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Educational innovations to improve teaching practices and enhance student outcomes are implemented regularly in higher education. Recent innovations have included redesigning the curriculum (Haas & Keeley, 1998; Halasz, Brinckner, Gambs, Geraci, Queeley, & Solovyova, 2006), maximizing the use of instructional technologies (Davidson-Shivers, Salazar, & Hamilton, 2005), and implementing more comprehensive and systematic approaches to student assessment (Koslowski, 2006; Lazerson, Wagener, & Shumanis, 2000; Tomlinson, 2007; Yanowitz & Hans-Vaughn, 2007). While these and other innovations are designed to enhance the overall effectiveness of the institution, not all members of the campus community welcome them. Campus members often resist institutional innovations because their experience suggests that the innovations are likely to have short shelf lives with little chance of being sustained over time (Lueddeke, 1999). Others may resist innovations on philosophical grounds, if they perceive the innovation(s) to be incompatible with their belief systems regarding practice or policy (Boice, 1990; Halasz et al., 2006; Rice, 2006).

The institutionalization of an educational innovation is a complex process that requires sustained institutional commitment and support from key stakeholders. As Levine (1994) suggests, many innovations in higher education fail because they are instituted without first securing

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the involvement and buy-in of key constituents whom the innovations most affect. In many cases, the key constituency group is faculty, whose powerful voice and genuine participation often determine the success or failure of educational innovations, especially those that involve pedagogical and academic change (Furco, 2002; Serow, Brawner, & Demery, 1999; Zlotkowski & Williams, 2003).

Faculty members resist new initiatives for various reasons. Koslowski (2006) suggests that faculty members have difficulty in accepting an educational innovation because they misunderstand an innovation's goals, have the perception that the innovation pre-empts their teaching responsibilities and academic freedom, or are entrenched with those practices with which they are most comfortable. More pragmatic concerns of faculty members are lack of knowledge or competence regarding the innovation (Boice, 1990; Davidson-Shivers et al., 2005; Eisen & Barlett, 2006), expectations of added time and effort involved in implementing change (Boice, 1990; Haas & Keeley, 1998), expected distraction from disciplinary-focused research (Haas & Keeley, 1998), concern for student reactions (Boice, 1990), and lack of institutional support, including rewards or recognition for involvement (Davidson-Shivers et al., 2005; Haas & Keeley, 1998; Lazerson et al., 2000).

Building on the work of these scholars, there appear to be at least four conditions that are important for securing faculty buy-in and support for an instructional innovation:

1. The goals of the innovation must be clearly communicated to faculty members and must be consistent with their values and concerns (Koslowski, 2006);
2. Faculty members must have opportunities to gain expertise with the innovation and to explore their questions, without making inordinate demands on their time (Baxley, Probst, Schell, Bogdewic, & Cleghorn, 1999; Dotolo, 1999; Koslowski, 2006);
3. Faculty members must perceive an institutional commitment to provide on-going support for the innovation (Young, Shinnar, Ackerman, Carruthers, & Young, 2007);
4. Faculty members should see rewards for their participation, in terms of their own professional development (Williams, Weber, Babbott, Kirk, Heflin, O'Toole, Shapira, Eckstrom, Tulsky, Wolf, & Landefeld, 2007) or through the faculty reward system (Lazerson et al., 2000).

These four conditions can be applied to a host of educational innovations for which faculty members are key stakeholders.

In recent years, one instructional innovation that faculty members have been encouraged to adopt is the practice of service-learning. Service-learning is a pedagogy that incorporates into academic courses meaningful community-based service experiences that meet genuine community needs, with the aim of enhancing a host of student development outcomes, including academic learning, civic and social responsibility, career development, and personal self-efficacy. Campus administrators implement service-learning initiatives for various reasons: To fulfill the civic purposes of higher education; to improve town-gown relations; to improve student learning; to secure available external funding for community/university collaborations; and to foster greater collaboration among faculty, departments, students, and community members (Furco & Holland, 2004).

