

IS SERVICE-LEARNING EFFECTIVE?: A LOOK AT CURRENT RESEARCH

Clayton A. Hurd

Colorado State University

June 2006

Please do not quote without permission of the author

Abstract

The growth of service-learning in higher education is related to the way it both helps students achieve personal and academic goals and serves broader institutional goals of civic engagement for students and outreach to communities (Campus Compact 2000). This article looks closely at current research assessing the impact of academic service-learning in such areas as enhanced academic learning, instructional effectiveness, civic responsibility, appreciation of diversity, and student retention. Research has demonstrated that courses incorporating service learning components generally provide greater learning benefits than those that do not, including a deeper understanding of course material, a better understanding of the complex problems people face, and an ability to apply course material to new situations and real world problems. Research also suggests that faculty integration of service-learning pedagogy and practice enhances the achievement of curricular goals of the course, facilitates deeper faculty-student connections and better understanding of student learning styles, provides more meaningful engagement with and commitment to teaching, and promotes a greater sense of connection to other faculty and the institution. With regard to student retention, emerging research highlights the ways in which service-learning classes promote academic (cognitive) and social (affective) integration and facilitate the development of meaningful connections between students, faculty, and community members in ways that allow for diversity and encourage retention.

DEFINING SERVICE LEARNING

Service-learning is a pedagogical practice that integrates service and academic learning to promote increased understanding of course content while helping students develop knowledge, skills, and cognitive capacities to deal effectively with the complex social issues and problems. It is an approach that emphasizes reflection and field-based learning as a way to engage the learner personally with the curriculum. As pedagogy, service learning emphasizes *meaningful* student learning through applied, active, project-based learning that draws on multiple knowledge sources (academic, student knowledge and experience, and community knowledge) and provides students with ample opportunities for ethical and critical reflection and practice. By confronting issues and problems in complex natural contexts, service learning courses help students develop a deeper understanding of subject matter, a practical knowledge of community decision making processes, and strategies for transferring knowledge and problem solving skills to new situations. Effective service-learning classes are those that use service and civic engagement to *integrate* and *enhance* academic learning, not to take the place of it. Service-learning courses, when thoughtfully designed, combine content-driven, outcomes-based commitments with ample opportunity for learning and knowledge to grow from students' service experiences.

The growth of service-learning in higher education is related to the way it both helps students achieve personal and academic goals and serves broader institutional goals of civic engagement for students and outreach to communities (Campus Compact 2000). The increasing status of service-learning as a legitimate and valued pedagogy is related, in large part, to shifting understandings about the nature of learning as a social and dialogical process. A growing body of scholarship from disciplines and traditions of thought as diverse as social psychology (Vygotsky 1978), cultural anthropology (Lave 1988; Lave and Wenger 1991), sociolinguistic theory (Volosinov 1986/1929; Wells 2001), and the cognitive sciences (Steinke and Duresh 1999; Eyler 2000) have demonstrated that “learning” is not a simple process of knowledge transmission from teacher to students but rather a *multidimensional social practice* where learning is supported by forms of apprenticeship (that is, relationships with others who have various kinds of expertise) and participation in specific, on-going social activities. In other words, students achieve academic mastery not simply by acquiring a particular body of knowledge they can recall on demand, but by developing a personal understanding of information through a process of interpersonal co-construction and problem-solving that depends on relations between themselves, university faculty and staff, their peers, and other educational partners.

It can be said that service-learning helps students develop not only as “traditional experts” but “expert learners” as well. Higher education has long been concerned with producing “traditional experts” – that is, people who have mastery of a body of knowledge and know answers to important questions in their disciplinary field. The contribution of service-learning pedagogy and practice is to also develop students as “expert learners,” that is, as people who are able to approach new situations flexibly, are skilled at acquiring new knowledge quickly and efficiently, and are able to learn throughout their lifetimes (Singham 2005). It is clear that helping students develop these kinds of “socially-responsive” intellectual skills is essential in a 21st century context that requires adaptability, sophisticated knowledge, problem-solving capacities, and life-long learning skills.

