of a developmental approach to student acquisition of social responsibility. Seven professors from seven institutions of higher education who teach service-learning courses were asked if they would be willing to have their students included in a study of social responsibility development via service-learning. Four professors at three institutions were included because they met the following criterion: they were teaching two sections of the same course with only one offering service-learning, or they were teaching a single course for which students could choose a service or non-service assignment.

The final sample was of 56 students, 25 of whom completed service-learning projects and 31 of whom did not. The instrument chosen for the study was the "Scale of Social Responsibility Development" (SSRD), a new measure derived from the developmental phases of Delve and developed by Olney and Grande. It included three scales, Exploration, Realization, and Activation (formerly Internalization).

Analysis revealed that the scales were significantly correlated with one another, creating doubt over whether they were truly measuring different factors. Nonetheless, significant differences were found between pretest and posttest performance on all three scales for those who completed service-learning projects, but only on the "Activation" scale for the non-service-learning students. In addition, a significant and dramatic difference was found on the "Involvement" scale (constructed by combining "Realization" and "Activation" items) for service-learning students but not for the control group. Since the SSRD did not yield three clearly distinct scales with these data, it is impossible to determine if social responsibility developed in phases. However, since students who performed service-learning tasks showed a significant overall increase on the "Realization" and "Activation" scales, there is tentative support for the hypothesis that service-learning increases social responsibility--at least on a short-term basis.

Jones, S.R., Abes, E.S. (2004). Enduring influences of service-learning on college students' identity development. *Journal of College Student Development*, 45(2), 149-166.

Methodology	Qualitative
Sample	Outcome
Purpose	Process
Original Sample	NR
Final Sample	8
Study Design	Case Study
Data Sources	In-depth semi-structured interviews
Outcome Variables	Identity development

This follow-up to Jones and Hill (2001) used a constructivist framework to identify the long-term influences of a service-learning course on college students' identity development 2 to 4 years after the completion of the course. *The service-learning occurred during a 10-week leadership theories course which required a minimum of 3 hours per week at either an AIDS service organization or a food pantry. Students had the opportunity to provide service directly and to work side-by-side with organization staff and volunteers. They also spent 2.5 hours each week in class. The second half of the class was spent in a reflection group with other students who were serving at the same site. Finally, students participated in weekly journaling, for which graduate teach assistants provided consistent feedback.* (This may be able to be omitted if Jones and Hill (2001) is included in this update)

Data was collected through in-depth, semistructured interviews based on a protocol developed and pilot tested with two former students not included in the final sample. Each interview lasted between 45 and 90 minutes. The interviewer asked students to reflect on how their service-learning experience influenced how they think about their identity and any other perceived influence it had. Each interview was audiotaped and transcribed. Interview data were analyzed using a constant comparative method, focusing on themes in the words and phrases used by participants and moving from concrete experiences to abstract categories.

This course significantly influenced students' identities in several aspects: a heightened focus on others in relation to self, increase commitment to socially responsible work, and notable openness to new ideas, experiences, and people. Students also exhibited increased awareness of their own privileges, increased capacity for critical thinking, and an ability to define their identity internally rather than allowing others to shape it for them.

Jones, S.R. & Hill, K. (2001). Crossing High Street: Understanding diversity through community service-learning. *Journal of College Student Development, 42, 204-16.*

Methodology	Qualitative		
Purpose	Process		
Sample	Students	Sample	Community
Original Sample	13	Original Sample	NR

Study Design:	One shot		
Final Sample	6	Final Sample	8
Data Sources	Face-to-face interviewing of students and community participants		
Outcome Variables	Understanding of diversity		

The purpose of this research was to investigate how student and community participants come to understand diversity in the context of service-learning. The guiding research question was how do student and community come to understand diversity in the context of service-learning? Other questions explored were: How does the meaning of diversity evolve and change for participants through service-learning? How do students and community participants come to know and understand the social issues around which community service agencies are organized (i.e., homelessness, hunger, HIV/AIDS)? How does this understanding influence knowledge of social issues and appreciation of diversity?

Naturalistic inquiry methodology (emphasizing the constructivist nature of meaning making, complex realities, and the importance of the naturalistic setting) was the focus of data collection. Ohio State University students and community members at two community service organizations across High Street (a major roadway) were interviewed. Participants were part of a service-learning experience, anchored in curriculum. The primary strategy used for data collection was in-depth interviewing. One interview was conducted with each participant. The constant comparative method characteristic of grounded theory methodology was used to analyze the data.

The core category was described as a process of relationship building anchored in face-to-face contact with individuals different from oneself. Three key categories emerged – cultural learning, negotiating individuality and commonality, and crossing boundaries. Both groups indicated that they learned from interacting with individuals they wouldn't normally come into contact with. Some students made connections between understanding others and understanding oneself. Students learned to appreciate that all people of a certain race, social class, sexual orientation, or HIV status should not be essentialized, but understood through their unique characteristics, experiences and backgrounds. Service-learning significantly helped to break down the barrier between university and community, but did not eliminate it.

Jordan, K. L. (1994). The Relationship of Service Learning and College Student Development. Unpublished Dissertation, Virginia Polytechnic Institute and State University.

Methodology	Quantitative; Qualitative
Purpose	Outcomes
Sample	Students
Original Sample	300
Final Sample	116 (38.6%)
Study Design	Pre/post; Quasi-experimental
Data Sources	Survey, self-report; Journals; Document analysis;
Outcome Variables	Civic responsibility; Respect for diversity; Knowledge of self; Skill

This study examined the relationship between student growth and development and service-learning participation along four dimensions: sense of civic or citizenship responsibility; respect for diversity; development of individual skills such as knowledge and academic concentration; and knowledge of self.

Three hundred students from two Virginia Universities were invited to participate in the study. Fifty students from each school participated in community service learning with no reflection, while another fifty students representing each school participated in community service learning with reflection. Fifty students from each school were the control group with no community service involvement. Both qualitative and quantitative data were gathered from these students. All took a pre- and post-course instrument that measured the four dimensions of growth. Descriptive statistics and an analysis of variance were conducted on this data. Students were also required to write in journals and respond to a set of predetermined questions regarding service and volunteering. Journals were coded for evidence of change along the four dimensions of growth.

Data analysis was conducted on a final sample of 116 students. The dependent variables were the dimensions of growth described above, and the study controlled for race, gender, and previous community service. Participation in community service learning with the two levels of experience defined above was the independent variable. Results from the quantitative analysis did not reveal any significant difference between the groups. There was, however, a significant difference between genders.

Students involved in service-learning and reflection indicated in their journals that their community service experiences contributed to increased development along three of the four dimensions of growth: respect for diversity; development of individual skills such as knowledge and academic concentration; and knowledge of self.

Karayan, S., & Gathercoal, P. (2003). Empowering Students with Special Needs through Service-Learning. Evaluative Report. California State University

Methodology	Quantitative and qualitative
Sample	Teacher candidates
Original Sample	NR
Final Sample	NR
Study Design	Longitudinal
Measures	Service-learning projects
Outcome Variables	Reciprocal empowerment model

In the past, special-needs students were usually the beneficiaries of service-learning projects, which are traditionally referred to as the deficit model, since it pities people with special needs. An empowerment model enables special needs students to participate in the service-learning projects as change agents themselves. This study investigated service-learning projects done by teacher-training students specializing in special education to determine whether employing service-learning as a tool for teaching can transform the traditional “deficit” model into a reciprocal empowerment” model.

The research used both a qualitative and quantitative design to examine service-learning projects by utilizing elements of quality service-learning as their standard. Between fall semester of 1996 and spring semester of 2000, preservice, general K-12, and special education teacher candidates at California Lutheran University served as the sample population. Researchers used qualitative techniques to classify projects into three groups: “deficit,” (provides quality service) “empowerment,” (provides quality service and involves collaboration) and “reciprocal empowerment” (provides quality service, involved collaboration and represents all stakeholders’ voices).

The study revealed that in 1996, sixty percent of the service-learning projects were categorized as “deficit.” Service-learning projects from 1997 were no longer “deficit” model and were not classified as “empowerment.” In 1998, more service-learning projects were categorized as “reciprocal empowerment” than before. By October 2000, out of 182 service-learning projects, only thirty percent were characterized as “deficit” while forty-five percent of the projects were labeled as “empowerment.” Finally, twenty-five percent of the service-learning projects were categorized as “reciprocal empowerment.” The reason that “reciprocal empowerment” became more prevalent throughout the years of the study was because students with special needs became involved in the actual service-learning projects.

Kearney, K.R. (2004). Students’ self-assessment of learning through service-learning. *American Journal of Pharmaceutical Education*, 68(1), 1-10.

Methodology	Quantitative
Sample	Students
Purpose	Outcomes
Original Sample	127
Final Sample	84 (66%)
Study Design	One-Group, Pre-Post
Data Sources	Survey-self report
Outcome Variables	Oral communication, written communication, analytical ability, critical thinking, and leadership.

This study aimed to assess the learning outcomes of a service-learning course for students enrolled in a required service-learning course in their first semester as pharmacy

students. At most sites, students provided general assistance that was not necessarily healthcare related. Students completed approximately 16 hours of service during the quarter and were required to keep journals in which they described what they did, reflected on it, and planned action steps for the next service day. Students also participated in in-class seminars and group presentations with students from similar service sites. Stated course objectives were to; 1) provide a concrete service, 2) develop/improve oral and written communication skills, 3) develop/improve ability to think critically about issues, and 4) to develop an understanding of the populations they served.

Students completed a survey on the first and the last days of the course. The survey consisted of demographic information, previous service experience, type of work performed for the course, self-assessment of skills and abilities, and student attitudes toward service. The 84 complete, matching survey sets were analyzed using paired t-tests to test for a significant P value of .05 or less.

Students showed statistically significant improvements in self-assessments of oral communication, written communication, analytical ability, critical thinking, and leadership ability. The subgroup of students who worked with senior citizens showed significant improvement in ability to listen to and understand others. Although not statistically significant, the number of students who disagreed with the following statement: “one person can do little to bring about changes in our society” decreased from 71% to 64%, perhaps indicating the possibility that the course (or other factors) may foster a sense of helplessness as the students are exposed to societal problems.

Keen, C. & Baldwin, E. (2004) Students promoting economic development and environmental sustainability: An analysis of the impact of involvement in a community-based research and service-learning program, *International Journal of Sustainability in Higher Education*, 5(4), 384-94.

Methodology	Qualitative, quasi-quantitative
Sample	Students, Community Partners
Purpose	Outcomes
Original Sample	NR
Final Sample	19 Students, 13 Community Partners
Study Design	One-Shot
Data Sources	Semi-structured interviews
Outcome Variables	Life Choices, Communication Skills, Connection to community, emotional and cognitive development.

This study examined the effects of a community-based research (CBR) service-learning program on student and community partner outcomes. Allegheny College’s Center for Economic and Environmental Development (CEED) provides seven different programs with opportunities for students to participate in CBR by working with local citizens, public agencies, businesses and schools to analyze water quality, reduce costly waste streams, identify environmental problems, and implement solutions. These CBR projects

also incorporate other aspects of service learning such as teaching local students in the natural sciences.

Researchers collected data from 19 alumni and 13 representatives from community partner organizations. The alumni had all graduated from 1995-2001 and had been extensively involved in CEED'S CBR programs. Each agreed to participate in a semi-structured phone interview lasting between 45 and 120 minutes. The community partners interviewed consisted of 1 or 2 representatives from each of the seven programs who participated in 20-90 minute interviews. . Each interview transcript was coded by two researchers with 90+ percent interrater reliability to discern key themes.

All 19 graduates indicated that CBR projects had an impact on their current choice of work. Students experienced increased connection to the community, improved systemic and holistic thinking skills, improved ability to deal with ambiguity and diversity, improved communication skills, and an increased ability to incorporate different perspectives into their work. Community partners reported that they received new information and ideas, new perspectives, increased resources (time and physical), personal change, and organizational improvement as a result of CEED's programs.

Keen, C. & Keen, J. (1998). *Bonner Student Impact Survey*. Bonner Foundation.

Methodology	Quantitative; Qualitative
Purpose	Description
Sample	Students
Original Sample	NR
Final Sample	929
Study Design	One shot; Case study
Data Sources	Survey, self-report; Focus groups; Interviews

These authors reported preliminary results from a student impact survey, focus groups, and interviews indicating that the Bonners Scholars Program (BSP) had strong and positive effects on students involved in service-learning by providing opportunities to cross racial and cultural boundaries. The Bonner Scholars Program selects students who are already active in service. Over 80% of the scholars reported that BSP affected their opportunity, capacity, or commitment to interact with compassion with those different than themselves. Students reported that service-learning positively impacted their motivation to serve others, their senses of personal efficacy and leadership effectiveness, and enhanced their career development process. The survey also documented how critical financial support is to its students.

Kendrick, J. R. (1996). *Outcomes of Service-Learning in an Introduction to Sociology Course*. Michigan Journal of Community Service Learning, 2, 72-81.

Methodology	Quantitative
Purpose	Outcomes
Sample	Students

Original Sample	NR
Final Sample	123
Study Design	Pre/post; Quasi-experimental
Data Sources	Survey, self-report; Grades; Course evaluations; Attitude measurement scales
Outcome Variables	Social responsibility; Personal efficacy; Application

Modeled after Markus, King, and Howard (1993) and Giles and Eyler (1994), this study examined effects of service-learning on students in two sections of the same course. Students were given extra credit for participation in service-learning at 20 hours per semester (60 students). Students who selected no service-learning were required to read the NY Times (63 students). The researcher used demographic information to control for effects on learning outcomes. Seventy-five percent of students were freshmen; 63% were female; 86% were Caucasian. Service-learning was the independent variable and the dependent variables were social responsibility, personal efficacy, and application.

Students in the service-learning section showed greater improvements than did the control section in measures of social responsibility, personal efficacy, and they also reported greater ability to apply course concepts to new situations. Compared to the control group, service-learning students indicated that it was more important to work toward equal opportunity and volunteer time to help others. The control group subjects showed a significant change in attitudes about their involvement in community, but were less likely to agree that they could make a difference. There was no significant difference between the service-learning and the control group in grades. Seventy-two percent of students from both groups showed low motivation for service-learning by either "disagreeing" or "strongly disagreeing" that they felt motivated to learn.

Kiely, R. (2004) A Chameleon with a Complex: Searching for Transformation in International Service-Learning. *Michigan Journal of Community Service Learning*. Volume 10, No. 2, 5-20.

Methodology	Qualitative
Sample	Students
Original Sample	43
Final Sample	22
Study Design	Longitudinal Case Study
Measures	Self-Reports
Outcome Variables	Personal Development Outcomes, Cultural Awareness, Social and Civic Responsibility

Processes in Qualitative Studies: Transformations in orientations toward service and community. Exposure to Diversity: Diversity has an impact on students, particularly personal outcomes, such as identity development & cultural understanding. Social Outcome: S-L has a positive effect on sense of social responsibility and citizenship skills.

This study consisted of a sample of 43 students at a community college in New York over a seven-year period (1994-2001). Five separate cohorts of 22 students each participated

in a six-credit service-learning immersion program in poverty-stricken Puerto Cabezas, Nicaragua. The course maintained an explicit social justice orientation. The service was to organize and implement health clinics in collaboration with the local community. Data was collected through on-site participant observation, document analysis, and semi-structured interviews. A case profile on each study participant included pre-post trip questionnaires, photographs, student journals, final reflection papers, and post-trip contracts for future action. The interviews assessed patterns in envisioning (inspired expressions to reach out), transforming forms (dynamic shifts in political, moral, intellectual, cultural, personal, and spiritual perspectives), and the chameleon complex (the struggles involved in sustaining motivations).