Over the past decade, the prevalence of service-learning across all types of institutions of higher education has increased substantially (Campus Compact, 2007). Today, accreditation and certification boards, along with other influential bodies in higher education (e.g., Carnegie Foundation Classifications, disciplinary professional organizations, *U.S. News and World Report* rankings) recognize service-learning as a notable higher education initiative that can enhance teaching and learning as well as promote engaged scholarship (O'Meara & Rice, 2005). Despite growing pressures on higher education to adopt service-learning, faculty resistance to the innovation remains high. Much of the service-learning literature continues to focus on the persistent and pervasive faculty resistance to the pedagogy. This resistance has been attributed to faculty members' uncertainty over the academic value of service-learning (Zlotkowski, 1998), the lack of faculty incentives and rewards for engaging in community engaged teaching and scholarship (Ward, 2003), faculty members' concerns over adding to already heavy workloads (Abes, Jackson, & Jones, 2002), and fear among faculty members of losing control over course content and students' academic experiences (Brooks, 2008). Although systematic efforts to prepare faculty for service-learning have been developed and widely used (Bringle & Hatcher, 1995; Campus Compact, 2007; Stacey & Rice, 1997), there is limited research on the effectiveness of such faculty development and training activities.

Because service-learning is embedded in academic instruction, it is inherently a faculty initiative and, therefore, must be accepted by faculty members as a legitimate educational practice before it can become part of the academy's fabric (Zlotkowski & Williams, 2003). In a study of 43 colleges and universities that made a three-year investment in service-learning, Bell, Furco, Ammon, Muller, and Sorgen (2000) iden-

tified 22 components that are key to institutionalizing service-learning. These components are organized within five broad dimensions: Institutional philosophy and mission that support service-learning; faculty buy-in and support for service-learning; strong community partnerships, student buy-in and support for service-learning; and institutional structures and enabling mechanisms. In analyzing pre-post data that benchmarked participating campuses' service-learning efforts, Bell et al. found that the components within the faculty buy-in and support dimension best predicted campuses' advancement of service-learning institutionalization over a three-year period.

In this paper, we report findings from a three-year study conducted for an eight-campus service-learning consortium funded by the federal national service program Learn and Serve America. Working toward the goal of service-learning program institutionalization, institutional leaders and program managers from the eight participating colleges and universities developed and implemented three-year plans to advance the pedagogy of service-learning on their campuses. The institutions were recruited for participation through messages circulated on a national service-learning list serve. The participating institutions, located in various regions across the United States, were at the early stages of implementing this innovation when the project began. Although each institution had an individual faculty or staff member and a unit (e.g., office or center) on the campus that was responsible for service-learning, each offered only a few service-learning courses. All eight participating institutions sought to broaden faculty involvement in and strengthen faculty support for service-learning. A goal of this study was to assess the extent to which faculty members' attitudes towards and facility with this instructional innovation changed through their participation in learning communities designed to lead them to embrace and adopt service-learning.

At the beginning of the three-year consortium project, representatives on each campus conducted a self-assessment of service-learning efforts at their institution, using the Furco Self-Assessment Rubric for Service-Learning Institutionalization (Furco, 2003). This instrument, which has been used at more than 300 colleges and universities in the United States and abroad, measures institutions' advancement across Bell et al.'s five dimensions of service-learning institutionalization. Initial assessments revealed that few faculty members at the eight participating institutions knew what service-learning was, viewed it as a legitimate academic or educational pursuit, and/or considered themselves skilled in its practice.