Unfortunately, though, most college students enter and leave college without the capacity and critical thinking abilities to be effective problem solvers (King 1992). Problem-solving draws on the capacity to recognize, frame, and address a problem and involves a wide range of skills and knowledge. For example, the ability to analyze what are called “ill-structured” problems (that is, problems that are complex and open-ended with no easy solutions) and to make warranted judgments about often-conflicting information in the context of uncertainty takes a fairly advanced level of cognitive development that most college students do not possess. Yet the processes that lead to cognitive development of this kind are very similar to those associated with well-designed service-learning experiences. Service-learning activities help students to reflect on complex problems and bring their experiences to bear on these puzzles, helping them move toward the ability to make well-reasoned decisions in the face of doubt.

Service-learning, by engaging students in rich problem-solving and experiential settings, allows students to construct and refine complex knowledge structures from which they are better equipped to understand complex social problems, apply what they have learned to new situations, and to develop the critical thinking abilities to make adequate judgments about the information they receive. At the same time, service-learning experiences often challenge students’ assumptions about particular problems and community issues they face, and reflection on such “cognitive dissonance” is a way in which individuals develop the capacity to understand and resolve complexity. Structured and continuous reflection - the cornerstone of effective service-learning pedagogy - is the key mechanism for stimulating this kind of cognitive growth.

THE IMPACT OF SERVICE-LEARNING ON ENHANCED ACADEMIC LEARNING

Research has demonstrated that courses incorporating service learning components generally provide greater learning benefits than those that do not, including a deeper understanding of course material, a better understanding of the complex problems people face, and an ability to apply course

material to new situations and real world problems. Service-learning experiences have also been shown to enhance students' creativity, as they often require students to apply knowledge to novel situations in settings that have few resources.

IMPACT OF SERVICE-LEARNING ON ENHANCED ACADEMIC LEARNING

<u>Service Learning Leads To:</u>	<u>Evidence in Research</u>
Deeper Understanding of Course Material	Mckenna and Rizzo 1999 Eyler and Giles 1999 Balazadeh 1996 Markus et al. 1993
Enhanced Ability to Apply Course Materials to New Situations and Real World Problems	Rasmussen and Skinner 1997 William, Youngflesh, and Bagg 1997 Eyler and Giles 1999 Markus, Howard, and King 1993
Deeper Understanding of Causes of, and Solutions to, Complex Issues and Social Problems	Batchelder and Root 1994 Boss 1994 Eyler and Giles 1999 Eyler and Halteman 1981 Barron et al. 1998 Bransford and Vye 1989 Bransford and Schwartz 2000 Mabry 1998
Growth in Writing and Critical Thinking Skills Over Students' College Career	Astin, Vogelgesand, Ikeda, and Yee 2000
Higher Grades on Essay Tests, But Not Necessarily on Multiple Choice Questions	Kendrick 1996 Strange 2000
Positive Impact on Complexity of Problem Analysis, Identification of Locus of Problem or Solution, Use of Information to Support Arguments, Creation of Practical Strategies for Community Action, Cognitive Moral Development and Critical Thinking	Batchelder and Root 1994 Bhaerman et al. 1998 Boss 1994 Eyler and Halteman 1981
Gains in Basic Thinking Processes Like Problem-Solving, Open-Mindedness, and Critical Thinking	Conrad and Hedin 1991
Enhancement of Creativity as Students Apply Knowledge to Novel Situations in Settings that Have Few Resources	Osborne, Hammerich, and Hensley 1998 Steinke, Fitch, Johnson and Walderstein (in press)
Positive Impact on Cognitive Moral Development Which is Related to Complexity of Thinking about Social Problems	Boss 1994 Eyler and Giles 1991; 2001

When grades on *standardized tests* have been used to measure student learning, the relative benefits of service-learning courses are mixed. Some studies claim no significant difference in grades while others show that students earn higher grades from their service-learning courses. However, it should be noted that even if grades on standardized tests are minimally affected, service-learning makes significant contributions to *qualitative* differences in the understanding of academic material, including a greater depth of understanding, increased analytical skills, and a greater ability to apply what is learned. This makes some sense of the evidence that service-learning students do better on essay tests but not necessarily on multiple choice questions (Kendrick 1996; Strange 2000).