Initially, study participants consistently reported a change in their frame of reference, feeling empowered to act on their raised consciousness regarding global social justice. Students reported feeling a sense of global citizenship, responsibility and accountability, committing to increased activism. Seven students reportedly changed career directions to focus on international political challenges. Students seriously questioned their previous notions of providing relief support without sustainability measures that contributed to their intellectual transformation. Prior to the field experience, students could not truly imagine the conditions of extreme poverty but after working directly with the developing world community, they developed a sense of moral obligation to not only care, empathize, and build solidarity but to use their power and privilege to address social change. Students reported intense reflections on their cultural and personal norms and choices highlighting strengths and weaknesses. Students also reported reexamining their religious and spiritual beliefs to gain strength to undertake work for social justice. For some years after the experience, students proceeded to sometimes react intensely and and at other times to respond methodically in their personal and professional lives. The findings reflected imbalances in their transformations over time due to social and cultural influences closer to home. The findings alluded to remaining uncertainties on the conscience of the students in sustaining service to the world's poor.

Kiely, R. (2005) A Transformative Learning Model for Service-Learning: A Longitudinal Case Study. *Michigan Journal of Community Service Learning*. Volume 12, No. 1, 5-22.

Methodology	Quantitative
Sample	Students
Original Sample	Not Listed
Final Sample	57
Study Design	Longitudinal Case Study
Measures	Documents, Observations, Focus Groups, and Interviews
Outcome Variables	Personal Development Outcomes, Social, Cultural, and Civic Awareness, Learning

Processes in Qualitative Studies: Transformations in orientations toward service and community.

Exposure to Diversity: Diversity has an impact on students, particularly personal outcomes, such as identity development & cultural understanding. Social Outcome: S-L has a positive effect on sense of social responsibility and citizenship skills.

Over a ten-year period a community college in New York offered an immersion international service-learning opportunity in Puerto Cabezas, Nicaragua. Participants received six-credits for attending seminars and presentations in community development and health, Nicaraguan culture, history, and language. Students also performed service work, conducted research, designed and implemented health assessments, and worked at a hospital. Course requirements consisted of a daily journal, evening reflection groups, a research report, and a final reflection paper (with a plan for future action). This study was conducted to better understand how 57 students in seven separate cohorts experienced transformational learning during and after participation in the service-learning program.

Document analysis, on-site participant observation, focus groups, and semistructured and unstructured interviews were utilized for data collection. An examination of multiple information sources including pre- and post-trip surveys, photographs, journals, reflection papers, research reports, and action plans constituted document analysis. Students' emotional, physical setting, service work, and social interaction were also closely observed. Each year, comprehensive and detailed field notes and video footage were recorded and analyzed. Shortly after returning to the U.S., and once again in 2001-2002, students participated in interviews and focus groups to explore the process of transformational learning.

The findings generated five dimensions of the transformational service-learning process model: contextual border crossing, dissonance, personalizing, processing, and connecting. These themes and the conceptual relationships among them were used to generate theory grounded in the multiple data sources gathered. The study provided evidence to support the fact that both reflective and non-reflective service-learning opportunities to interact with peers, faculty, and community members are necessary for sustained transformational learning.

Knee, R. T. (1999). Service-Learning in Social Work Education: Building Democracy Through Informed Citizenship. *Unpublished Dissertation*, University of Denver.

Methodology	Quantitative
Purpose	Outcomes
Sample	Students
Original Sample	NR
Final Sample	208
Study Design	Pre/post; Quasi-experimental
Data Sources	Survey, self report
Outcome Variables	Citizenship; Leadership abilities; Respect for diversity

This quasi-experimental study used a comparison group design to discover whether undergraduate

social work students participating in service-learning acquired citizenship skills, a respect for diversity, and leadership skills more readily than those who chose not to participate in service. The study period spanned from the Fall of 1995 through the Spring 1998 semesters.

Students who selected the service-learning option (n=45) in this semester-long introductory social welfare course were required to complete 30 hours of community service at an institution of their choosing. However, the site needed to meet certain requirements, such as supervisors being able to meet with the students regularly and an opportunity for direct contact with clients. Students were required to keep records of their experiences and turn them in to the instructor, and to keep a journal. Entries were graded as to whether and how well they integrated personal experience with larger social issues.

The control group (n=163) did an academic assignment intended to parallel the work the service-learning students were doing. Both groups participated in small group discussions. A 57 item questionnaire was developed specifically for this project and included demographic questions and questions pertaining to community life, personal characteristics, activities and interests, and course perspectives. Items measuring the dependent variables of citizenship, respect for diversity, leadership ability and perceptions of the learning activity were also included in the instrument. A total of 208 respondents completed the pre- and post-experience surveys. No differences were found between the two groups on the dependent variables at pretest. Differences between and within groups from pretest to posttest were measured by employing independent and paired t-tests. Neither groups citizenship scores changed significantly over the course of the semester. However, leadership ability increased significantly for the service group but not the control group, and the service group had significantly higher ratings of the learning experience than did the control group.

Kollross, C. A. (1997). Service Learning and Citizenship: Is There a Connection? *Unpublished Thesis*. California State University, Long Beach.

Methodology	Quantitative
Purpose	Outcomes
Sample	Students
Original Sample	NR
Final Sample	119
Study Design	One shot
Data Sources	Survey, self-report
Outcome Variables	Citizenship

This study examined the effect of service-learning on the development of citizenship in community college students. Students (n=119) in four different courses were compared. Two courses (Sociology and Psychology) required service-learning, and two courses (Economics and Statistics) offered students the option to participate in community service as extra credit. For this study, the definition of citizenship was based upon Myers-Lipton's three stage development of civic responsibility: stage 1) displaying concern about social issues; stage 2) expressing the belief in a sense of personal efficacy, or ability to make a difference; and stage 3) demonstrating the ability to act on concerns.

The following hypotheses were examined in this study: 1) students in courses with a mandatory service-learning component will exhibit significantly develop their level of citizenship; 2) students in courses that merely encourage volunteer community service will exhibit no significant change in their development of citizenship; and 3) academic discipline will affect students' development of citizenship.

Two questionnaires, The "Scale of Service Learning Involvement" and the "Attribute Range" that identified demographic information, were used to test these hypotheses. None of these hypotheses were supported. Service learning students did, however, indicate interest in future community service. The author asserts that the lack of support for these hypotheses may be explained by the confusion over definitions of citizenship because a large percentage of the community college students were foreign-born (approximately 60%). Other possible explanations might be that four different courses were compared to one another with different numbers of service hours and at different service sites.

Krain, M. & Nurse, A.M. (2004). Teaching human rights through service learning. *Human Rights Quarterly*, 26(1), 189-207.

Methodology	Qualitative, Quantitative
Sample	Students
Purpose	Outcomes
Original Sample	NR
Final Sample	27
Study Design	One-shot
Data Sources	Student journals, structured reflection, post-course evaluation, follow-up survey
Outcome Variables	Student learning, service, and engagement

This study examined the effect of a concentrated service learning experience on the outcomes of student learning, service, and engagement in a human rights course for first year students. Each student in the course was paired with a peer at a local juvenile prison in a mask-making project that took place over four two-hour sessions near the middle of the semester. Each pair worked to create and decorate plaster casts of each others faces while interacting on an interpersonal level. The students received a comprehensive orientation before the experience and participated in structured reflection during and after the service.

Data for this study were collected from the journals that the students were required to keep throughout the experience, from structured reflection time, and from a service-learning evaluation adapted from an instrument developed by researchers at the Graduate School of Education at University of California Berkeley. Finally, a follow-up survey was administered one year after completion of the course to assess students' retention of course concepts, participation in volunteer work, and any attitudinal changes resulting from service learning. To analyze the data, researchers content-analyzed the open ended responses and calculated the mean for closed-ended responses.

Students experienced increased understanding of course concepts, strengthened desire to help those in need, and were more engaged in the classroom as a result of service. The one-year follow up indicated that students still felt that the course had increased their learning outcomes for the course and had also increased retention of knowledge. One third of students continued to participate in service upon completion of the course.

LaMaster, K.J. (2001). Enhancing preservice teachers field experiences through the addition of a service-learning component. *The Journal of Experiential Education, 24, 27-33.*

Methodology	Qualitative
Purpose	Outcomes
Sample	Students
Original Sample	NR
Study Design	Case Study
Final Sample	26
Data Sources	Open-ended questions, surveys, reflection papers and perceived goals and challenges
Outcome Variables	Impact on individuals involved, student motivation, and student participation

This paper describes an early field experience planned to incorporate an assessment and service-learning component into high school physical education. A needs assessment was done with both teachers and students. One of the goals of the Physical Education Project was to have multi-directional impact, including high school teachers, their students, and the undergraduate students. Within the two classes that participated in the project, about 90 students were assigned to 26 undergraduates. Each undergraduate would teach a small group of students two days per week for six weeks. High school teachers and university faculty evaluated the undergraduates on teaching effectiveness strategies. At the end of the day, the faculty member would debrief with the students. The undergraduates used a variety of instructional styles and strategies.

Multiple sources of data were collected in an effort to evaluate the Physical Education Project from various perspectives. Short answer questions and surveys were used to measure multidirectional impact among all participants. Student surveys, undergraduate reflection papers, and teachers' responses to open-ended questions were used to measure motivation and participation. Data sources were studied for similar themes and categories, then coded by the two independent researchers.

Qualitative analysis methods were used to interpret the data. Out of the undergraduates' teaching goals statements, two major thematic categories emerged (among seven). The first was to become a better teacher and the second was that the high school students would have fun. Seven thematic categories also surfaced from analyzing the anticipated challenges. Two predominant categories were student involvement and interest and

student behavior and attitude problems. When reflection papers were analyzed, the majority showed that initial interactions influenced teaching approaches. High school teachers found a positive effect on their students and learned new teaching strategies. The students found class to be more fun and teachers thought they were more motivated.

Litke, R. (2002) Do All Students “Get IT?”: Comparing Students’ Reflections to Course Performance. *Michigan Journal of Community Service Learning*. Volume 8, No. 2, 7-34.

Methodology	Quantitative
Sample	Students
Original Sample	Unlisted
Final Sample	60
Study Design	Longitudinal
Measures	Self-Reports, Course Grades
Outcome Variables	Learning, Educational Attainment, Life Skills, Civic Responsibility

Learning Outcome: The impact of service-learning on student academic learning as measured by course grades or GPA is mixed.

This study involved content analysis of sixty service-learning student reflection papers from a service-learning course taught five times over a three-year period. The course objectives included public speaking and training techniques while developing alliances with faculty and community. The service component of the course was for students to coach community youth on public speaking over a six-week period. The students’ course commitments included weekly reflections and two written assignments. The research questions included: (1) what benefits were reported by undergraduate student participants in the course?; and (2) what differences were found when responses were compared relative to students’ performance in the course? Coding was placed in six themes: (1) Personal development, (2) Sense of belonging and connection with others, (3) Commitment to active citizenship, (4) Enhanced academic understanding of subject matter, (5) Ability to apply knowledge and skills learned in one setting to another setting, and (6) Ability to reframe complex social issues. Students were categorized, based on final course grades into higher performers (“A”, “A-“, or “B+”) and lower performers (“B” or lower).

Students reported personal development (self-awareness, self-confidence) as a major benefit of the course (38.28%). The transferability of knowledge and skills between classroom learning and real world application (19.74%) and enhanced understanding of academic content (12.76%) followed. Opportunities for increased team rapport toward achieving a common goal was also high (15.54%). Students reported recognizing the importance of commitment to active citizenship (10.4%) and an increased ability to reframe complex social issues (3.28%). Within the six themes, the order of rankings for the higher and lower groups differed and the comparative strength of the rankings also

differed. Both groups identified personal development and the ability to apply knowledge and skills (57.3% combined for higher performers and 59.4% for lower performers) as their first and second outcome. In terms of the outcome for a sense of belonging and connection, the higher performance group ranked 7.4% higher than the lower performance group. In the outcome for active citizenship however, the lower group coded 14.9% while the higher performance group coded 9.6%. In the final category of the ability to reframe complex social issues, 4.4% was coded for the higher performers but the lower performers did not report any outcomes. Findings suggest that benefits accrue to all participants engaged in a service-learning course.

Loewen, D. E. (1998). Reflection on the Service Experience of First Year College Students: A Content Analysis. *Unpublished Dissertation, University of Iowa.*

Methodology	Quantitative
Purpose	Outcomes
Sample	Students
Original Sample	NR
Final Sample	295
Study Design	One shot
Data Sources	Survey, self-report
Outcome Variables	Empathy; Empowerment; Effort-to-perform further service

This dissertation examined differences in students' levels of empathy, empowerment, and effort-to-perform further service by several variables, including gender, amount of reflection performed, and service setting. Faculty from three Midwestern universities who taught a first level course that required community service were invited to participate in the study. They in turn, offered their students the opportunity to participate in the study (n = 295).

Students were asked to respond to written reflections of their community service experiences at the conclusion of the semester. They also responded to a Service Experience Survey (SES). Content analysis was conducted of written reflections from students based upon responses to three questions "What?", "Now what?", and "So What?"

Results from the content analysis were supported by analysis of the SES and indicated that reflection had a significant effect upon students' levels of empathy and sense of empowerment. In addition, the content analysis revealed a significant gender/setting effect so that women who participated in community service in a direct setting were significantly likely to have higher empathy levels than men serving in a direct setting. The content analysis and SES also showed that gender had a significant effect in a participant's effort to perform further service.

Mabry, J. B. (1998). Pedagogical Variations in Service-Learning and Student Outcomes: How Time, Contact and Reflection Matter. *Michigan Journal of Community Service Learning, 5, 32-47.*

Methodology	Quantitative
Purpose	Outcomes
Sample	Students
Original Sample	232
Final Sample	144 (75%)
Study Design	Pre/post; Quasi-experimental
Data Sources	Survey, self-report
Outcome Variables	Civic attitudes; Personal social values

This study assessed how student attitudes and values were affected by the amount and type of contact with service beneficiaries, and the frequency and types of reflection required. To understand these relationships, pre/post surveys were administered to students participating in service-learning in 23 different courses. Though 232 students completed the pretest, the final sample was 144 students, 68% of whom were female, and 84% of whom were White. There was no significant difference at pretest between those who completed both surveys and those who did not.

At posttest, students were asked to indicate the number of hours of service they performed, the extent to which they had contact with those they served (from "not at all" to "all my service time"), the frequency with which they engaged in reflective activities (in and out of class) and the kinds of reflective activities that were required (written and/or discussion). They also self-reported on the impact service-learning had on their personal social values and civic attitudes, and on their perceptions of how the course influenced their civic attitudes and academic learning.

Students' precourse personal social responsibility and civic attitudes varied significantly by socio-demographic characteristics. Women, Whites and those with previous volunteer experience scored significantly higher on both these precourse measures. An ANOVA showed that these groups' social responsibility and civic attitude scores did not change significantly over the semester. However, men, nonwhites and those with the least service experience showed significant positive changes in their civic attitudes. Service-learning was also more effective when student had at least 15-20 hours of service, enjoyed frequent contact with beneficiaries of their service, engaged in weekly in-class reflection, wrote ongoing and summative reflections and had discussions about their service experiences with both instructors and site supervisors.