Faculty Learning Communities and Service-Learning

Much has been written about the effectiveness of learning communities in advancing faculty members' knowledge and understanding of instructional innovation (Baker, 1999; Cox, 2001; Cross, 1998; Shapiro & Levine, 1999), but very little is known about the effectiveness of learning communities in enhancing faculty members' involvement in and support for the much-resisted practice of service-learning. Harwood, Ochs, Currier, Duke, Hammond, Moulds, Stout, and Werder (2005) reported positive reactions of 16 faculty members to a faculty development seminar, including their sense that the seminar provided a time and space for faculty to discuss, network and build relationships, and provide mutual support. Faculty members also reported that the seminar encouraged them to examine their pedagogical practices and supported their growth as researchers and enhanced aspects of their personal development. In addition, Dale Rice and Kathleen Stacey at Eastern Michigan University developed a multi-campus service-learning faculty development institute that employed elements of a faculty learning community (Rice & Stacey, 1997). This initiative engaged individual faculty members in peer exchanges across institutions and focused on developing faculty members' facility with service-learning practice within their individual courses. We are not aware of any larger-scale studies of the effectiveness of service-learning faculty development efforts, either through learning communities or other approaches, which was the aim of the present study.

Building on the structure and organization of the Rice and Stacey's training institute, the eight institutions participating in the present study established a set of semester-long faculty learning communities that incorporated a curriculum designed to deepen faculty members' knowledge of service-learning as an educational philosophy, academic program, and instructional pedagogy. Each semester, each campus program engaged small groups of faculty in meetings focused on advancing faculty facility with service-learning and building participants' understanding of the value of service-learning for students and their own professional development. The seminars were publicized throughout the campus, inviting faculty members to join a peer network to learn about service-learning and to meet other faculty interested in creating a service-learning course. A grant from the Learn and Serve America program made it possible to provide each participant a small stipend. The faculty participants met weekly over the course of eight to ten weeks to discuss readings and share ideas for practice. The seminars were facilitated by service-learning program directors and usually co-facilitated by

a faculty member, both of whom had strong knowledge of and experience in service-learning. Community partners were invited to participate in some sessions as a source of information for faculty members about community needs and possibilities. Readings that were discussed in seminar meetings focused on the theoretical and conceptual frameworks for service-learning, service-learning methodology and best practices, service-learning outcomes for students and communities, as well as other topics selected by program leaders. Each faculty participant integrated service-learning into a new or existing course and shared the syllabus with colleagues for peer feedback and critique.

The seminars bore characteristics of a topic-based faculty learning community as described by Layne, Froyd, Morgan, and Kenimer (2002), Cox and Richlin (2004) and Gottlieb (2009). Specifically, the seminars were *Voluntary*: Faculty joined the group in response to offers from the campus service-learning office; *Structured*: The readings and discussions were designed to challenge and engage participants as they interacted with and learned from others in the group; *Goal-oriented*: Each faculty participant developed a new service-learning course during the seminar; *Interdisciplinary*: Participants represented different academic disciplines so that varied perspectives were shared; *Safe*: The seminars made it possible for participants to discuss issues and questions about teaching openly and in confidence; and *Supportive*: The seminars were affirming, validating participants' concepts of student learning while also challenging them to apply new ideas gained through the seminar. The seminars established topic-based faculty learning communities (rather than cohort-based ones) by focusing the curriculum on a particular teaching innovation that brought together faculty from different ranks, perspectives, and organizational cohorts (Cox & Richlin, 2004). Consistent with the aforementioned conditions for securing faculty buy-in for instructional innovations, the learning communities: (a) sought to clearly communicate the goals and value of service-learning as a pedagogy and tied service-learning practice to the key issues and concerns of the participating faculty; (b) actively involved faculty members in learning about and becoming practitioners of service-learning through an organized set of activities carried out in a collegial group setting; (c) offered faculty members a small stipend for participating and provided a safe space in which they could explore service-learning, raise questions and concerns, and gain confidence with the pedagogy; and (d) tied the faculty development initiative to broader institutional goals for advancing service-learning throughout the campus.