IMPACT OF SERVICE LEARNING ON DIVERSITY AND CIVIC LEARNING

Service learning has long been associated with important civic learning outcomes like enhancing students' engagement with the community and developing their sense of civic responsibility. In addition, students participating in service-learning courses report a greater understanding of social problems (Austin and Sax 1998; Blyth, Saito, and Berkas 1997), greater knowledge and acceptance of diverse cultures and races (Austin and Sax 1998; McKenna and Rizzo 1999), a greater ability to get along with people of different backgrounds (Austin and Sax; McKenna and Rizzo), and increased awareness of their own biases (Rice and Brown 1998; Vadeboncoeur, Rahm, and Aquilera 1996). While acquiring this important civic learning, student also provide meaningful outreach to people and organizations in need, a service generally valued by community partners (Driscoll, Holland, Gelmon and Kerrigan 1996; Gray et al. 1998; Nicro and Wortham 1998).

Service-learning experiences often provide students with an opportunity to gain knowledge about the larger community, especially those across lines of class, racial, ethnic, religious, and generational difference, and to learn about social issues that are often not adequately covered by the national media. By moving outside of themselves and encountering others in the community, students can come to a greater appreciation of the strengths and great capacities (assets) contained in the diverse groups and people that make up their community, their state, and their nation. In their community service work, students often experience "encounters with strangers" (Radest 1993) in which they face "alien" situations and "shocks of awareness" that lead to increased self-awareness. These "shocks of awareness" can also increase students' need to confront their notions of otherness and construct more complex and multiplicitous notions of cultural diversity (Rhoads 2003; 1997). Students who are allowed to explore different social worlds come to see the sophisticated ways in which identities intersect and diverge and, at the same time, recognize common connections that many of them share with their peers and those they meet in the community. Social and cognitive development is facilitated as students move from comfort zones to contact zones and become "more comfortable with that which is different and more sophisticated in locating that which is similar" (Rhodes 2002). In this way, service-learning has an important role to play in helping students to develop complex selves capable of negotiating diverse cultural differences and enhancing their capacity to work with others, who often face vastly different circumstances, in efforts to achieve common purposes.

In a global democracy, higher education must give serious thought to structuring student learning and development in such a way to promote cross-cultural understanding and civic-mindedness. In strong democracies, people have to be able to listen to each other, to understand the places and interests of others in the community, and to achieve compromises and solve problems when conflicts occur. These are the kinds of skills students can successfully develop and enhance through their service work and through the critical classroom reflection activities that are central to effective service-learning experiences.

IMPACT OF SERVICE-LEARNING ON STUDENT RETENTION

<u>SERVICE LEARNING....</u>	<u>EVIDENCE IN RESEARCH</u>
Has A Positive Influence on Persistence in College	Bringle et al. 2002 Gallini and Moely 2003
Enhances Students Engagement With and Commitment To School	Astin and Sax 1997
Is Positively Associated With Student Satisfaction in College	Astin and Sax 1998 Roose et al. 1997
Has Significant Impact on Students' Social and Emotional Health	Eyler and Giles 1996; 1999 Kendrick 1996 Ostrow 1995 Rhodes 1997
Leads to Faculty's Enhanced Understanding of Students, which Often Leads to Deeper Student-Faculty Connections	Pribbenow 2005
Improves Students Academic Motivation (Compared to Non Service-Learning Courses)	Cohen and Kinsey 1994
Has Positive Impact on Students' Personal Development, Including Confidence in Political and Social Skills and Building Relationships With Others	Eyler and Giles 1997; 1999 Kendrick 1996
Promotes Interpersonal, Community, and Academic Engagement	Eyler and Giles 1999 Bringle et al. 2002
Facilitates Meaningful Connections Between Students, Faculty, and Community that Result in Retention	Braxton, Sullivan, and Johnson 1997 Gallini and Moely 2003 Astin, Vogelesand et al. 2000 Eyler 2002
Provides Meaningful Connections in A Way that Provides for Diversity, Which is Also Linked to Retention	Eyler and Giles 1999
Provides Active Learning Techniques Such as Class Discussion and Higher Order Thinking Activities that are Positively Related to Student Retention	Braxton, Milem, and Sullivan 2000