Madsen, S.R. (2004). Academic service learning in human resource management education. *Journal of Education for Business*, 79 (6), 328-332.

Methodology	Qualitative
Sample	Students
Purpose	Outcomes
Original Sample	15
Final Sample	12
Study Design	One-shot
Data Sources	Reflection Assignments, student self-assessment survey, final examination

Outcome Variables Confidence, ability to manage complexity, motivation, depth of knowledge

This study sought to determine the effectiveness of incorporating a service-learning component into a class on compensation and benefits in corporations. Each student chose one service organization from a list provided by the professor and performed job analyses and job evaluations for two or three positions within that organization. Data for this study was collected via in-depth interviews by the course instructor with each student. Interview questions addressed students' feelings and thoughts before, during, and after completion of the course. The interviews were then transcribed word-for-word and content analyzed for major themes.

Students expressed increased confidence in themselves, increased ability to manage complexity, increased ability to apply classroom knowledge, motivation to continue to help others, and greater motivation in their studies after having the chance to apply them in a service setting.

Markus, G. B., Howard, J. P. F., & King, D. C. (1993). Integrating Community Service and Classroom Instruction Enhances Learning: Results From an Experiment. *Educational Evaluation and Policy Analysis*, 15(4), 410-419.

Methodology	Quantitative
Purpose	Outcomes
Sample	Students
Original Sample	NR
Final Sample	89
Study Design	Pre/post; Experimental
Data Sources	Survey, self-report; Attitude scales; Course evaluations; Grades
Outcome Variables	Social and personal learning

In an experimental study, two sections of an eight section American politics course were randomly selected to include service-learning. The other six sections were the control groups and used a traditional course format with discussion groups. Control groups wrote a longer term paper instead of performing service. All students had the same lectures and took the same exams. Students had no knowledge during course registration that there were treatment and control groups and there were no significant differences between these two groups prior to the study in their social and political beliefs and values. According to the course evaluations, students in treatment groups did not feel like they were being treated specially. Service-learning was the variable researchers hypothesized would impact grades and social attitudes.

Results included the fact that at the end of the semester, service-learning students attached significantly increased importance to equal opportunity, volunteering, and finding a helping career. For the most part, control groups students did not show significant changes in these areas. However, participating in service-learning increased students' intentions to help others in need. Service-learning students were also significantly more likely to self-report that they learned to apply principles, and had significantly better course grades.

Mayhew, J. (2000). *Service-Learning in Preservice Special Education: A Comparison of Two Approaches*. Paper presented at the Capitalizing on Leadership in Rural Special Education: Making a Difference for Children and Families, Alexandria, VA.

Methodology	Quantitative
Purpose	Outcomes
Sample	Students
Original Sample	179
Final Sample	179 (100%)
Study Design	Pre/post
Data Sources	Survey, self report; Journals; Attitude measurement scales; Focus groups
Outcome Variables	Attitudes about disabled people

This study compared two approaches to service-learning in an undergraduate human exceptionalities course. Each course section served as a treatment group. The “Unlimited Choice” section of 13 students designed and implemented their own service-learning project involving persons with disabilities, and the “Limited Choice” section of 16 students chose between 3 prearranged project sites.

Students filled out the Scale of Attitudes toward disabled people (SADP) at the beginning and end of the semester. There was no significant difference between the groups on this measure, nor was there any change from pre- to posttest in either of the groups.

Other quantitative data were obtained from the standard university course evaluation survey, while qualitative data came from student reflective journals and focus group interviews. Follow-up phone interviews were conducted with students not present for the focus groups. Interviews were recorded and transcribed, and then indexed using the Folio Views program. Questions centered around: a) connecting course content to service experience; b) personal growth from service; c) perceived benefit to others of service; d) influence on future plans; e) expectations about service; and f) suggestions for improvement.

Themes that emerged from journal analysis included: a) feelings of the student; b) the impact of the exceptionality on the individual; c) educational practices; d) reaction to the exceptionality by society; e) connecting course content to service experience; and f) other perceived values of the service experience.

Results suggest that students benefited from both approaches, but each approach had advantages and disadvantages. The course evaluation survey showed that students in the unlimited choice group responded more positively in the content and citizenship domains than the limited choice group. Class discussions about the service experience were a critical component of service-learning--the unlimited choice group commented on their value, and the limited choice group wished there had been more discussion.

On the other hand, students in the limited choice group were able to make more specific connections between course concepts and the service experience, possibly because they served a more diverse

population of children with disabilities. Most of the unlimited choice group students were able to devote their time to a single individual, which contributed to their satisfaction with the experience. Personal ownership, feelings of acceptance, development of relationships, and recognition of the value of the service all contributed to student satisfaction with the experience. Selection of appropriate service sites also contributed to the quality of the experience for both groups.

McElhaney, K. A. (1998). Student Outcomes of Community Service Learning: A Comparative Analysis of Curriculum-Based and Non Curriculum-Based Alternative Spring Break Programs. *Unpublished Dissertation, University of Michigan*

Methodology	Qualitative
Purpose	Outcomes
Sample	Students
Original Sample	22
Final Sample	6 (27.2%)
Study Design	Case study
Data Sources	Interviews; Focus groups; Observations; Content analysis
Outcome Variables	Behaviors; Attitudes; Affect

This qualitative case study examined how service-learning affected undergraduate students from a Midwestern university in two different kinds of Alternative Spring Break (ASB) programs. One ASB site was curriculum-based and focused on urban poverty while the other ASB site, which provided service to homeless women and children with HIV/AIDS, was not linked to a curriculum (n=22). The following research questions guided the study: 1) how does service-learning affect undergraduates; 2) what is the relationship between service-learning and outcomes; 3) what changes do service-learning students undergo; and 4) why does service-learning lead to these student outcomes and/or changes?

Case study methodology guided the data collection strategies, which included: two student focus groups (one per site); 6 individual interviews of 6 key informants (three from each site); document analysis; and researcher observations. Focus groups were first conducted to identify potential informants for interviews and develop interview scripts. Interviews were guided by structured protocol and were tape recorded, transcribed, and analyzed for content.

Drawing from Astin's student outcome typology, the researcher classified data as showing evidence of behavioral or psychological outcomes in two domains, cognitive and affective. Transcripts were coded for outcomes, domains, and type of service-learning (non-curriculum or curriculum-based).

Results from the content analysis include the fact that both groups experienced more psychological than behavioral outcomes. Both groups also challenged previously held attitudes, values, and stereotypes. However, the curriculum-based group experienced a greater variety of outcomes, especially in the cognitive psychological domain. They increased their understanding of community issues, connected theory to practice, broadened their career and educational choices, learned problem-solving skills, displayed much knowledge of the history of the city in which they worked; and expressed a commitment to future service involvement.

The non-curriculum-based group bonded with and befriended each other more often than did the

curriculum-based group and learned more about group dynamics but had fewer learning outcomes.

In addition to content analysis, the researcher used a hurricane analysis to map outcomes from students' service-learning experiences. This analysis led the researcher to classify outcomes as either direct or indirect. Direct outcomes were immediately recognizable at the completion of the experience, while indirect outcomes emanated from the experience as well as from the direct outcomes. Some of the strongest outcomes from this analysis were: the ability to make friends; the challenging of previously held beliefs, attitudes, and values; the broadening of career and educational options; increased knowledge of issues; learning the power of collaboration to solve problems; and discovering new ways of learning.

McMahon, R. (1998). *Service-Learning: Perceptions of Preservice Teachers*. Paper presented at the 27th Annual Meeting of the Mid-South Educational Research Association, New Orleans, LA.

Methodology	Qualitative
Purpose	Process
Sample	Students
Original Sample	NR
Final Sample	56
Study Design	Case study
Data Sources	Reaction papers; Journals

This study used qualitative methods to garner information on the experience and perceptions of pre-service teachers' regarding service-learning. Subjects were undergraduate students enrolled in a early childhood course required for education majors and taught by the researcher. Most of the subjects were female (91%) and elementary education majors (67%). Student's volunteered for at least 10 hours at an organization serving children and/or adolescents. Students kept dialogue journals and participated in two reflection sessions. At the end of the semester, students contemplated involvement in community service by responding to a set of open-ended questions in the form of a narrative reaction paper.

A selection of student reaction papers was analyzed by the instructor to identify key issues and themes in three broad areas of interest: 1) overall attitude; 2) learning that occurred; and 3) impact on life at the university. Next, either the instructor or a collegiate volunteer's representative coded the data using the constant comparative method to clarify subthemes that fell under each rubric and to identify new themes. Reactions to journals and reflections sessions, difficulties experienced, and plans to continue volunteering were added as themes of interest. The findings of the two readers were synthesized and their analysis revealed a positive perspective on service-learning. Approximately 80% of the students saw the service experience as highly beneficial, 18% thought the experience had some merit, and 2% thought it was ineffectual.

Students identified many benefits of service-learning, including: gaining knowledge of self; communication skills; caring; recognizing a need to improve certain skills; gaining awareness of communities; learning about children; clarifying choice of major;

and illuminating or exemplifying information learned in university courses. Frustration and difficulties surrounding service were also mentioned in journals, as was a sometimes negative reaction to required service.

Miller, J. (1997). The Impact of Service-Learning Experiences on Students' Sense of Power. *Michigan Journal of Community Service Learning*, 4, 16-21.

Methodology	Quantitative
Purpose	Outcomes
Sample	Students
Original Sample	451
Final Sample	327 (78%)
Study Design	Pre/post
Data Sources	Survey, self report
Outcome Variables	Efficacy

This project examined whether students that self-selected to participate in an undergraduate community service learning course with diverse options for service would show an increased sense of their own power to impact the world. The students (n=327) completed a survey at the beginning and end of a semester that was geared toward perceptions of power to make a difference in the world. A hypothesis that students would report a greater sense of power following the experience was not supported. Indeed, students reported a significant loss in sense of power to impact the world. This effect was strongest for students in a particular section of the course, but held for all students. In addition, all demographic characteristics collected were significantly related to this loss of power in some fashion, including gender, ethnicity, major, year in school, GPA, membership in fraternities, and level of religious activity.

Miller, J. (1994). Linking Traditional and Service-Learning Courses: Outcome Evaluation Utilizing Two Pedagogically Distinct Models. *Michigan Journal of Community Service Learning*, 1, 29-36.

Methodology	Quantitative
Purpose	Outcomes
Sample	Students
Original Sample	658
Final Sample	125 (19%)
Study Design	Pre/post; Quasi-experimental
Data Sources	Survey, self report
Outcome Variables	Personal and academic growth

Students from two different classes were offered opportunity for enrollment in service-learning sections. Twenty-two students (out of 318) selected the service-learning option in a developmental psychology class (7%), and fourteen (out of 340) students selected the service-learning option in a social psychology class (4%). A sample of the remaining students in both classes were randomly

selected as the control groups (n=89). Service-learning was the independent variable, which the researcher hypothesized would impact personal development, application, attitudes, and academic experience. A questionnaire was administered at beginning regarding demographics and expectations, and a survey at the conclusion of the course asked questions related to the hypotheses.

Students who selected service-learning did not substantially differ demographically from the control group. Service-learning students did differ in that they had significantly higher expectations than their peers that the service-learning experience would be helpful and valuable, and would more positively affect their educational experience. At posttest, service-learning students rated their experiences as being significantly more valuable than the control group, but did not differ in their reports concerning gains in personal development or in the final grades they received. They did, however, report an enhanced ability to apply concepts outside of classroom.

Mobley Smith, M.A., Koronkowski, M.J., & Petersen, N.M. (2004). Enhancing student learning through integrating community-based geriatric educational outreach into ambulatory care advanced practice experiential training. *American Journal of Pharmaceutical Education*, 68(1).

Methodology	Qualitative, Quantitative
Sample	Pharmacy Students
Purpose	Outcomes
Original Sample	NR
Final Sample	64
Study Design	One Shot
Data Sources	Reflective Learning Logs, students' self evaluations
Outcome Variables	Attitudes, knowledge, skills

This study examined the effects of a service-learning component in an experiential training class for pharmacy students. A community-based geriatric outreach component was added to 6-week experiential learning rotations. During the outreach, students interacted with elderly patients, providing drug information and evaluating patients' therapeutic and medical regimes for possible inconsistencies. They then communicated the results and any problems to the patients. The goal of the service was to help students further develop effective medication counseling skills and gain a better appreciation of the health-related perceptions and needs of the elderly population.

Data was obtained from reflective learning logs kept by each student and from self-evaluations administered at the conclusion of the service-learning experience. With qualitative data, researchers conducted reviews and comparisons of reflective logs completed before, during, and after the 6-week experience. Mean scores were calculated for the six-item Likert-like scale self-evaluations (1= strongly agree, 5= strongly disagree). The study also reported the percent of participants who rated each item a 1 or a 2, indicating agreement of any degree.

In the reflective logs, students reported increased confidence, strengthened communication skills,

increased awareness of the needs of the elderly, and increased understanding of the role of the pharmacist in preventative care as the strongest outcomes. On the student self-evaluation, 97.2% of students agreed that the experience helped them understand how pharmacists can impact lives (mean score of 1.5). All of the students agreed that the experience helped them learn to communicate with the elderly (mean score of 1.2) and 76.4% agreed that they had learned to speak with people of different cultures (mean, 1.7). Finally, 58.1% of students agreed that the reflective log helped them to think about how to improve the quality of services they provide (mean, 2.3).

Moely, B. E., McFarland, M., Miron, D., Mercer, S., Ilustre, V. (2002). Changes in College Students' Attitudes and Intentions for Civic Involvement as a Function of Service-Learning Experiences. Tulane University Office of Service Learning.

Methodology	Quantitative
Purpose	Outcomes
Sample	Students
Final Sample	541
Study Design	One shot: Quasi-experimental
Data Sources	Questionnaire
Outcome variables	Student attitude and intention for civic involvement

This study was designed to study if service-learning affects a college student's attitude and intention for civic involvement. The researchers used two groups of students to complete the study (217 doing service-learning and 324 not so engaged). All of these students completed the Civic Attitudes and Skills Questionnaire (CASQ) at the beginning and end of the semester. This evaluated areas such as the students' civic action, interpersonal and problem-solving skills, political awareness, leadership skills, social justice attitudes, and diversity attitudes.

The service-learning students showed increases in their post-evaluation in the areas of plans for future civic action, assessments of their own interpersonal and problem-solving/leadership skills, and agreement with items emphasizing social justice. There were no changes in their diversity attitudes. Service-learning students also showed greater satisfaction with their courses, reported higher levels of learning about the academic field and community compared to the non-service learning students. The non-service learning students showed little change in scores on any of these scales. The researchers conclude that service-learning benefits students on personal conceptualizations of self, others, and societal issues.

Morris, F.A. (2001). Serving the community and learning a foreign language: Evaluating a service-learning programme. *Language, Culture and Curriculum, 14*, 244-255.