In the present study, we sought to understand the strengths and limi-

tations of the learning communities approach to enhancing faculty participants' buy-in and support for service-learning. Specifically, we examined the ways in which faculty participants' attitudes towards and facility with the service-learning innovation changed over the course of their participation in these learning community seminars. Participants completed surveys at the beginning and again at the end of their seminar, describing their views of service-learning and evaluating their own competence and understanding of the pedagogy. The investigation, which was conducted at the eight institutions over five semesters, addressed the following research questions:

1. How do faculty participants' views of the value of the innovation (service-learning) change from the beginning to the end of the learning community seminar?
2. Are the learning community seminars effective in increasing faculty participants' competence with the innovation (e.g., facility in understanding and using service-learning concepts and in working with community agencies)?
3. How do faculty participants' views of institutional support for the innovation (service-learning) change following seminar participation?
4. How do the faculty participants view the innovation (service-learning) in terms of their own professional development?

Method

Research Participants

Participants were faculty members from eight diverse colleges and universities that had volunteered to join the Learn and Serve America consortium in order to advance service-learning campus-wide (See Table 1). The institutions varied in size, degrees granted, and whether they were public or private, religious-affiliated or secular. They were similar in that each had made a commitment to develop service-learning but, except for the lead institution (#1) and one other (#3), had not yet developed a campus-wide and substantial service-learning program. At School #3, a large number of service-learning courses were offered, but efforts were needed to coordinate course offerings and build sustained partnerships with community agencies. School #8 only participated for one year, as budgetary constraints made it impossible for it to meet grant requirements. It was replaced by School #3, which participated for two years. The other six institutions were involved for all three years of the project.

TABLE 1
Type and Size of Participating Institutions

Institution	Highest Degree Granted	Public/ Private	Secular or Faith-based	Enrollment	U.S. Region	# S-L Courses /Year
1	Doctoral	Private	Secular	12,700	South	49
2	Doctoral	Private	Secular	9,400	Midwest	10
3	Doctoral	Private	Religious-affiliated	8,500	West	160
4	Masters	Private	Religious-affiliated	3,400	West	8–10
5	Masters	Private	Religious-affiliated	1,700	West	8–10
6	Bachelors	Private	Religious-affiliated	2,400	North East	20
7	Bachelors	Private	Non-denominational Christian	1,500	South	17
8	Associate	Public	Secular	28,000	West	28

Complete data sets were obtained from 152 (69%) of the 221 faculty members who took part in the learning community seminars. These participants included 6 individuals at the Instructor level (4%), 9 Adjunct faculty (6%), 61 Assistant Professors (40%), 44 Associate Professors (29%), 18 Full Professors (12%), 2 department chairs (1%), 9 other administrators (6%), and 3 faculty members (2 %) who did not specify rank. A wide range of academic disciplines was represented, with 63 (41%) participants in arts and humanities areas, 28 (18%) in professional programs (e.g., education, social work, medical areas), 30 (20%) in the sciences, and 19 (13%) in the social sciences; 12 persons (8%) did not include academic discipline on their survey forms.

Learning Community Curriculum

The leaders of the campuses' service-learning programs were encouraged to create a faculty learning community structured as an eight- to ten-week seminar. Each semester, up to 17 individuals (Range; 3–17, mode = 6) at each institution participated in the seminars. Based on a shared set of readings highlighting important topics central to service-learning, the seminars' structure and content were adapted as appropriate to meet the needs and interests of the participating faculty. Discussions in each seminar emphasized the conceptual groundings for service-learning as a pedagogy based in cognitive psychology and experiential education. All included discussions of reflection, a core com-

ponent of service-learning (Eyler & Giles, 1999). Ways of working in collaboration with community agencies, including community-based research, was also a focus in each seminar. Most considered issues of diversity and looked at the effects of service-learning on students. Some considered individual and developmental differences in students that might affect service-learning outcomes. Program leaders selected additional topics and readings that were likely to be particularly useful to their own faculty. The learning community seminars gave particular emphasis to the contributions that members of the local community can make to the development of high quality service-learning. The participation of community members as co-educators in service-learning was emphasized in readings, discussions, and through the involvement of community representatives in the seminars. This emphasis encouraged faculty members to explore and reconsider their assumptions about their own roles as educators, the role of community partners in the educational enterprise, the nature of expertise, and responsibilities for and methods of student assessment.