Proponents of service-learning and student retention share a common concern for addressing the lack of “connectedness” in education and the failure to prepare students for life-long learning and participation. In fact, as Mundy and Eyler (2001) note, service learning seems a logical and necessary response to Tinto’s (1993) interactionalist model of student departure, which highlights the need to promote both students’ academic (cognitive) and social (affective) integration and to facilitate the development of meaningful connections between students, faculty, and community members that encourage retention.

In service learning classes, students receive “coaching” support from faculty, community partners, and peers as they navigate their service learning experiences, undertake worthwhile projects, and problem solve in a variety of settings. Service-learning is a particularly good fit because it provides these meaningful connections in ways that allow for diversity, which is also linked to retention (Eyler and Giles 1999).

Another strong link between the two is the centrality of active learning - a hallmark of both service-learning and student retention theory. A number of active learning techniques such as class discussions and higher order thinking activities have been positively related to student retention (Braxton, Milem, and Sullivan 2000). Good practice in service-learning promotes active learning, collaborative learning, and student involvement, all key strategies to assist students with both academic and social integration.

IMPACT OF SERVICE LEARNING ON TEACHING EFFECTIVENESS

Service-learning, as pedagogy, is distinct from traditional teaching in many ways, including the role of the student, the role of the instructor, and the kind of learning that is valued. Service-learning integration often asks faculty to rethink traditional pedagogical approaches, shifting from teacher-centered, lecture-based formats focused on information dissemination to synergistic classroom where responsibility for teaching and learning is shared by students and instructors (Howard 1998; 2003). Effective service learning courses tend to pursue models of active learning that promote inclusive student involvement and participation and place a strong emphasis on dialogue and deliberation as primary modes of teaching and learning. In curricular terms, service-learning courses include activities and resources that draw from and build upon students’ own experiences, creative ideas, and “funds of knowledge” to increase and diversify the intellectual resources available to all students and to bring to the surface assumptions, values, beliefs, and feelings that shape (and sometimes limit) students’ responses to new learning. Instructional approaches typically focus on active learning and include participatory lectures, full class and small group discussions, student-led panels and debates, and on-going opportunities for structured reflection that link students’ service experiences to central themes, concepts, and objectives of the course.

Given the methods mentioned above, it is clear that the effective integration of service learning into academic courses involves much greater time and effort in coordinating and structuring activities and class discussions, and much more attention to process than does a “traditional” classroom. Yet research demonstrates the benefits of such integration are significant, particularly in enhancing the achievement of the curricular goals of the course (Astin and Sax 1998; Cohen and Kinsey 1994, Eyler and Giles 1996; Grey et al. 1996; Kendricks 1996; Markus et al. 1993; Strange 2000.). In addition, research suggests that service-learning integration can lead to faculty members’ enhanced understanding of students, deeper faculty-student connections, a better sense of students’ learning styles, and insight into how students construct knowledge and experience the course (Pribbenow 2005). This is important because research on student learning outcomes has consistently shown that increased student-faculty interaction positively affects student learning (Austin 1993; Kuh et al. 1991; Pascarella 1980; Pascarella and Terenzini 1991).

Faculty integration of service-learning pedagogy and practice, as well as faculty association with the service-learning program, has also been shown to promote more meaningful engagement with and commitment to teaching and a greater sense of connection to other faculty and the institution (Pribbenow 2005). For some faculty, new knowledge of students and community-based experiences leads to changes in pedagogical practices, including more use of constructivist teaching and learning approaches and improved communication of theoretical concepts through the availability of community-based experiences (Pribbenow 2005).

Many faculty who chose to integrate service into their courses are cognizant of the positive impact that well-designed service-learning experiences can have on student learning outcomes. In fact, research suggests that faculty's efforts to incorporate service-learning are most often motivated by a desire to improve their teaching (Hammond 1994; Pribbenow 2005). Alternatively, it is not surprising to find that faculty with little awareness of service-learning, or with negative perceptions of it, are less likely to integrate it than faculty with awareness and positive perceptions (Mundy 2003). Therefore, it is important to develop strategies for increasing faculty knowledge and awareness of service-learning as a valuable educational philosophy, instructional pedagogy, and institutional program.