Methodology	Qualitative; Quantitative
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Purpose	Outcomes
Sample	Students
Original Sample	152
Study Design	Quasi-experimental
Final Sample	95
Data Sources	Pre-registration interview, biographical survey, pre- and post-survey
Outcome Variables	Impact of service on learner motivation and attitudes

A service-learning program in Spanish at the University of Minnesota, in which learners of Spanish provide various forms of social services to native speakers in local communities in the target language, was evaluated to assess its impact on learner motivation and attitudes. Class meetings are held once a week, conducted and communicated in Spanish. In class, students analyze academic materials dealing with race, class, gender, current patterns of power in the United States and roles of citizens within the system. Of the 152 students registered for the service-learning class, 95 were selected to participate in the study because their pre-registration interview, biographical survey, and pre-survey responses indicated low motivation towards learning Spanish and indifference towards the cultures and/or Spanish speakers.

Pre-registration interviews, biographical surveys, and pre- and post-surveys were used to gather data. Data collection was administered by the researcher with the help of the instructor. In order to establish whether students demonstrated a change in motivation and attitudes (after service-learning class), data were analyzed by examining and comparing means, standard deviations, frequencies, and percentages. A paired *t*-test was also used to establish significant changes between pre- and post-tests.

Overall, results suggest a substantial positive change took place. The qualitative findings further supported the quantitative results. Closer inspection of qualitative responses show that participants examined their own culture and the way it treats Spanish speakers in the U.S. Students also assessed their own preconceived notions. Many participants found similarities between themselves and those they were serving. All participants alluded to wishing to continue language learning, working with the community, and wanting to learn more about Spanish-speaking cultures.

Myers-Lipton, S. J. (1996a). Effect of a Comprehensive Service-Learning Program on College Students' Level of Modern Racism. *Michigan Journal of Community Service Learning*, 3, 44-54.

Note Study 1 of 3 (same sample, different measures)

Methodology	Quantitative
Purpose	Outcomes
Sample	Students
Original Sample	NR
Final Sample	225
Study Design	Pre/post; Quasi-experimental

Data Sources	Modern racism scale
Outcome Variables	Attitudes regarding modern racism

The effects of a service-learning program on students' levels of modern racism were assessed by comparing three groups of students using a quasi-experimental design with a nonequivalent control group. The experimental group were members of a highly selective two year program for juniors and seniors with a focus on service and community action. They performed 6 hours community service per week in concert with four three-credit classes, four one-credit service-learning labs, and two month-long summer service-learning experiences. They performed a total of over 200 hours of service. Eleven students finishing the course in 1993 (wave 1) and 14 students finishing the course in 1994 (wave 2) formed this Comprehensive Service Learning (CSL) group. There was also a control group of students (25 per wave) that performed service that was not linked to course work (the Service No Learning, or SNL group). A second control group of no-service (NS) students consisted of a random sample of 150 students.

At pretest the three groups scored similarly on the Modern Racism Scale. However, at post-test, the CSL students showed a larger decrease in modern racism than the two control groups. Neither political orientation, gender, nor race were predictors of change for modern racism.

Myers-Lipton, Scott J. (1996b). Effect of Service-Learning on College Students' Attitudes toward International Understanding. *Journal of College Student Development*, 37(6), 659-68.

Note Study 2 of 3 (same sample, different measures)

Methodology	Quantitative
Purpose	Outcomes
Sample	Students
Original Sample	NR- <i>See the previous entry for a discussion of the sample.</i>
Final Sample	225
Study Design	Pre/post; Quasi-experimental
Data Sources	International Understanding Scale
Outcome Variables	Attitudes regarding international understanding

The International Understanding Cognitive Scale developed by the Educational Testing Service was used as a pre- middle- and postcourse measure for this study. The scale consisted of several factors: concern for third world problems, a desire for international peace, a desire to be a member of an organization involved in global issues; a desire to find solutions to global problems and awareness of the prevalence of these problems; a belief in cooperation; and an attitude toward the United States.

Even after controlling for student background variables and precourse differences in scores (where necessary), there was clear support for the hypothesis that CSL students would show larger positive changes in international understanding than SNL and NS students.

Myers-Lipton, S. J. (1998). Effect of a Comprehensive Service-Learning Program on College Students' Civic Responsibility. *Teaching Sociology*, 26, 243-258.

Note Study 3 of 3 (same sample, different measures)

Methodology	Quantitative
Purpose	Outcomes
Sample	Students
Original Sample	NR- <i>See Myers-Lipton (1996a) for a description of the study sample.</i>
Final Sample	225
Study Design	Pre/post; Quasi-experimental
Data Sources	Civic Responsibility Scale; Locus of Control Scale; Civic Behavior Scale
Outcome Variables	Civic responsibility

This study hypothesized that students who are involved in service-learning will show larger increases in civic responsibility than students involved in non course-related community service and students not involved in community service. Three scales were used to test this hypothesis: the Civic Responsibility Scale, the Locus of Control Scale, and the Civic Behavior Scale. Independent and control variables included sex, race, political orientation, parents' education, and student group. A multiple regression indicated that the Wave Two CSL and SNL groups had similar levels of civic responsibility at pretest but that the Wave One CSL group had higher pretest scores than the SNL group. Both waves of CSL and NSL groups scored more highly than NS groups at pretest. These differences in initial attitude were controlled for when analyzing pretest to posttest changes. Results of this analysis included the fact that CSL groups gained significantly in their locus of control, civic behavior, and concern for civic responsibility scores over the study period, while the SNL and NS students' scores on these scales stayed the same or declined.

Nichols, A.H. & Monard, K. (2001). Designing intergenerational service-learning courses based on student characteristics. *Educational Gerontology, 27, 37-48.*

Methodology	Quantitative; Qualitative
Purpose	Outcome
Sample	Students
Original Sample	NR
Study Design	One-shot
Final Sample	230
Data Sources	Surveys
Outcome Variables	Relationship-based benefits and curriculum-based benefits

This study examined survey data from 230 students enrolled in 10 intergenerational service-learning courses during the spring of 1999. In order to understand the relationships between relationship-based or curriculum-based benefits and student characteristics, this study questioned whether student characteristics play a role in the likelihood of experiencing these benefits. Age, gender, class standing, experience in gerontology and service activities were all student characteristics that were discovered. Data from the precourse surveys were examined with multiple regression. The analysis controlled for the university attended by the student. The interpretation of the variable was determined by the direction of the standardized coefficients.

This study looked at what characteristics might explain how students expect to benefit from an inter-generational service-learning course. Survey data found there was a significant relationship among age, gender, and class standing and students' perceptions of the benefits that would result from enrolling in an intergenerational service-learning course. Students whose first course it was in gerontology or for whom it was required, were significantly related to relationship-based benefit and problems and concerns with the agency. A required course and not the first in gerontology were significantly related to curriculum-based benefits. There were also significant relationships among first service-learning course, previous volunteer experience, and students' evaluations of community involvement experience with students' expectations of benefits. Lack of service experience did not seem to have any effect on the students' perceived benefits.

Nigro, G., & Wortham, S. (1998). Service-learning through action research. In R. G. Bringle and D. K. Duffy (Eds.) *Collaborating With the Community: Psychology and Service-Learning*. Washington DC: American Association for Higher Education.

Methodology	Qualitative
Purpose	Process
Sample	Students
Original Sample	4
Final Sample	4
Study Design	Case study
Data Sources	Course evaluations; Journals; Observations

This study examined student research and community service in two action research projects. In the first project, two students assisted a community agency by drafting a survey regarding the nature of violence in schools and how it was being addressed. They then mailed the survey to all elementary and secondary schools in the county. In the second project, two students assisted teachers employing a new curriculum based upon Howard Gardner's multiple intelligences by observing and interviewing children and families affected by the curriculum.

Several insights were gleaned by observing students and by soliciting evaluations of the course from the agency staff, teachers, and students. The latter valued the direct experience they gained in dealing with complex community problems and appreciated the control they had from taking initiative and thinking on their own. Agency staff and teachers appreciated receiving other perspectives and information about their own practices.

Nnakwe, N. E. (1999). Implementation and Impact of College Community Service and its Effect on the Social Responsibility of Undergraduate Students. *Journal of Family and Consumer Sciences*, 91(2), 57-61.

Methodology	Quantitative
Purpose	Outcomes
Sample	Students
Original Sample	NR
Final Sample	34
Study Design	Pre/post
Data Sources	Attitude measurement scale
Outcome Variables	Commitment; Social responsibility

Students in a required senior level nutrition course (n=34) participated in a service-learning project in community food banks serving homeless people. Before the project, students were trained by community outreach professionals on how to work with vulnerable populations and in how to administer the Radimer/Cornell food insecurity questionnaire. Students then worked in pairs at food-assistance sites. They also administered the Radimer/Cornell to older persons and others receiving food assistance to assess the prevalence of hunger and food insecurity.

Students filled out a questionnaire designed to determine attitudes and knowledge about food insecurity and hunger at the beginning and the end of the semester. Posttest data showed significant increases in students' concern, activism, and attitudes related to world hunger and homelessness.

service-learning across the curriculum and build service-learning community partnerships. Through a program impact survey, students responded that there was enhanced learning, and a deeper commitment to future service.

Within the institution, five of six academic divisions have incorporated service-learning into individualized programs of instruction. In addition, 34% of the faculty have integrated a service-learning

Osborne, R. E., Hammerich, S., & Hensley, C. (1998). Student Effects of Service-Learning: Tracking Change Across a Semester. *Michigan Journal of Community Service Learning*, 5, 5-13.

Methodology	Quantitative
Purpose	Outcomes
Sample	Students
Original Sample	NR
Final Sample	95
Study Design	Pre/post; Experimental
Data Sources	Survey, self report
Outcome Variables	Self-worth; Cognitive complexity; Social behavior; Competence

For this study, four sections of a pharmacy communications class were randomly assigned to service-learning or no service-learning conditions (for a total of 95 undergraduate students). Service-learning was the independent variable and was expected to positively impact participating students' sense of self-worth, cognitive complexity level, social behavior, and sense of competence. Pre-tests indicated no significant difference between samples on scales measuring these elements. The Self Perception Scale, the Spontaneous Self Esteem Scale, the Remote Associations Test, the Texas Social Behavior

Inventory, the Cognitive Complexity Scale and the Rosenberg Self Esteem Scale were used to measure the impact of service-learning and were administered at the beginning and the end of the semester. Service-learning groups showed significant positive improvements when compared to no-service-learning groups on cognitive complexity, social competency; perceived ability to work with diverse others; and self worth in social situations. There was no significant change in the Rosenberg Self Esteem Scale, but service-learning students were more realistic about their sense of self-worth.

Ostrow, J. M. (1995). Self-Consciousness and Social Position: On College Students Changing Their Minds about the Homeless. *Qualitative Sociology*, 18(3), 357-375.

Methodology	Qualitative
Purpose	Process
Sample	Students
Original Sample	NR
Final Sample	NR
Study Design	Case study
Data Sources	Journals

For this study, the researcher performed a content analysis of journals collected over a period of four and a half years that were written by undergraduates who visited homeless people and then chronicled their experiences and thoughts. Students described their expectations in anticipation of visiting homeless shelters, then visited the homeless at emergency night shelters and soup kitchens. Afterward they wrote about how their attitudes shifted.

Many students described a process of personal transformation as they began to understand the homeless people. They were hyperattentive to their own fears, and experienced a sense of being "on stage" while at the shelters. Their journals underscored the effect of self-consciousness among participants as a barrier between the homeless and themselves, as well as the role that social position plays as students struggle with this self-consciousness.

Parker-Gwin, R. P. & Mabry, J. B. (1998). Service-Learning as Pedagogy and Civic Education: Comparing Outcome for Three Models. *Teaching Sociology*, 26, 276-291.

Methodology	Quantitative
Purpose	Outcomes
Sample	Students
Original Sample	525
Final Sample	260 (49.5%)
Study Design	Pre/post; Quasi-experimental
Data Sources	Survey, self-report
Outcome Variables	Academic and civic outcomes

For this study, pre- and postcourse surveys were administered to 260 students enrolled in three different types of service-learning courses at Virginia Tech to examine whether or not service-learning produced civic and academic outcomes. The first type of class used a "placement-service required" model (n=60) for which students performed required service chosen by the professor to line up with course material. The second model, "placement-service optional" (n=121), offered service as an option, and service sites were chosen based on recommendations by the instructor and the Service-Learning Center. The third "consulting group" placement model required the class (n=79) to work in teams to complete one community project. The placement-service optional classes (12) and placement-service required classes (4) required reflection through student journaling, in-class discussions, electronic chat room use, and final reports. The five consulting group classes did not require any student reflection on how the courses and the service projects were related, but did require final reports.

Pre- and post-surveys included Likert-type measures of personal social responsibility, the importance of community service, civic awareness, motives for volunteering, self-ratings of analytical and problem solving skills. The postcourse survey also included perceptions of course effects. Contrary to expectations, paired t-tests revealed that at the end of the semester, service-learning students rated the importance of community service significantly less favorably than at pretest, and students agreed significantly less with the statement that adults should give some time for the good of their community.

These results, however, are specific to the type of service-learning course taken. Scores decreased on the measures only for students in courses requiring service-learning. A positive result was that students in the placement-service optional courses significantly decreased in self-oriented motives for volunteering. Students in the consulting model service-learning classes and in the placement-service optional classes also reported increases in their critical thinking ability over the semester.

Payne, C. A. (2000). Changes in Involvement as Measured by the Community Service Involvement Preference Inventory. *Michigan Journal of Community Service Learning*, 7, 41-53.

Methodology	Quantitative
Purpose	Outcomes
Sample	Students
Original Sample	83
Final Sample	53 (64%)
Study Design	Pre/post
Data Sources	Attitude measurement scale
Outcome Variables	Commitment

This study examined the ability of the newly revised Community Service Involvement Preference Inventory (CSIPI, formerly the Service-Learning Inventory) to gauge how students like to be involved in community service. Students registered in four sections of an elective service-learning class took the CSIPI at the beginning and at the end of one semester. They performed roughly 20 hours of service work in the ten week term.

The four subscales of the CSIPI are: a) exploration--the affective nature of the apprehension common in new experiences; b) affiliation--a preference to participate with peers or in a group; c) experimentation--an appreciation of the personal challenges of becoming involved in community service; and d) assimilation--a feeling of lifelong commitment and frequent contact with persons/groups being served.

The author hypothesized that there would be a change in mean scores from the beginning to the end of the semester for all four preferences. Exploration and affiliation preferences, which the author associates with egoism and lack of commitment, are theorized to change to experimentation and assimilation. Because of the new revision, the author set the alpha level for the two-tailed t-test performed at $p > 0.10$. There was significant change from pre- to post test on two of the involvement preferences, exploration ($p < .01$), and assimilation ($p < .10$). There was no significant change in the affiliation preference, perhaps because there was little chance for group work. There was also no significant change in the exploration preference, perhaps because most students had already performed community service in the past.

Payne, C. A. & Bennett, E. B. (1999). Service-Learning and Changes in Involvement Preferences Among Undergraduates. *NASPA Journal*, 37(1), 337-348.

Methodology	Quantitative
Purpose	Outcomes
Sample	Students
Original Sample	100
Final Sample	87 (87%)

Study Design	Pre/post
Data Sources	Attitude measurement scale
Outcome Variables	Commitment

This study examined the ability of the Community Service Involvement Preference Inventory (CSIPI, formerly the Service-Learning Inventory) to measure how students prefer becoming involved in community service. Students registered in an elective service-learning class took the CSIPI at the beginning and at the end of one semester. They performed approximately 20 hours of service work in the ten week term.