During the seminars, faculty members worked on syllabi for one or more service-learning courses: 62% of the participants reporting that they had modified a course they had offered in the past to include a service-learning component, 44% of the participants created a new service-learning course, and 39% enhanced a service-learning course they had already developed prior to seminar participation. By the end of the seminars, most of the participants (82%) reported that they had completed a syllabus for a service-learning course they planned to offer in the future.

Measures

The measures for our study involved both quantitative and qualitative assessments of seminar participants' views of and facility with service-learning.

Faculty Service-Learning Attitude Survey (FS-LAS). We created a 35-item pre-post questionnaire that measured faculty members' overall attitudes towards service-learning, their understanding of the service-learning philosophy, and their feelings of competence about engaging in the work of doing service-learning. Items (shown in Table 2) were presented as statements that respondents evaluated using a five-point scale, from 1 = Rarely/Never True, 2 = Minimally True, 3 = Sometimes/Possibly True, 4 = Often/Likely True, and 5 = Always/Definitely True.

Participants were asked to complete the survey at the beginning and end of their seminar. We subjected pretest items from 152 respondents to an exploratory factor analysis in order to determine groups of items that would give us a more detailed picture of participants' views.

TABLE 2

Faculty Service-Learning Attitude Survey (FS-LAS)

Scales and Items	Factor Loading
1. Value of Service-learning to Students, Faculty, and Community	
Service-learning enhances students' personal development, such as self-esteem, self-concept, leadership, etc.	0.78
Service-learning enhances students' social development, such as being able to work with others, multicultural awareness, etc.	0.75
Service-learning enhances students' civic development, such as commitment to service, participation in political affairs, etc.	0.72
Service-learning enhances students' moral development such as values clarification, ability to deal with ethical dilemmas, etc.	0.72
Service-learning makes it possible to be more creative in teaching.	0.70
Service-learning enables one to interact more positively with students.	0.69
Service-learning enhances students' vocational development, such as work preparation, career awareness, etc.	0.67
Service-learning enhances students' academic knowledge and achievement.	0.63
It is possible to provide real benefits to the community through service-learning courses.	0.58
Pretest α (N = 151, 9 items) = 0.89; Posttest α (N = 150) = 0.88	
Factor Analysis: This cluster of items accounts for 27.72% of variance in scores of 152 participants.	
2. Knowledge of and Competence in Service-Learning	
I am able to explain the ways in which service-learning is distinct from other forms of community engagement.	0.84
I can explain the concept of service-learning to my colleagues.	0.81
I am able to explain the distinction of service-learning from other forms of experiential learning to my colleagues.	0.78
I can explain the essential programmatic components of high quality service-learning practice.	0.74
I can distinguish between a high quality and low quality service-learning experience.	0.71
I understand the role that reflection has in the practice of service-learning.	0.69
My teaching has been enhanced because of service-learning.	0.53
Service-learning takes away from teaching important concepts or content of the course (R).	0.45
Pretest α (N = 143, 8 items) = 0.87; Posttest α (N = 141) = 0.76	
Factor analysis: 9.77% of variance accounted for.	

TABLE 2 (*Continued*)
Faculty Service-Learning Attitude Survey (FS-LAS)