THE IMPORTANCE OF INSTRUCTIONAL SUPPORT FOR SERVICE-LEARNING

It is clear that "service learning" means quite different things to different people. For example, some courses will require a service component but make less of a tangible or explicit connection to course objectives and learning outcomes whereas others will intentionally and elaborately integrate learning from the community with learning in the classroom. The former is often a compromised interpretation of academic service learning and will not yield academic outcomes that quality service learning does.

While service-learning courses may offer students the opportunity to experience communities first-hand, they may provide too little guidance to help students understand the lessons to be learned from that experience. In fact, if done inadequately, service-learning may not only fail to connect students to public life, it may actually reinforce student stereotypes about people who are "different" and harden previously held beliefs. For example, badly-mediated community engagement in culturally and socio-economically diverse settings may lead students to individualize social issues and problems, de-emphasize structural components and causes, and reinforce views of community members as deficient (Eby 1998). It is in this sense, as John Dewey (1938) has noted, that the discipline of experience may be "miseducative." It is therefore important that students' community involvement be subject to clear direction and development.

Research highlights the importance of careful planning, preparation, and partnership in assuring successful outcomes of service-learning. Effective, well-designed programs are those that include strategies for real partnerships with communities, are academically integrated and include deep and substantive reflection, and have a plan for how to deepen students' civic learning. Some of the variables known to impact cognitive outcomes in service-learning courses are summarized in the following table:

**Characteristics Of Service-Learning Courses That
Predict Better Cognitive Outcomes**

CHARACTERISTICS OF INSTRUCTION	
Quality, frequency, and diversity of in-class reflection	Eyler and Giles 1999 Hepburn, Niemi, and Chapman 2000
CLEAR SPECIFICATION OF LEARNING GOALS	
Both process and content	Schank et al. 1999
CHOICE OF STRATEGIES FOR STUDENT PLACEMENTS	
Individual vs. "team" service projects	Mabry 1998
QUALITY OF SERVICE EXPERIENCE	
Variety and challenge of work	Eyler and Giles 1999

STUDENTS PERCEIVED CHOICE ABOUT SERVICE-LEARNING PROJECT	Steinke et al. in press
QUALITY OF ORIENTATION TO AND SUPERVISION AT THE SERVICE SITE	Eyler and Giles 1999 Howard 2001
INTENSITY AND DURATION OF COMMUNITY SERVICE COMPONENT	Mabry 1998
AMOUNT OF DIRECT CONTACT WITH CLIENTS	Knutson and Miller 2002 Mabry 1998

THE IMPORTANCE OF QUALITY REFLECTION

Reflection, as applied to service-learning, is perhaps best defined as “the intentional consideration of experience in light of particular learning objectives” (Hatcher and Bringle 1997: 153). Studies measuring quality of the service learning experience suggest that quality matters and that the quality which seems to matter most is the amount and type of reflection. Structured, intentional reflection activities build a bridge between concrete and abstract, connecting practice and theory, and can facilitate recognition of lessons in service experience that might not otherwise be acknowledged. Quality reflection activities help student integrate what they are bringing into the situation, what they are learning from the class portion of the course, and what they are gaining from their service experiences.

Research has demonstrated that reflective, compared to non-reflective, service-learning has a significant impact on development of intellectual components like knowledge, skills, and cognition. A recent study by Eyler (2002) shows that when students’ capacity for problem analysis were compared, only students in highly reflective courses showed significant progress in complexity of analysis, the tendency to frame the problem and solution in systematic ways rather than focusing on individual analyses, in coherence of a practical action strategy, and in cognitive development (Eyler and Giles 1999).

CONCLUSION

As an educational practice, service-learning fulfills the dual purpose of promoting outreach to communities and providing the means for distinctive undergraduate experiences. It does so by providing students access to diverse cultures through community involvement in a broad array of activities that extend learning, foster leadership skills, and promote civic responsibility.