The four subscales (or preferences) of the CSIPI are: a) exploration--the affective nature of the apprehension common to all new experiences; b) affiliation--a preference to participate with peers or in a group; c) experimentation-- appreciating the personal challenges of becoming involved in community service; and d) assimilation--a feeling of lifelong commitment and frequent contact with persons/groups being served. Differences in means from the pre to the posttest reveal significantly more positive scores at posttest for the affiliation, experimentation, and assimilation preferences. This supports the notion that as students perform service, they gain a greater understanding of the needs of those served and form a greater propensity for future service.

Peterson, E. A. (1998). What Can Adults Learn from Community Service? Lessons Learned from AmeriCorps. *Community Education Journal*, 25(1-2), 45-46.

Methodology	Quantitative
Purpose	Description
Sample	Students
Original Sample	NR
Final Sample	NR
Study Design	One shot
Data Sources	Survey, self-report

This abstract reported results of a University of South Carolina's AmeriCorps project survey that solicited the opinions of participating college students aged 19-22 and young adults aged 23-35. Through their community service, participants reported that their experiences built self-esteem, developed leadership skills, and fostered compassion.

Pickron-Davis, M. C. (1999). Black Students in Community Service-Learning: Critical Reflections About Self and Identity. *Unpublished Dissertation*, University of Pennsylvania.

Methodology	Qualitative
Purpose	Process
Sample	Students
Original Sample	13
Final Sample	13
Study Design	Case study
Data Sources	Observations Focus groups; Interviews

The purpose of the this ethnographic case-study was to gain understanding of how 13 Black students enrolled in three service-learning courses subjectively experienced the in-class and fieldwork components of the course. Five questions guided the study: 1) who were the Black students that were drawn to service-learning courses; 2) what were the motivations of these students; 3) what were the subjective experiences of these students; 4) how did the stated and hidden curriculum influence Black students' experiences of these courses; and 5) what did it mean to be a Black student enrolled in a service-learning course at the university being studied?

The three service-learning courses under study required a commitment to work with primarily lower-class, Black middle-school students. Bi-weekly focus groups, informal interviews with faculty, audiotaped students interviews, and participant-observation of students in the service-learning courses and during service experiences provided the data for this study. Data were coded for themes, including implicit and explicit discussions of race and cultural difference in the classroom, developing cultural competencies for the service-site, and assumptions about service roles.

Major findings include the facts that: critical dialogue in community service learning on race, racism, and cultural differences was often absent; Black students self-silenced when race was brought up in class; Black students navigated dual identities as students in the classroom and as role-models and service-providers in the schools; and Black students developed cultural competence to bridge the cultural differences they found in the predominantly Black, low income community in which they were serving. These competencies centered around language and code-switching and coming to understand urban issues.

Preis, J., & Fenzel, L.M. (2003). Service-Learning in the First Year Seminar: Providing Reciprocal Benefits and Enhancing Connections. Paper presented at the American Educational Research Association, Chicago, IL.

Methodology	Qualitative
Sample	Freshmen students
Original Sample	85
Final Sample	35(41.1%)
Study Design	One shot
Measures	Survey and evaluation
Outcome Variables	Connection to class and community, subsequent community service

This study seeks to investigate the benefits of two service-learning freshman courses at Loyola College (MA) by analyzing a) unique ways to incorporate service-learning in a freshman course; b) to what degree does service-learning help establish interpersonal connectedness with fellow students, faculty, and the larger community; c) the impact of college service-learning on future community service participation.

The Alpha program was instituted by the College to provide first-year students with an academically challenging experience and closer relationship with their faculty instructor

within the context of a small seminar. The two classes that were studied took the alpha form. The first class was *Introduction to Human Communication: An exploration of internal and external influences* while the second was entitled *Introductory Psychology: Human behavior in diverse contexts*.

In February 2003, e-mails were sent to students enrolled in either one of the two class from 2000 to 2002 (40 students from the *Introduction to Human Communications* course and 45 students from the *Introduction to Psychology* course). Fourteen students from the communications class responded and twenty-one students from the psychology course responded. The e-mail survey posed three questions: “a) did the service-learning component of the Alpha course influence your decision to engage in service after your first semester? b) did the service-learning component of the Alpha course facilitate any connection for you to classmates, professor, the college, and/or the community? c) how beneficial was the service-learning component of your Alpha course overall?”

Besides an e-mail survey, 42 end-of-semester evaluations (2 pages long) were turned in from the psychology course (no evaluation was conducted in the communications course). The survey consisted of students evaluating the quality of their service experience, the degree to which it enhanced or did not enhance their appeal to future service, and their thoughts toward social responsibility and people from all walks of life.

The results indicated that “most students in both courses found the service-learning experience to positively influence subsequent service involvement, to facilitate connections within the class and in the community, and to be very beneficial overall.” The evaluation conducted at the end of the semester in the psychology class showed that students thought of their service-learning experience as beneficial, and majority of them thought it made them “much more interested or somewhat more interested” in future community service.

Raskoff, S. (1997). Group Dynamics in Service-Learning: Guiding Student Relations. *Michigan Journal of Community Service Learning*, 4, 109-115.

Methodology	Qualitative
Purpose	Process
Sample	Students
Original Sample	53
Final Sample	25 (47%)
Study Design	Case study
Data Sources	Interviews; Journals

This study examined the process of group work, individual reflection and supervision in service-learning. Eleven students from two courses, *Women at Work*, and *Bureaucracy and Complex Organizations*, were selected to participate in a service-learning project in conflict mediation. For this project, they worked at the middle school with the conflict resolution director, wrote weekly journals based on prompts, met together to discuss their experiences, and prepared a reflective paper for the course. Other students in the classes were required to write a paper and keep a journal if they

participated in community service unrelated to the course. Twenty one (out of 42) students in this second group chose to be involved in community service.

The author reported that analysis of students' notes and journals revealed a connection between group interpersonal dynamics and student motivation. Thus, student interactions, motivations, and experiences during service-learning affected whether students reported positive or negative experiences.

Students in the service-learning group tended to include explicit references to other students in the group or to situations at the school. Results from the pre-experience surveys, interviews and debriefing meetings indicated that students' expectations should be identified early in the semester so that appropriate attention and intervention can be attempted.

Rauner, J. S. (1995). The Impact of Community Service-Learning on Student Development, as Perceived by Student Leaders. *Unpublished Dissertation, University of San Diego.*

Methodology	Qualitative; Quantitative
Purpose	Process; Description
Sample	Students
Original Sample	NR
Final Sample	58
Study Design	Pre/post; Quasi-experimental; Comparative case study
Data Sources	Survey, self report; Focus groups; Journals; Observations
Outcome Variables	Cross-cultural sensitivity

Using a comparative case study approach, this study examined students' experiences as community service leaders at two California universities over two years. Four case studies were analyzed with 58 participating students (14 per case study, per institution, per year).

Surveys, questionnaires, journals, focus group interviews, and observations were used to gather data concerning whether, how, and why student leaders changed their: self-perceptions; awareness of cultural diversity issues; moral judgements; decision making processes; learning; and relationships with other students, administrative leaders and community organizations.

Students reported that they gained self-confidence by meeting time demands, facing complex situations, and increasing their organizational and communication skills. Through immersion in different community cultural settings, students reported that interacting with those being served had great impact because it forced them to confront their stereotypes and made them aware of the vast differences in physical environments and resources available to people.

Cross analysis of the two programs indicated differences in program longevity, funding sources, and in the autonomy of student leaders. Students raised issues regarding the amount and type of advising that they received as well as the receptivity to input from the student leaders from the community agency. Student leaders also questioned whether or not they were able to influence other student volunteers. All students felt challenged to continue their involvement as citizens in their world.

Rhoads, R. A. (1997). *Explorations of the Caring Self: Rethinking Student Development and Liberal Learning*. Paper presented at American Education Research Association, Chicago, IL.

Methodology	Qualitative
Purpose	Process; Description
Sample	Students
Original Sample	NR
Final Sample	374
Study Design	Case study
Data Sources	Survey, self report; Interviews; Observations

This author hypothesized that if college students have a deep sense of caring for others, it is more likely that they will interact with others in a meaningful way. Thus, a means to foster a sense of self grounded in an ethic of caring via community service involvement is explored in this paper.

The three objectives addressed in this work were: (1) to advance higher education's understanding of the varieties of learning experiences students have through involvement in community service; (2) to use theoretical discussions of the "caring self" (a combination of symbolic discussions and feminist explanations of self) as a means to interpret findings on community service involvement; and (3) to use interpretations of research to discuss the ideal of community and the role of higher education and community service in advancing community.

Data for this paper were gathered over a 6-year period and included interviews, surveys, and observations of students participating in community service. Several themes emerged from reading this data and were member checked with the students. The themes relevant to the topic of identity exploration included making connections with the self, with community members, and with other volunteers. Students reported that they were rejuvenated by their interactions with other volunteers and that because they were connected to the community, they were able to put faces on the statistics and policy discussions they heard about poverty, homelessness, and the like. It also challenged them to confront stereotypes they had about people and face racism head-on.

Rhodes, C. (1999). *Psychosocial Changes in Student Development of College Sophomore Women Along Chickering's Seven Vectors with Service-Learning as an Institutional Effect*. Unpublished Dissertation, Peabody College, Vanderbilt University, Nashville, TN.

Methodology	Quantitative
Purpose	Outcomes
Sample	Students
Original Sample	61 (21 experimental)
Final Sample	17 experimental
Study Design	Pre/post; Quasi-experimental
Data Sources	Survey, self report; Attitude measurement scales
Outcome Variables	Career development; Interpersonal skills

This dissertation project focused on a service-learning program required of all students in their sophomore year at a small liberal arts college for women. The research had two objectives: 1) to illuminate how community service with reflection impacts psychosocial development; and 2) to determine if there were specific facets of service-learning that had a greater impact on student development than others.

All sophomores at the college were invited to participate in the study, and 61 agreed to take part. Of these 61 students, 21 were taking the required service-learning course in the Fall semester and comprised the experimental group. The other 40 students were taking the course in the Spring and formed the control group. The service-learning course required 30 hours of community service and weekly reflection sessions. Service sites ranged from homeless shelters, to the Red Cross, to Big Brothers/Big Sisters.

To answer the research questions, the control and treatment groups completed the Student Developmental Task and Lifestyles Inventory (SDTLI) at the beginning of the semester and the treatment group also completed it at the end of the semester. This measure was developed by Winston, Miller and Prince to assess whether college students have achieved developmental tasks typical to college students. These tasks and subtasks involve establishing and clarifying purpose, and developing mature interpersonal relationships. Students in the experimental group also completed a service-learning post survey developed by Eyler and Giles. This determined levels of placement quality, discussion, writing, application, community voice and diversity, learning, personal growth, interpersonal skills, specific skills, and social commitment. Data on previous community service, academic interests, and parental information were also collected.

Analysis did not reveal significant differences from pre- to posttest on any of the SDTLI subscales. Analysis did reveal that past community service did have a significant effect on SDTLI scores (and 85% of the students in both groups had performed community service in the past). Specific aspects of the service-learning experience were also examined to see if they were related to student development, and it was found that the personal growth and interpersonal skills aspects of the course were positively related to the career planning posttest score. However, three aspects of the course negatively predicted posttest scores, e.g. 1) specific skill development was negatively related to developing peer relationships, 2) the relevance of the service to class work was negatively related to tolerance, and 3) community voice in service was negatively related to emotional autonomy.

Rice, K. L., & Brown, J. R. (1998). Transforming Educational Curriculum and Service Learning. *Journal of Experiential Education*, 21(3), 140-146.

Methodology	Quantitative; Qualitative
Purpose	Outcomes
Sample	Students
Original Sample	61 (21 experimental)
Final Sample	17 experimental
Study Design	Pre/post
Data Sources	Attitude measurement scale; Course evaluations

Outcome Variables Civic participation
--

This research project measured changes in students' civic participation and social attitudes due to service-learning. Undergraduates at California State University at Monterey Bay enrolled in a required service-learning course completed the Student Service Assessment designed by Furco and his colleagues. In addition, responses to an open-ended question on course evaluations were coded for themes. These questions were either, what are the most useful concepts, skills, and abilities you learned in this course and why, or what was the most important thing you learned in this course. Results from the Student Service Assessment found that students scored significantly higher on the civic participation scale after engaging in the service-learning course and understood the communities they served more thoroughly. Four themes emerged from qualitative analysis of course evaluations: interactive skills; cognitive skills; content; and personal growth. Within these themes, it can be seen that over the course of the service-learning experience, students became advocates of community service, became personally and emotionally engaged, learned about their positions of privilege in society, and recognized the assumptions that they brought to the class.

Rockquemore, K. A., & Schaffer, R. H. (2000). Toward a Theory of Engagement: A Cognitive Mapping of Service-Learning Experiences. *Michigan Journal of Community Service Learning*, 7, 14-25.

Methodology	Qualitative; Quantitative
Purpose	Process; Outcomes
Sample	Students
Original Sample	NR
Final Sample	120 (50 for qualitative)
Study Design	Case Study; Pre/post
Data Sources	Journals; Attitude measurement scale
Outcome Variables	Attitude about equality of opportunity; Student efficacy

This research project used grounded theory to analyze the reflective journals of 50 students enrolled in service-learning courses at a West Coast university enrolling affluent students. Students engaged in service activities in: food delivery; residential geriatric care; youth mentoring; public education; juvenile detention; free health services; free legal aid; homeless shelters; and after-school mentoring. The journal data showed that students went through three stages in the service-learning process: shock (at encountering poverty), normalization (adapting to the new surroundings), and engagement (seeking answers to why clients were in poverty and needed services).

In addition to the analysis of journals, all students took a survey that measured changes in attitude about equality of opportunity in the US and students' abilities to impact social problems. Though the researchers did not perform significance tests on these data, there was substantial positive increases over the semester in these attitudes.

Roose, D., Daphne, J., Miller, A. G., Norris, W., Peacock, R., White, C., & White, G. (1997). *Black Student Retention Study: Oberlin College*. Oberlin College.

Methodology	Quantitative
Purpose	Description
Sample	Students
Original Sample	305
Final Sample	170 (48%)
Study Design	One shot
Data Sources	Survey, self report; Interviews

This study examined 15 variables to see which ones were associated with retention, such as involvement in community service, changing majors, and summer employment. The data for this study were interviews conducted by telephone with African American students from 1987-1991 (final n = 170). For African-American students who had attended Oberlin, involvement in community service was the factor most strongly correlated with graduation in the entire study.

Rosenbaum, V. M. (1997). Understanding College Age Volunteers' Behavior. *Unpublished Dissertation, LeHigh University.*

Methodology	Quantitative
Purpose	Description
Sample	Students
Original Sample	302
Final Sample	181 (70%)
Study Design	One shot
Data Sources	Survey, self report

This dissertation explored motives for volunteering and the relationship between motives and expectations for actual volunteer experiences. Specifically, the research questions this study attacked were: who volunteers, why do they volunteer, and what do they gain from volunteering? To answer these questions, students from five sociology courses were given a chance to perform 40 hours of community service and write an essay about this service during the semester in place of writing a paper. Of the 1058 students across three semesters, 21.5% volunteered, and 17% (n = 181) successfully completed the requirements. A control group of students who did not volunteer was also examined.