List of References

- Astin, A.W., Vogelgesang, L.J., Ikeda, E.K., Yee, J.A. (2000). How service learning affects students. Los Angeles: University of California, Higher Education Research Institute.
- 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.
- Barron, B.J.S, Schwartz, D.L., Vye, N.J., Moore, A, Petrosino, A., Zech, L., Bransford, J.D. and the Cognition and Technology Group at Vanderbilt (1998). Doing with Understanding: Lesson from Research on Problem- and Project-based Learning. *The Journal of Learning Sciences*. 7(3&4), 271-311.
- 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, 341-356.

- Bhaerman, Robert et al. (1998). What are the purported benefits and results of service-learning, In *The Role of Service-learning in Educational Reform*. NC: Simon and Schuster Custom Publishing, pp. 37-49.
- Boss, J.A. (1994). The Effect of Community Service Work on the Moral Development of College Ethnic Students. *Journal of Moral Education*, 23(2), pp. 183-198.
- Bransford, J.D., Brown, A.L., Cocking, R.R., Donovan, M.S., Pellegrino, J.W. (Eds.). (2000). *How People Learn: Brain, Mind, Experience, and School*. (Expanded ed.). Washington, D.C.: National Academy Press.
- Bransford, J.D. and Schwartz, D.L. (2000). Rethinking Transfer: A Simple Proposal with Multiple Implications. In A. Iran-Nejad and P.D. Pearson (Eds.), *Review of Research in Education* (V. 24, pp. 61-101).
- Bransford, J.D. and Vye, N.J. (1989). A Perspective on Cognitive Research and its Implications for Instruction. In L. Resnick and L.E. Klopfer (eds.), *Toward the Thinking Curriculum: Current Cognitive Research* (pp. 173-205). Alexandria, VA: Association for Supervision and Curriculum Development.
- Braxton, J. , Sullivan A., Johnson, R. (1997). Appraising Tinto's Theory of College Student Departure. In J. Smart (ed.), *Higher Education: Handbook of Theory and Research*, Vol. XII., pp. 107-159.
- Braxton, J., Milem, J. and Sullivan, A. (2000). The Influence of Active Learning on the College Student Departure Process. *Journal of Higher Education*, 71(5), 569-590.
- Bringle, R.G., Hatcher, J.A., & Muthiah, R.N (2002, March). Service learning and retention in the first year. Paper presented at the American Association of Higher Education National Conference, Chicago, IL.
- Berson, J.S. and 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 for Higher Education, Miami, FL.
- Campus Compact (2000). Highlights and Trends in Student Service and Service-learning: Statistics from 1999 member and faculty surveys. Providence, RI.
- Cleary, Cindy and Delwin Benson (1998). The Service Integration Project: Institutionalizing University Service-learning. *The Journal of Experiential Education*, 21(3), pp. 124-129.
- Cohen, J. and Kinsey, D (1994). "Doing good" and Scholarship: A Service-learning Study. *Journalism Educator*, 48(4), pp. 4-14
- Conrad, D. and Hedin, D (1991). School-based Community Service: What We Know from Research and Theory. *Phi Delta Kappan*, 72, 743-749.
- Cruz, N.I. & Giles, D.E. (2000). Where's the Community In Service-Learning Research. *Michigan Journal of Community Service Learning*, Fall, pp. 28-34.
- Dewey, J. (1938). *Experience and Education*. New York: Collier Books.
- 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.
- Eyler, Janet
2002 "Reflection: Linking Service and Learning - Linking Students and Community." *Journal of Social Issues*, 58(3): 517-534.
2000 What do we most need to know about the impact of service-learning on student learning? *Michigan Journal of Community Service Learning*, (Special Issue), pp. 11-17.
1997 The Impact of Service-Learning on College Students. In *Michigan Journal of Community Service Learning*, Fall.
- Eyler, J & Giles, D.E.Jr. (2002) Beyond surveys: Using problem solving interviews to assess the impact of service-learning on understanding and critical thinking. In Billig, S. & Furco, A. *Service-Learning: The essence of the pedagogy*. Information Age Publishing, CT. 147-160.
- Eyler, J. & Giles, D.E. (1999). *Where's the learning in service-learning?* San Francisco: Jossey-Bass Publishers.
- Eyler, J. and Hacteman, B. (1981). The Impact of a Legislative Internship on Students' Political Skill and Sophistication. *Teaching Political Science*, 9, pp. 27-34.
- Gallini, Sarah and Barbara Moely (2003). Service-Learning and Engagement, Academic Challenge, and Retention. *Michigan Journal of Community Service Learning*, Fall, pp. 5-14.
- Gray, M, Ondaatje, E., Fricker, R & Geschwind, S. (2000). Assessing Service-Learning: The Benefits of Service-Learning for Students. *Change*, 3e2(2), pp. 30-41.
- Hammond, C. (1994). Integrating Service and Academic Study: Faculty Motivation and Satisfaction in Michigan Higher Education. *Michigan Journal of Community Service Learning*, 1(1), pp. 21-28.
- Hatcher, J.A. and Bringle, R.G. (1997). Reflection: Bridging the Gap Between Service and Learning. *College Teaching* 45(4), pp. 153-158.
- Hondagneu-Sotelo, P and Raskoff, S. (1994). Community-Service Learning: Promises and Problems. *Teaching Sociology*, 22, 248-254.
- Honnet, E.P., and Poulsen, S. (1989). *Principles of Good Practice in Combining Service and Learning*. Wingspread Special Report. Racine, WI: The Johnson Foundation.