The essays service-learning students wrote were guided by two general directions: describe your expectations about volunteering, and discuss why you volunteered. From these essays, six categories of motives for volunteering were identified and coded for: self-satisfaction; self-improvement/learning; social motivation; humanitarian/altruistic; pragmatic; and a functional category for negative statements.

A personality instrument was also administered that identified the following personality factors: warmth, reasoning, liveliness, socially bold, sensitivity, abstractness, and apprehension. Results included the facts that females were significantly more likely to volunteer than males, and that

male volunteers were significantly more warm than male controls. Students who volunteered also had significantly higher GPAs than those who did not volunteer. Many student volunteers were motivated by the intrinsic reward of self-satisfaction or by an extrinsic reward, grades. Other volunteers cited altruistic reasons for volunteering. The only significant personality factor differences between volunteers and non-volunteers was that the former considered themselves more religious than the control group and had significantly higher mean scores on the liveliness factor.

Saunders, M. D. (1998). The Service Learner as Researcher: A Case Study. *Journal on Excellence in College Teaching*, 9(2), 55-67.

Methodology	Qualitative
Purpose	Description
Sample	Students
Original Sample	9
Final Sample	9
Study Design	Case study
Data Sources	Reports

This case study describes one college-faculty member's research project based on the experiences of nine honors students involved in service-learning with children's organizations. Students served as participant-observers at an international conference on children's issues and interviewed delegates to the summit. Their field reports yielded a solid profile of healthful environments for children worldwide. Students felt their service-learning experience had contributed significantly to their ability to perform this research.

Schmidt, B. C. (2000). The Service Sojourn: Conceptualizing the College Student Volunteer Experience. *Unpublished Dissertation*, University of Utah.

Methodology	Qualitative
Purpose	Process
Sample	Students
Original Sample	NR
Final Sample	16
Study Design	Case study
Data Sources	Interviews

This qualitative study studied the experiences of 16 students from the University of Utah who participated in community service. These students were self-selecting and were performing service through a volunteer center at school.

The following questions informed the ethnographic interviews. What common events occurred? How did students make sense of their experience? What, really, did students learn?

Transcripts of 54 ethnographic interviews that focused on student descriptions of their service experience were coded using the QSR NUD*IST software program. Themes that emerged from this

analysis included leaving familiar surroundings, the shock of a new environment, and efforts to adjust. The interpretive metaphor of a sojourn was used to interpret and discuss students' experience.

Student interviewees reported several positive outcomes from their community service experiences, including gaining a better understanding of others, a matured sense of identity, a more complex worldview, and an enhanced sense of personal efficacy.

Schmiede, A. (1995). Using Focus Groups in Service-Learning: Implications For Practice and Research. *Michigan Journal of Community Service Learning, 2, 63-71.*

Methodology	Quantitative; Qualitative
Purpose	Description
Sample	Students
Original Sample	NR
Final Sample	15
Study Design	Pre/post; Case study
Data Sources	Survey, self report; Focus groups; Interviews

This study examined the value of focus groups as a methodology for service-learning research and as a means to encourage reflection. Ten students from a freshman community service laboratory were divided into two focus groups before their involvement in community service. Eight students in the upper-level internship class also participated as a focus group, but three of their responses were excluded from analysis. All students from both classes also responded to a pre- and post-survey as a part of the FIPSE study "Comparing Models of Service". Both focus group data and the open-ended questions on the FIPSE survey were analyzed using an open-ended coding scheme to establish the complexity of thinking involved in participants' attempts to problem-solve.

According to moderators and analysts who examined written survey responses, compared to students who just responded to the survey, forty percent of participants in the focus groups solved problems at a higher level of complexity, twenty-seven percent of the focus group participants responded at the same level of complexity, and thirty-three percent of focus group students had lower complexity ratings. The author suggests that focus groups as a methodology may be more effective in gathering data about problem-solving than open-ended surveys.

Schmidt, M.E., Marks, J.L., & Derrico, L. (2004). What a difference mentoring makes: Service learning and engagement for college students. *Mentoring and Tutoring, 12(2), 205-217.*

Methodology	Qualitative, Quantitative
Sample	Students
Purpose	Outcomes
Original Sample	NR
Final Sample	20
Study Design	One Shot

Data Sources	Pre-mentoring survey, weekly logs, post-mentoring survey
Outcome Variables	Student engagement, valued relationships, learning about self and mentees

This study examines the outcomes for mentors in a voluntary program called The Learning Connection (TLC). Offered through the Community Services Office at Moravian College, the program pairs students with low-performing 4th graders from low-income, single-parent or blended families who show potential for learning and could benefit from the program. Mentors spend time with mentees once per week and on “Family Saturdays” once per month.

Data were gathered in a pre-mentoring survey with six open-ended questions designed to assess students’ level of experience with mentoring, their goals, hopes, and fears regarding the experience. Throughout the academic year, students kept weekly logs indicating their hours spent and activities with their mentees. They also rated their mentee’s level of withdrawal, openness, enjoyment, involvement, and cooperation. Finally, a post-mentoring survey consisted of 20 questions designed to assess mentors feelings about the experience. The first author and two research assistants performed content analyses on the pre-mentoring and post-mentoring surveys to identify themes for why mentors chose to mentor and what they got out of the experience. They compared and developed unanimous themes. Researchers used data from weekly logs to examine mentoring time and activities and performed of changes in the relationship based on mentor ratings (using analysis of variance).

Pre-mentoring surveys indicated that 55% of mentors hoped that mentoring would supplement their classroom learning (these were primarily elementary education or psychology majors). Overall, students indicated that they hoped to learn from the experience and create positive change in a child’s life. Quantitative analysis revealed that mentees exhibited significant increases in enjoyment and involvement in the first six months of mentoring. Mentors exhibited a corresponding significant decrease in anxiety over this time. Finally, post-mentoring surveys indicated that mentors learned about children, themselves, the importance of community work, and the value of relationships throughout the mentoring experience.

Schumann, W., Moxley, D.P., & Vanderwill, W. (2004) Integrating service and reflection in the professional development of pharmacy students. *American Journal of Pharmaceutical Education*, 68(2), 1-8.

Methodology	Qualitative
Sample	Students
Purpose	Outcomes
Original Sample	NR
Final Sample	50
Study Design	One Shot
Data Sources	Electronic journal, group reflection, summative paper, pre- and post-tests

Outcome Variables Attitudes toward the elderly, social responsibility

This study examined the outcomes of a service learning experience on students enrolled in an elective pharmacy course on community partnerships with elderly individuals. At the time of the study, the course had been offered during several semesters to a total of 50 students. Each semester, students spent the first half of the 15-week semester studying the aging process and gaining a background in the provision of pharmaceutical care elderly individuals. For the final 6-8 weeks of the semester, teams of 2 pharmacy students spent 2 hours each week visiting a resident of a local subsidized housing facility. The visits were termed “friendly visits” and did not include any pharmacy-oriented activities. Each team spent the entire semester visiting the same resident and residents ranged in age from 50-70 years old.

Students were required to keep an electronic journal in which they recorded the events that transpired during the visit and their feelings about those events. Students also participated in periodic group reflections in which they shared about their experience and answered other students’ questions about it. Students also completed a summative 10-page paper, integrating their experience with course materials. Finally, students completed a pre-test and post-test regarding their stereotypes and attitudes throughout the program. All data sources were content analyzed, and the quantitative results of the pre- and post-tests were not reported.

Results indicated that students felt that they had increased sensitivity to the struggles of aged individuals in coping with isolation, diminished health and poverty. Students indicated that they developed empathy and a professional commitment to social responsibility.

Shastri, A. (1999). *Investigating Content Knowledge Gains in Academic Service-Learning: A Quasi- Experimental Study in an Educational Psychology Course*. Paper presented at the Annual Meeting of the American Educational Research Association, Montreal, PQ Canada.

Methodology	Quantitative
Purpose	Outcomes
Sample	Students
Original Sample	NR
Final Sample	64
Study Design	Pre/post; Quasi-experimental
Data Sources	Grades; Class attendance
Outcome Variable	Final grade

This research was designed to measure content knowledge gains made by 64 students enrolled in two sections of undergraduate educational psychology course. One section was randomly designated the service-learning group, and the other the control group. Both sections were taught by the same instructor. The experimental group (n= 31) performed 20 hours of community service in sites dealing

with K-12 students and were required to keep triple-entry reflective journals and turn in a reflective paper. The control group (n=33) did library assignments designed to take similar time and effort.

When academic outcome measures were considered as total scores earned on quizzes, examinations, and written assignments, the results between the two groups were significant at the .05 probability level with a p-value of .013, with the service-learning group scoring higher. However, it is important to note that the difference between exam and quiz grades taken alone was not significant. In contrast, the grade differential on written assignments (graded by the researcher) was quite high when analyzed alone (p=0.001). Service-learning students also had much better attendance than the control group and had much lower ratings on the difficulty of the class as revealed in course evaluations.

Sledge, A. C., Shelburne, M., & Jones, R. (1993). *Affective Domain Objectives in Volunteer Courses for Postsecondary Teachers*. Paper presented at the Annual Meeting of the Mid-South Educational Research Association, New Orleans, LA.

Methodology	Quantitative; Qualitative
Purpose	Description
Sample	Students
Original Sample	NR
Final Sample	43
Study Design	One shot; Case study
Data Sources	Survey, self report; Journals; Documents

This paper discusses a program at Delta State University that included a course called “Volunteering in the Community.” This course required that students serve at a volunteer site for 30 to 48 hours per semester and attend weekly seminars covering such topics as socioeconomic aspects of the Delta region, the role of volunteers in helping agencies, social responsibility, and community resources. Students also kept journals reflecting on their experience and gave oral reports that required them to integrate their service experience with their lifelong goals and expectations.

Forty three students that completed the service-learning course were given a survey based on one developed at Brevard College. Over three hundred students that had completed less than the required 30 hours of service were not surveyed. Analysis of the survey indicated that: 1) the volunteer experience confirmed the choice of a major for approximately half the students and had no effect on 40 percent; 2) the most widely cited reasons for joining the volunteer program were a desire to help others, course credit, personal development, and career exploration; and 3) students reported improvements in self-confidence, the ability to work and learn independently, insight into their personal strengths and weaknesses, and a sense of personal achievement.

Smedick, W. D. (1996). *A Study of the Effect of a Volunteer Service Program at an Urban-Based Institution of Higher Education on the Current Level of Service Achieved by Alumni who had Participated in the Program*. Unpublished Dissertation, Morgan State University.

Methodology	Quantitative; Qualitative
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Purpose	Outcomes
Sample	Students (Alumni)
Original Sample	NR
Final Sample	231
Study Design	One shot
Data Sources	Survey, self report; Interviews
Outcome Variables	Level of service involvement

This study examined if students who participated in community service learning at one institution of higher education institution would continue to provide volunteer service as alumni. Two hundred thirty one alumni were chosen randomly as the survey sample. Seventy of these were service-learning participants and 157 were non-service-learning participants. Participation in service-learning during college (the independent variable) was expected to predict the level of service following graduation (the dependent variable).

To test this hypothesis, the "Volunteer Community Service Survey" was administered to the sample of alumni, and then a sub-sample of twenty alumni were interviewed as a follow up to the survey. Included in the analysis as control variables were gender, ethnicity, income level, and time elapsed since graduation. An ANOVA was performed to test the primary research question and its possible interaction with the income variable. Chi-Square Analyses of Independence were conducted to test the impact of the ethnicity, gender and time-elapsd-since graduation variables. Analysis of the survey revealed that, though not significant at the .05 level, there were several identifiable trends: 1) alumni who participated in service-learning were more service oriented than alumni who were non-participants; 2) females were more service oriented than males, and 3) African Americans were more service-oriented than Euro-Americans or Asian-Americans. One control variables was significant at the .05 level.

Alumni who had graduated 10 or more years previous to the study (time elapsed since graduation) were more service oriented than younger alumni. Income level had no effect on service orientation for alumni. Analysis from the 20 interviews performed indicated that participation in service-learning impacted career direction for alumni as well as fostering a value of life-long community service.

Smith, M. (1994). Community Service-Learning: Striking The Chord of Citizenship. *Michigan Journal of Community Service Learning*, 1, 37-43.

Methodology	Qualitative
Purpose	Process
Sample	Students; Community service administrators; Faculty; Institutions
Original Sample	NR
Final Sample	18 Students; 1 Community service administrator; 4 Faculty; Institution
Study Design	Case study
Data Sources	Interviews; Focus groups; Documents

This study examined how service-learning is incorporated into higher education settings. A pilot study was conducted by interviewing and holding focus groups with seven students from a mid-sized public

university. Each student had completed a service-learning course. Interestingly, none of these students mentioned that one effect of service-learning was increased civic participation or responsibility, or citizenship.

Then, a case study of an institution's community service learning program was conducted to identify intended student outcomes from service-learning participation among administrators (1), faculty members (4), community service administrators (1), and service-learning students (11). The following facts emerged from the individual and group interviews: the institutional administrator framed citizenship in a moral context, while two of the four faculty linked their intentions for service-learning participation to their religious backgrounds. One faculty member had not even considered service-learning as a way of promoting citizenship. Eleven students articulated deeply felt experiences when confronting social issues. However, they did not link their service-learning experience with citizenship.

These two studies indicate that if civic responsibility and participation were to be priorities in higher education, institutions should not assume that students connect their service participation with these goals.

Soukup, P. A. (1999). *Assessing Service-Learning in a Communication Curriculum*. Paper presented at the 85th Annual Meeting of the National Communication Association, Chicago, IL.

Methodology	Quantitative; Qualitative
Purpose	Description; Process
Sample	Students
Original Sample	NR
Final Sample	959
Study Design	One shot
Data Sources	Survey, self report

This study examined a communications curriculum utilizing service-learning to determine if the service-learning method was accomplishing its potential in six categories of service-learning objectives (intellectual, skills, affective development, moral and spiritual growth, community outcomes, and college or university outcomes). This secondary analysis was of narrative and survey data collected between 1990-1993 and 1995-1999 by Santa Clara University's Eastside Project. Only data from students participating in service-learning placements along with communication courses was analyzed, yielding differing sample sizes for narrative evaluation data (n=577), and survey data (n=382). Though the Eastside project used several survey instruments, this author uses two, each of which contains demographic questions and Likert-type scale items regarding student opinion about the placement, service-learning, social issues, and people at the placement.

A factor analysis of 1992-1993 survey data yielded five components: 1) the value of the experience and influence on students future behavior; 2) initial experience of placement; 3) connection to academics; 4) values of discussion groups; and 5) contact with clients. The 1995-1997 data (drawn from an instrument similar to the earlier surveys) yielded four components: 1) value of the experience

and influence on students future behavior 2) connection to academics; 3) awareness of community and social issues; and 4) the initial experience of the placement.

Results of an initial reading of the narrative evaluations yielded five themes: connecting with learning; student personal issues; empathy and relating to others; changes in outlook; and program feedback. Within these themes, the author noted that: 1) students make connections to their learning at different levels; 2) emotional growth from service-learning includes self-esteem, a sense of being appreciated, and a sense of satisfaction; 3) growth in empathy for those served and a recognition of personal differences and similarities often result from service-learning experiences; 4) a changed outlook on others, on education, and/or on life may result from the experience; and 5) areas that need improvement and elements of program failure are represented in student responses. The survey data reveal that: 1) the value of the service-learning experience and its influence on students' future behavior is noticeable; and 2) the connection with student academics is present though less prevalent than other assessment variables. In addition, applied courses such as journalism, reporting, and documentary video have more success with service-learning than do introductory courses.

Strage, A. (2000). Service-Learning: Enhancing Student Learning Outcomes in a College Level Lecture Course. *Michigan Journal of Community Service Learning*, 7, 5-13.

Methodology	Quantitative; Qualitative
Purpose	Outcomes
Sample	Students
Original Sample	NR
Final Sample	477
Study Design	One shot
Data Sources	Grades; Journals
Outcome Variables	Learning

The performance of 477 students over five semesters was examined to determine if learning outcomes in a large required introductory child development course would be impacted by adding a service-learning requirement. For the first three semesters, students did no service but spent 10-15 hours doing structured observations of children in a preschool, and wrote up the experience. For the last two semesters, students instead spent 20 hours working with children at a preschool, elementary, middle, or high school. A total of 166 students completed the service-learning semesters.

Grades on mid-terms and finals were compared between service-learning and non service-learning students using ANOVAs. The service-learning students scored significantly (4.9%) higher on course exams than non-service-learning students. However, the increase was not distributed evenly between the first through third exams. Service-learning students scored higher on the second midterm and the final, but their first mid-term scores did not differ from non-service-learning students. This gain in points is due to service-learning students scoring highly on the essay questions. There was no difference between the two groups on multiple choice questions. The final was a take-home, all essay exam. These results indicate that it took time for the positive academic effects of service-learning to manifest. Furthermore, the effects of service-learning on mastery of course material were best seen in student narratives.

The researcher did a second set of ANOVAs to determine if site placement (preschool, elementary, middle or high school) impacted student learning. Site placement did not have an effect on the first midterm or the final, but scores of the essay portion of the second midterm did vary significantly by placement, with students serving at middle/high schools performing more poorly than others.

Journal entries suggested that students were making links between course material and service, and that the reflection on these links increased through the semester.

Strage, A. (2004). Long-term academic benefits of service-learning: when and where do they manifest themselves? *College Student Journal*, 38(2), 257-262.

Methodology	Quantitative
Sample	Students
Purpose	Assess academic outcomes
Original Sample	NR
Final Sample	477
Study Design	One-shot
Data Sources	Academic Records
Outcome Variables	Academic effects

This follow-up study to Strage (2000, this issue) examines the academic effects of service learning throughout the college career of a group of 477 students who took an introductory child development course over 5 semesters. For the first three semesters, students did no service, instead spending 10-15 hours during the semester in structured observations, writing about the experience (n=311). The last two semesters consisted of 20 hours working with children at a school in a service capacity (n=166). Students in the service-learning section kept a structured journal and participate in in-class reflection.

Analysts conducted one-way ANOVAs to compare grades earned by the “service-learning” and the “non-service-learning” students in four types of classes. 1) upper division lecture/discussion courses (with little opportunity or call for hands-on experiences; 2) upper division lecture/activity courses (with some regular opportunity for hands-on activities and experiential learning; 3) upper division lab practicum courses (where hands-on work with children and youth make up at least half of the course requirements; and 4) the Senior Capstone course (where students are to review, integrate, and apply the core knowledge base of their academic major, but do not engage in hands-on activities as part of the course).

None of the results of this study reached statistical significance, with most P-values around .4 or higher. However, service-learning students outscored non-service-learning students overall by 4.8%, in type 2 courses by 4.1%, in type 3 courses by 2.4%, and in type 4 courses by 4.3%. Student scores in the lecture courses were nearly identical for service-learning and non-service-learning students.

Stukas, A.A., Snyder, M., & Clary, E. G. (1999). The Effects of "Mandatory Volunteerism" on Intentions to Volunteer. *Psychological Science*, 10(1), 59-64.

Methodology	Quantitative
Purpose	Outcomes
Sample	Students
Original Sample	NR
Final Sample	Study 1, 371; Study 2, 63
Study Design	Pre/post (both studies); Quasi-experimental (study 2)
Data Source	Survey, self-report
Outcome Variables	Intentions to volunteer; Perceptions of control

In the first study, business student majors from the University of St. Thomas were required to enroll in a service-learning course and completed initial and follow-up surveys (n = 371). The survey included measures of prior volunteerism, and the extent to which students were involved in service simply because it was a course requirement. Results demonstrated that students with more service experience before the course were more likely to intend to volunteer in the future than were students who began with less experience. Another result was that the effects of experience on students' intentions were moderated significantly by perceptions of external control to volunteer.

The second study was quasi-experimental in design and compared the situational effects of mandatory and free choices to volunteer, and how these effects were moderated by perception of external control to volunteer. Sixty-three students from the University of Minnesota signed up and completed extra credit for a psychology course by participating in a study of leisure time activities. Students were initially told that they could choose between two activities-entertainment and volunteering. Then, half of the participants were randomly selected and told that they were forced to volunteer, while the other half were induced to volunteer through persuasion. Results indicated that participants who were less inclined to volunteer at pretest expressed greater future intentions to volunteer when they completed service that was chosen. Students who were inclined to serve at pretest reported greater future intentions to volunteer at posttest than those who felt less inclined to serve, regardless of whether they subsequently performed "required" or "voluntary" service.

Subramony, M. V. (2000). The Relationship of Performance Feedback and Service-Learning. *Michigan Journal of Community Service Learning*, 7, 46-53.

Note Same data as dissertation, below

Methodology	Quantitative
Purpose	Outcomes
Sample	Students
Original Sample	NR
Final Sample	177
Study Design	Pre/post; Quasi-experimental
Data Sources	Survey, self report; Attitude measurement scales
Outcome Variables	Personal outcomes; Learning; Commitment

This study examined the impact of organizational feedback quality, client feedback quality, and students' dispositions toward feedback and 2 sets of individual-differences variables (goal orientation and feedback disposition) on key service-learning goals. The author put forth a path model predicting the relationship between performance feedback and student learning from community service experiences. This model hypothesized that students who were oriented toward learning, as opposed to performance, would seek more feedback, and that feedback seeking would predict learning. In addition, this goal orientation would predict student learning independent of feedback seeking. Finally, the combination of feedback seeking and amount of feedback was expected to positively impact learning.

In order to test these hypotheses, 177 students from ten service-learning classes at six colleges and universities completed four instruments (see next entry for a description of these instruments). Results were mixed and included the facts that client feedback quality predicted student learning positively and significantly, but organizational feedback quality did not predict student learning. Feedback seeking also failed to predict student learning. Those students who had a learning goal orientation did have a high tendency to seek feedback while those with a performance goal orientation tended not to seek feedback. Learning and performance goal orientation did not predict student learning.

Subramony, M. V. (1999). Two Studies of the Impact of Performance Feedback on Community Service Learning Among College Students. *Unpublished Dissertation*, Central Michigan University, Mount Pleasant.

Methodology	Quantitative
Purpose	Outcomes
Sample	Students
Original Sample	Study 1, 40; Study 2, NR
Final Sample	Study 1, 38 (95%); Study 2, 177
Study Design	Pre/post; Quasi-experimental
Data Sources	Survey, self report; Attitude measurement scales
Outcome Variables	Personal outcomes; Learning; Commitment

This project consisted of two studies designed to examine the effect that receiving feedback had on student learning. In the first study, students' access to frequent written performance feedback from agency supervisors was manipulated. Thirty-eight service-learning students enrolled in a human services class with a 60-hour service-learning component were randomly assigned to a performance feedback (experimental) condition and a no performance feedback (control) condition.

In order to measure learning, the Feedback Disposition Instrument (FDI--feedback seeking/avoiding behavior), the Goal Orientation Instrument (GOI--likelihood of seeking challenge), and the Student Learning from Community Service (SLCS--use of knowledge, skills taught in courses, likelihood of volunteering in future, feeling it is important to help those in need) were developed. In Study One these instruments were administered both before and after the semester-long intervention. Students in the experimental group did not show significant improvements in SLCS over those in the control condition.

However, those students who had a high tendency to seek feedback scored higher on the SLCS. In other words, they perceived that they had learned more than students with low scores on the Feedback

Disposition Instrument.

Study 2 examined the impact of organizational feedback quality, client feedback quality, student feedback seeking, and 2 sets of individual-differences variables (goal orientation and feedback disposition) on SLCS. One hundred seventy-seven students enrolled in ten service-learning classes (with differing numbers of service hours) at six colleges and universities completed the SCLS, FDI, GOI, and another instrument, the Performance Feedback Instrument (PFI--how much and what types of feedback were available). Client feedback quality predicted SCLS positively and significantly. As in Study One, those students who had a high tendency to seek feedback scored higher on the SLCS. Learning and performance goal orientation did not predict SLCS scores. A model of the relationship between performance feedback and service-learning is proposed and discussed.

Tarallo-Falk, J (1995). The Socialization of Medical Students in a Preventive Health Community Service Learning Experience. *Unpublished Dissertation, Harvard University.*

Methodology	Qualitative
Purpose	Process
Sample	Students (phase 1 and 2); Faculty (phase 2); Staff (phase 2)
Original Sample	27 Students (phase 1); 6 Students (Phase 2); NR Faculty and Staff (phase 2)
Final Sample	26 Students (96.2% for phase 1); 1 Faculty member; 2 Staff members
Study Design	Case study
Data Sources	Interviews; Focus groups; Course materials; Student papers; Records

This qualitative study examined the impact that service-learning plays in the socialization process of medical students. It explored the institutionalization of one medical school service-learning course at Dartmouth Medical School. This program, called Partners in Health Education, placed students in public schools to work with teachers on the delivery of health education and prevention programs.

Two research questions guided this study: What are medical students' perceptions of their experiences in the Partners in Health Education service-learning program, and how do medical students think that these experiences influence their perspectives on their role as doctors?

To answer these questions, multiple sources of data were collected in two different project phases. In Phase 1, 26 semi-structured interviews were conducted with second-year medical students who agreed to participate in the study. Six students were selected for re-interview in Phase 2, and one medical school faculty member and 2 administrative staff members were interviewed as well. Interviews were coded based upon theoretical concepts related to socialization, such as student culture and anticipatory socialization. Demographic data on the students were gathered, and document analyses were conducted on course materials, reports, and a grant application.

Findings were summarized in four areas regarding the research questions. First, because the students in this study had chosen to perform service, the view that preexisting values and promote service was supported. Most students were involved in service for three reasons: social action, personal well being, and education. A second finding was that many of the volunteering medical students struggled with

the institutionalization of service-learning as it moved from a student-led program to a program fully funded by the administration. They articulated concerns regarding service in the current curriculum, their desire to maintain influence over their own learning, a sense that service should be altruistic, and a frustration with the bureaucratization of service-learning. Third, many of the students had questions about the movement of the program to be fully institutionalized. These centered on issues of leadership, communication, decision-making, roles, and training design. Fourth, every student articulated the influence that the service-learning program might have on his or her future role as a physician. Students also saw the connection between their service-learning experience and their academic work. Overall, the study's results imply that service-learning promotes learning through application and extension of relevant knowledge, an awareness of the social context of people's lives, and the development of professional and communication skills.

Tartter, V.C. (1996). *City College Report to FIPSE*. New York: City College Research Foundation.

Methodology	Qualitative; Quantitative
Purpose	Outcomes
Sample	Students; Community
Original Sample	NR
Final Sample	57 Students; 150 Elementary school students
Study Design	One shot
Data Sources	Survey, self report; GPA; Journals
Outcome Variables	Student Learning; Career and academic choices

In a three-year study funded by FIPSE, 20 inner city undergraduates from New York City per year mentored and read to second graders, one-on-one, in a Harlem public school. The curriculum at City College supported students' service-learning experiences by acquainting them with the classics and teaching an understanding of literacy. The college also aimed to support interest in independent studies and a life-long interest in community service.

College students involved in the project indicated a greater commitment to community service, working with children, and/or education careers. The authors also reported that students involved in the first year improved their GPAs on average by .14. During the three-year study, the Harlem public school children's reading scores improved enough so that the school was removed from the city's critical list.

Based upon changes in GPA, writing, students' course selections, and indications of career choice, the researcher felt the program was a success.

Virginia Commonwealth University (1997). *Service-Learning at Virginia Commonwealth University*. State Council for Higher Education in Virginia.

Methodology	Quantitative
Purpose	Description

Sample	Students
Original Sample	255
Final Sample	166 (65%)
Study Design	One shot
Data Source	Survey, self-report

This study was inspired by earlier studies performed at Vanderbilt, the University of Utah, and Virginia Tech. For it, students from 2 classes at the Medical College of Virginia (MCV) and 128 students from the main campus of Virginia Commonwealth University (VCU) completed surveys at the end of one semester. In these surveys, students self-reported that through service-learning experiences: 1) they linked subject matter and the service experience (74%-VCU; 63%-MCV) and were able to apply things learned in class to real problems (77%- VCU; 76%-MCV) through the broad range of experiences they were exposed to; 2) they were better able to understand and appreciate the community and diverse populations (83 %-VCU; 92%-MCV); 3) they critically reflected on their personal values and on citizenship (72 %-VCU; 73%-MCV); 4) they were able to explore areas of study (71 %-VCU; 53%-MCV); and 5) they gained a belief that through their actions, they could make a difference (58 %-VCU; 66%-MCV).

Vogelgesang, L. J., and Astin, A. W. (2000). Comparing the Effects of Service-Learning and Community Service. *Michigan Journal of Community Service Learning*, 7, 25-34.

Methodology	Quantitative
Purpose	Description
Sample	Students
Original Sample	22,236
Final Sample	19,268 to 20,254
Study Design	Pre/post survey
Data Sources	Survey self-report
Outcome Variables	Behaviors; Values; Learning

The data for this study were collected as part of the Cooperative Institutional Research Program (CIRP), which is sponsored by the Higher Education Research Institute (HERI). The CIRP collects data annually from freshman at institutions around the country using the Student Information Form (SIF). The College Student Survey (CSS) is generally administered four years after a student enters college and provides longitudinal follow-up data. This study uses 1998 CSS data, and data from the SIF administered in 1994 (and other years, when applicable).

This study looked at two independent variables, generic community service, and coursed-based service and their effects on several variables. These included self reported: values and beliefs (commitment to increasing racial understanding, activism, and sense of efficacy); academic skills (GPA, growth in writing skills, and critical thinking skills; leadership aptitude (growth in interpersonal skills; leadership activities and leadership ability); and future plans (career choice and plans to engage in community service). Control variables included: pretest measures for most of the dependent variables; sex; high school volunteer work; tutoring; attending religious services; being a guest in a teacher's home; commitment to participating in community action programs; desire to make money; and self-rated

leadership ability.

The researchers used a method of blocked, stepwise linear regression analysis to study changes in each of the dependent variables. Students with data missing for the pre- or posttest were dropped from analysis, yielding different final sample sizes for each variable. Findings included the fact that all eleven dependent variables changed significantly when service-learning or community service was performed.

For some variables community service with no ties to coursework has a more positive impact than service-learning. Indeed, the self-efficacy and leadership outcomes would not show significant changes unless students were also participating in generic community service.