- Howard, Jeffrey P. F. (1998) Academic service learning: A counter-normative pedagogy. In Robert A. Rhoads and Jeffrey P. F. Howard, eds. *Academic service learning: A pedagogy of action and reflection*. New Directions for Teaching and Learning, No. 73. San Francisco: Jossey Bass.
- Kendricks, J.R. (1996). Outcomes of service-learning in an introductory sociology course. *Michigan Journal of Community Service Learning*, 2, pp. 72-81.
- King, P. (1992). How do we know? What do we believe? *Liberal Education*, 78(1), pp. 2-9.
- King, P. and Kitchener, K. (1994). *Developing Reflective Judgement*. San Francisco: Jossey-Bass.
- Kolb, D. (1984). *Experiential Learning: Experience as the source of learning and development*. Engelwood Cliffs, NJ: Prentice Hall.
- Kuh, G., Schuh, J.H., and Whitt (1991). *Involving Colleges: Successful Approaches to Fostering Student Learning and Development Outside the Classroom*. San Francisco: Jossey-Bass.
- 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, pp. 32-47.
- Markus, G., Howard, J., and King, D. (1993). Integrating Community Service and Classroom Instruction Enhances Learning: Results from an Experiment. *Educational Evaluation and Policy Analysis*, 15(4), pp. 410-419.
- Marullo, Sam and Bob Edwards (2000). "Editors' Introduction: Service-Learning Pedagogy as Universities' Response to Trouble Times." *American Behavioral Scientist*, 43(5): February: 746-755.
- McKenna, Maria W. and Rizzo, Elaine. (1999). Outside the classroom: Student perceptions of the benefits of service learning. *Journal of Prevention and Intervention in the Community*, 18, 111-123.
- Miller, J. (1994). Linking Traditional and Service-learning Courses: Outcome Evaluations Utilizing Two Pedagogically Distinct Models. *Michigan Journal of Community Service Learning*, 1, 29-36.
- Mundy, M.E. (2003). *Faculty Engagement in Service-Learning: Individual and Organizational Factors at Distinct Institutional Types*. Unpublished Dissertation, Vanderbilt University.
- Lave, J. (1988). *Cognition in Practice*. New York: Cambridge University Press.
- Lave, J. and Wegner, E.(1991). *Situated Learning: Legitimate Peripheral Participation*. New York: Cambridge University Press.
- Osborne, R.E., Hammerich, S., and Hensley, C. (1998). Student Effects of Service-Learning: Tracking Change Across a Semester. *Michigan Journal of Community Service-Learning*, 5, pp. 5-13.
- Ostrow, J.M. (1995). Self-Consciousness and Social Position: On College Students Changing Their Minds About Homelessness. *Qualitative Sociology*, 18(3), pp. 357-375.
- Pascarella, E.T. (1980). Student-faculty Informal Contact and College Outcomes. *Review of Educational Research*, 50(4), 545-595.
- Pascarella, E.T. and Terenzini, P.T. (1991). How college affects students: Finding and Insights from 20 years of research. San Francisco, Jossey-Bass.
- Radest, Howard. 1993. *Community service: Encounter with strangers*. Westport, CT: Praeger.
- Rasmussen, G., & Skinner, E. (1997). *Learning Communities: Getting Started* (ED433048).
- Rhoads, Richard
2003 How Civic Engagement Is Reframing Liberal Education. *Peer Review*, 5(3), pp. 25-27.
1997 Community service and higher learning: Explorations of the caring self. Albany, NY: SUNY Press.
- Roldan, Malu, Amy Strage, and Debra David (2004). "A Framework for Assessing Academic Service-Learning Across Disciplines" In *New Perspectives in Service Learning: Research to Advance the Field*.
- Roose, D., Daphne, J., Miller, A., Norris, W., Peacock, R., White, G. (1997). *Black Student Retention Study: Oberlin College*. Unpublished Manuscript.
- Sax, L and Astin, A (1997). The Benefits of Service: Evidence from Undergraduates. *Educational Record*, 78, pp.1 25-32.
- Schank, R.C., Berman, T.R., & Macpherson, K.A. (1999). Learning by doing. In C.M. Reigeluth (Ed.), *Instructional-design theories and models*. (Vol. 2., pp. 161-181). Mahwah, N.J.: Lawrence Erlbaum.
- Singham, Mano (2005). *The Achievement Gap in US Education: Canaries in the Mine*, Rowman and Littlefield Education.
- Steinke, Pamela and Stacey Buresh (2002). Cognitive Outcomes of Service-Learning: Reviewing the Past and Glimpsing the Future. In *Michigan Journal of Community Service Learning*, V. 8, No. 2, pp. 5-14.
- Steinke, P. & Buresh, S. (1999, June). Using a knowledge structure approach to assess cognitive outcomes of service- learning. Poster session presented at the annual meeting of the American Psychological Society, Denver, CO.
- Steinke, P., Fitch, P., Johnson, C., & Waldstein, F. (in press). An interdisciplinary study of service-learning outcomes. In A. Furco & S.H. Billing (Eds.), *Advances in service-learning research*, Vol. 2.
- Strange, A.A. (2000). Service-learning: Enhancing student outcomes in a college-level lecture course. *Michigan Journal of Community Service Learning*, 7, 5-13.

- Takahashi, J. (1999). Minority Student Retention and Academic Achievement. *NSEE Quarterly*, Summer, pp. 15-19
- Tinto, V. (1993). *Leaving College: Rethinking the Causes and Cures of Student Attrition*. Chicago: University of Chicago Press.
- Volosinov, V.N. (1986/1929). *Marxism and the Philosophy of Language*. Cambridge, MA: Harvard University Press.
- Vygotsky, L.S. (1978). *Mind and society: The development of higher mental processes*. Cambridge, MA: Harvard University Press.
- Warchal, Judith and Ana Ruiz (2004). "The Long-term Effects of Undergraduate Service-Learning Programs on Post-Graduate Employment Choices, Community Engagement, and Civic Leadership" In *New Perspectives in Service Learning: Research to Advance the Field*.
- Welch, Marshall and Shelley Billig (2004). *New Perspectives in Service-Learning: Research to Advance the Field*. Greenwich, CT: Information Age Publishing, pp. 250.
- Wells, Gordon (2001). *Action, Talk And Text: Learning And Teaching Through Inquiry*. New York: Teachers College Press
- Williams, D., Youngflesh, A. & Bagg, B. (1997) *Enhancing Academic Understanding through Service-Learning: Listening to Students' Voices. Expanding Boundaries: Building Civic Responsibility in Higher Education*. Washington, DC: The Corporation for National Service.