There are also some variables for which service-learning is a superior predictor of outcomes, including some affective measures (commitment to activism, and promoting racial understanding) and all three learning measures. Choosing a service related career is also impacted more positively by participating in service-learning than by performing generic community service.

Wade, R. C. & Yarborough, D. B. (1997). Community Service-Learning in Student Teaching: Toward the Development of an Active Citizenry. *Michigan Journal of Community Service Learning*, 4, 42-55.

Methodology	Quantitative; Qualitative
Purpose	Description; Process
Sample	Students
Original Sample	ND
Final Sample	255
Study Design	One shot; Case study
Data Source	Survey, self-report; Interviews

This study focused on three Midwest pre-service teacher-training programs and sought to study the impact of service-learning on students and cooperating teachers. Two hundred and fifty five members of these groups filled out a survey focused on these issues, and several interviews and case studies were conducted to understand how projects, relationships, and views of service-learning developed. Even though students generally enjoyed positive experiences in service-learning courses, the cooperating teachers were concerned with time and sometimes felt that service-learning affected classroom management negatively. Service-learning appeared to have a positive impact if: 1) student teachers were the project initiators; 2) student teachers showed strong leadership; and 3) cooperating teachers were willing to take the back seat.

Wade, R. C. & Yarbrough, D. B. (1996). Portfolios: A Tool for Reflective Thinking in Teacher Education. *Teaching and Teacher Education*, 12(1), 3-79.

Methodology	Quantitative; Qualitative
Purpose	Description; Process

Sample	Students
Original Sample	287
Final Sample	212 (74%)
Study Design	One shot; Case study
Data Source	Survey, self-report; Interviews; Essays

This article reports the results of an exploratory study that examined the efforts of 212 elementary education students to think reflectively via constructing portfolios based on their experiences in a community service learning program. Through interviews, essays, and survey data, the researchers found that the portfolio process facilitated reflective thinking in most, but not all, students.

The survey data indicated that approximately 35% of students "agreed" or "strongly agreed" that they felt frustrated in trying to represent their learning in the portfolio. Sixty-five percent "strongly agreed" that they were initially confused as to how to create a portfolio. Struggling with the portfolio process was also a theme that emerged in interviews. The authors recommended encouraging student ownership of portfolios and discussed the importance of balancing individual expression with structure to balance the open-ended nature of portfolios.

Wang, W. (2000). *Service Learning: Is it Good for You?* Paper presented at the Annual Meeting of the American Educational Research Association Conference Roundtable, New Orleans, LA.

Methodology	Qualitative
Purpose	Description
Sample	Students
Original Sample	4
Final Sample	4
Study Design	Case study
Data Sources	Journals; Reports; Observations

This study researched the relationship between elements of the service-learning pedagogy and several elements of student self-development. Four undergraduate students who participated in a career-based outreach program (CBOP) at the University of California, Los Angeles formed the researcher's focus of observation. She served as participant observer at each of the lecture and discussion sections of the service-learning class. She also collected students' weekly field experience journals, class exercises, and final reports at the end of the semester, and performed interviews with each of the subjects.

All data were coded for themes using the QSR-NUDIST program. Three self-development outcomes emerged from the data analysis: a commitment to loving people and loving the community; self-empowerment; and the quest to find purpose and meaning. Course elements that were influential in contributing toward self-development of undergraduates included the role of the professor, lecture content, discussions, reflective journals, and the field experience.

Weglarz, S. G. & Seybert, J.A. (2004). Participant perceptions of a community college service-learning program. *Community College Journal of Research and Practice*, 28, 123-132.

Methodology	Quantitative
Sample	Students, Faculty
Purpose	Evaluation, Outcomes
Original Sample	81 Faculty, 2,390 Students
Final Sample	28 Faculty (34.6%), 204 Students (8.5%)
Study Design	Survey
Data Sources	Survey responses
Outcome Variables	Awareness of community need, empathy, ability to relate to others, appreciation of differences in people, awareness of own impact on community.

Researchers at Johnson County Community College in Overland Park, KS surveyed all participants in the school's service-learning program from its inception in 1993-94 until 1999-2000. The survey solicited faculty and student responses on items regarding their level of satisfaction with various components of the service-learning program and areas for improvement. Some items were scored on a 5-point Likert scale, while others were simply yes or no responses regarding general satisfaction. Researchers calculated the mean scores for Likert items and percentages of students and faculty who agreed and disagreed with the various statements.

Seventy-five percent or more of students increased that the following five attributes "increased greatly" or "increased some" as a result of their service: "awareness of community needs," "appreciation of differences among people," "awareness of an individual's impact on the community," "empathy for others," and "ability to relate to others." In addition, seventy-five percent of students believe that service-learning is "somewhat important" or "very important" in the following areas: social/interpersonal development, personal development, career choice, development of civic responsibility, intellectual development, and academic development.

Weisskirch, R.S. (2003) Analyzing Student Journals in a Service-Learning Course. *Academic Exchange Quarterly*, 7, 141-146.

Methodology	Qualitative
Sample	College freshmen
Original Sample	36
Final Sample	36 (100%)
Study Design	One shot
Measures	Journals
Outcome Variables	Increase community awareness, improvement of personal skills, self-discovery, identity development, career development

This qualitative research analyzed journals of freshman students at California State University to determine whether or not learning took place in terms of service-learning outcomes. Students participating in this study enrolled in a year long Freshman Experience, which “strive to ease the transition for students, to foster a sense of belonging for the students, and to help the students succeed in university study.” Freshman Experience is coupled with service learning to bring forth such changes. This particular experience required students to meet twice a week and perform thirty hours of service learning. Students were required to turn in six journal entries, each consisting of two pages, during the course of the semester. Some entries addressed specific topics, as instructed by the professor, while others did not. 148 journal entries, written by 36 students from Spring 2000 and Spring 2001 classes, were analyzed.

The researcher who examined the journal utilized a grounded theory approach, which entails carefully looking at the data to create meaningful conceptualizations of what is being studied. Once concepts are formed, they are compared with each other to produce themes or categories, which are then used to come up with “propositions, which describe the conceptual relationships among the categories.” As journal entries were examined, categories of learning surfaced, thereby “forming the basis of the results (propositions).” Another researcher also reviewed the journals to ensure reliability of the coding.

While some students merely answered the prompted questions and others simply explained what they did, most students’ journal entries consisted of reflections describing learning that occurred as a result of their participation. Five themes emerged from these entries: learning about community, recognition of improvement of personal skills, self-discovery, identity development, and career development. The first three (intended) outcomes, learning about community, improvement of personal skills, and self-discovery, were quite obvious in the journal entries. However, the last two that focus on identity and career development were not anticipated. Thus, “service learning courses should incorporate developmental issues into curricula to maximize the experience for students.”

Western Washington University. (1994). *Community Service Activity by Western Washington Students: Its Extent, Nature, and Impact on the Surrounding Community*. Western Washington University, Bellingham, WA.

Methodology	Quantitative
Purpose	Description
Sample	Students
Original Sample	2219
Final Sample	1513 (68%)
Study Design	One shot
Data Source	Survey, self report

To document the extent and nature of community service activity both as part of course work and as non-course-based volunteer activities by Western Washington University students, a survey was sent to 2219 individuals who had received a bachelor's degree between Fall 1992 and Summer 1993. Over

1500 students replied. Almost half the respondents had participated in community service activities such as service-learning experiences that were course projects or internships, or had been involved in non-academic service projects. The most common service-learning activities were in social, health, and mental health services.

Based on this survey data, the University estimates that students at Western Washington engage in about 4,600 episodes of volunteer service during a typical school year, about half of those are internships, course-based projects, or non-academic service projects. Most variation in rates of course-based service-learning was explained by the different opportunities provided by different major fields. Graduates felt that their service-learning activities were extremely valuable in providing new awareness and personal self-improvement. The great majority of service-learning participants felt that the university should "definitely" or "probably" increase community service opportunities.

Whitbourne, S.K., Collins, K.J., & Skultely, K.M. (2001). Formative reflections on service-learning in a course on the psychology of aging. *Educational Gerontology, 27*, 105-115.

Methodology	Qualitative
Purpose	Outcomes
Sample	Students
Original Sample	NR
Final Sample	65
Study Design	
Data Sources	Open-ended student evaluations
Outcome Variables	Effectiveness of service-learning

This article portrays the outcomes of providing and option for service-learning in a psychology on aging lecture course. Data was collected from students that chose service-learning over a two-year period. The first semester, 28 of 155 students selected the service-learning option; the second year 37 of 149 chose to participate. Each student that participated had to complete 30 hours of community service-learning, keep a journal, write a 5-page summary paper, and complete a group presentation. Students volunteered at nursing homes, retirement communities, and the local community center. The service-learning students also met in weekly reflection groups led by undergraduate teaching assistants (TAs).

Based on student evaluations, the majority rated their service-learning experience highly. However, this study showed that students in groups led by undergraduate TAs unable to facilitate reflection well were not satisfied. Many site supervisors were very flexible. Although some students appreciated the independence, some would have liked more guidance. Student comments showed that in order for it to be a successful and rewarding experience, students must be self-motivated and relatively mature. The majority of students acknowledged that they thought participation in the service-learning project related well to the course. Students involved in service-learning were also able to provide the rest of the class with a sense of what it's like to work with older adults. Some

site supervisors noted that it would be helpful for the students to have more knowledge about specific issues and what to expect before their service-learning experience.

Williams, N.R. & Reeves, P.M. MSW students go to burn camp: Exploring social work values through service-learning. *Social Work Education* ,23(4), 383-398.

Methodology	Qualitative
Sample	Students
Purpose	Outcomes
Original Sample	22
Final Sample	21
Study Design	One-shot
Data Sources	Journals, transcripts of focus groups, and written course evaluations
Outcome Variables	Student learning about self, professional identity

The authors examined the impact of a 7-day service experience at a burn camp on the learning and professional development of first-year Masters of Social Work (MSW) students. The service activity took place on site at a state park approximately 45 miles from campus. Prior to the camp, all 22 students participated in a day of pre-orientation run by camp staff. Students were assigned to roles ranging from camp counselor to kitchen worker and photographer. Students had numerous opportunities to interact with the children both formally and informally and met three times throughout the week in groups depending on their job assignments. Each session lasted approximately 90 minutes and consisted of reflection and time to share observations and concerns. Twenty-one of the original students remained at the camp the entire week. A post-camp de-briefing session was held 10 days after the conclusion of the service.

Data were collected from student journals in which students recorded their impressions of the experience, focus group transcripts from the post-camp de-briefing session, and course evaluation consisting of open ended questions. The course instructor/principal investigator and a graduate research assistant analyzed all qualitative data within and across transcripts using the constant comparative method to discern key themes. The findings were then shared with the second researcher and cross-checked with students to ensure that the themes “rang true” with all audiences.

Students expressed that the experience had allowed them to learn about themselves including their ability to confront new challenges, find one’s place in a group, and discover their own strengths and abilities. Students also noted that they had the opportunity to apply social work concepts and define their social work identity. These things occurred through a heightened sense of community identity, using the “strengths based” approach to social work, and gaining the ability to examine the various roles of the social worker.

Wolff, M., Young, S. & Maurana, C. (2001). A senior elective: Promoting health in underserved communities. *Family Medicine*, 33, 732-733.

Methodology	Qualitative
Purpose	Outcomes
Sample	Students
Original Sample	NR
Final Sample	6
Study Design	One shot
Data Sources	Student questionnaire
Outcome Variables	Understanding

A fourth-year service-learning elective was developed to teach medical students about the social, economic and cultural factors that affect health and health-seeking behavior. The course teaches medical students about the unique strengths of and challenges facing, urban underserved communities. During the 1-month service-learning elective, students (1) work with public housing residents to jointly assess community need and develop an intervention to address the identified need or (2) select from a list of programs currently being developed or functioning in public housing. Six students participated in the elective. At the end of the class, students completed ten reflective questions.

Based on data from the reflection questions, several themes emerged throughout the learning experience. One hundred percent had a new and/or increased awareness of low literacy and its impact. The questionnaire found that 83% gained an understanding that patients' lack of adherence to treatment regimens can be due to a lack of instruction comprehension. Answers revealed that 83% found assumptions they had were wrong. All participants were able to identify the difficulty of maintaining health and seeking healthcare. Each medical student also saw that there are strengths in all communities. Overall, students reported increased understanding, new knowledge, breakdown of stereotypes, and an increased desire to take part in preventive health and education.

Zawacki, K. G. (1997). Personal and Family Factors related to Service Learning in an Undergraduate Course on Diversity. *Unpublished Dissertation*, Michigan State University.

Methodology	Qualitative; Quantitative
Purpose	Process; Description
Sample	Students
Original Sample	393
Final Sample	110 (27.9%)
Study Design	One shot
Data Sources	Focus groups; Survey, self report; Extended Objective Measure of Ego Identity Status 2; Inventory of Parent and Peer Attachment

This study explored the significance of selected family and personal factors of students engaged in community service as part of an undergraduate course on U.S. diversity. Three groups of students

were identified: Group 1, Service Learning related to course (n=31); Group 2, no service (N=39); and Group 3 (n=40), prior service not related to course. For the survey analysis, independent variables were service and prior service, and dependent variables were global identity, and parent and peer attachment.

Students were surveyed at the end of the course and then two years later to see if there was change over time. Comparisons between groups were also made. Focus groups were used to investigate the relevance and contexts of family and identity issues.

Survey results indicate significant differences between the groups' rate of responses, thus students who volunteered were more likely to cooperate in the study. In addition, female students were significantly more likely to volunteer, as were students whose mothers had a college degree or higher. Analyses indicated significant growth over a two year period for community service participants in the ideological scale of the Extended Objective Measure of Ego Identity Status II (EOMIS-2), but no differences on the interpersonal subscale. A surprising finding was that there was significantly more variance in the attachment-to-parents measures for students with community service experience, perhaps suggesting that resilient (and other) students participate in community service.

Bibliography Format Guide

Table Format- Each entry is accompanied by a table displaying relevant data of the study. In order to consistently display the data, please use the following guidelines to construct the table.

- Bold the categories of data (no semi-colon required) ex: Methodology, Purpose, etc.
- Tab the corresponding data 4 times from the initial tab/or twice from the categories of data
- Highlight entire categories/sets of data and click 'Format' in Microsoft Word Toolbar
- By scrolling down and selecting 'Borders and Shading', one can choose to 'Show Toolbar' to simplify the formatting process
- While text is still highlighted and the 'Tables and Borders' toolbar is now displayed, click the 'outside border' toolbar option in order to frame the table data
- Still using the 'Tables and Borders' toolbar, click the 'Shading Color' option (looks like a paint can) that provides the option of shading the area-(Gray-10%)

Table Format Example:

Categories of data: **Corresponding data:**

Methodology	Quantitative
Purpose	Description
Sample	Students
Original Sample	2219
Final Sample	1513 (68%)
Study Design	One shot
Data Source	Survey, self report

In order to consistently format the Bibliography, please use the following criteria regarding:

Spacing

- Two lines between each bibliography entry
- One line between entry paragraphs
- One line between bibliography listing (title, author, etc.) and data table
- One line between bibliography table and synopsis

Bold

- Bibliography listing (title, author)
- Categories of data (no semi-colon required) ex: Methodology, Purpose, etc.

Tab

- Once following first line of bibliography listing
- No initial tab required for each paragraph of bibliography synopsis

Capitalize

- Categories of data and corresponding data