Scales and Items	Factor Loading
3. Community Collaboration in Service-Learning	
The community members with whom I partner play an active role in the planning or development of my service-learning course(s).	0.83
I share the decision-making power with the community agency partner(s) in order to help make service-learning more worthwhile for all involved.	0.77
I plan service-learning experiences in such a way that incorporates intentional benefits to both the students and the community agency(ies).	0.65
Service-learning enriches classroom discussions and lectures in my course.	0.59
I feel confident in developing partnerships with community agencies.	0.54
I make my students aware of class, race, and/or community issues that might impact their service-learning experience.	0.51
Pretest α (N = 139, 6 items) = 0.82, Posttest α (N = 137) = 0.78	
Factor analysis: 6.85% of variance accounted for.	
4. Institutional Support for Service-learning	
My institution provides adequate support for service-learning.	0.81
My institution provides adequate assistance or information on service-learning.	0.76
There are colleagues on the campus with whom I can discuss my service-learning work.	0.60
My department supports my service-learning work.	0.50
There are colleagues in my discipline with whom I can discuss my service-learning work.	0.34
Pretest α (N = 151, 5 items) = 0.66, Posttest α (N = 149) = 0.65	
Factor analysis: 5.39% of variance accounted for.	
5. Service-learning and Professional Development	
Service-learning is tied to my service at the institution.	0.70
Service-learning is tied to the advancement of my teaching.	0.63
Service-learning is tied to the advancement of my research.	0.45
I enjoy teaching more when the class involves service-learning.	0.42
Pretest α (N = 141, 4 items) = 0.71; Posttest α (N = 138) = 0.68	
Factor analysis: 4.47% of variance accounted for.	

The analysis and Scree plot indicated that five factors, accounting for 54.14% of the variance in scores, best summarized the data. Three of the 35 items did not load above 0.30 on any of the scales or were not conceptually related to other items and therefore were not further considered. The scales, items' factor loadings, and reliability coefficients for each scale are shown in Table 2. The concepts measured by each scale are as follows:

1. *Value of Service-Learning* (9 items). Drawing from Eyler and Giles (1999) and others' work that shows that students gain in many ways through service-learning experiences, participants indicated the extent to which they agreed with statements about service-learning's value in fostering students' personal, social, civic, moral, and vocational development, as well as students' academic knowledge and achievement. Benefits to the faculty member and to the community were also evaluated.
2. *Knowledge of Service-Learning* (8 items). Participants indicated the extent to which they felt they understood the central features of service-learning as a pedagogy.
3. *Community Collaboration in Service-Learning* (6 items). Knowing how to work effectively with community partners is essential for securing high quality service-learning practice (Bringle & Hatcher, 2000; Stacey & Rice, 2007). To assess this, participants were asked to evaluate their ability to work collaboratively with community partners in creating and implementing their service-learning courses, to integrate the service activity into the course, and to prepare students for their work in the community through reflection activities and course discussions.
4. *Institutional Support for Service-Learning* (5 items). Bell et al. (2000) and Hinck and Brandell (2000) have shown that faculty members are more likely to value, support, and participate in service-learning when there is strong support for service-learning at their institution. Participants indicated the extent to which they agreed that their service-learning work was supported by their colleagues, departments, and administrators.
5. *Service-Learning and Professional Development* (4 items). Ways in which service-learning can contribute to or detract from faculty members' productivity have been the subject of discussion in recent years (O'Meara & Rice, 2005). Participants indicated the extent to which they agreed that service-learning contributed positively to their teaching, research, and service.

Post-Seminar Survey. At the end of the seminar, participants responded in writing to open-ended questions for which they could elaborate on the responses given in the FS-LAS. The questions asked and the procedures for summarizing the data were as follows:

1. *What is the most important thing you learned from the seminar?* A deductive coding process was used to identify respondents' mention of: (a) the value of service-learning; (b) knowledge of service-learning; (c) ability to work effectively with community partners; (d) awareness of institutional support for service-learning; and (e) understanding of how service-learning could contribute to faculty members' professional development. Initially, two raters independently scored a subset of 20 protocols by grouping them into the five categories listed above, in order to determine the reliability of the categorization. However, this resulted in only 55% agreement between raters. Because of this relatively low inter-rater reliability, we do not report (below) the kinds of learning mentioned but simply the frequency with which responses were given for any of the categories listed above.
2. *Faculty-community collaborations.* Three items asked faculty participants about the involvement of community partners in the service-learning course they had created. First, the faculty participants were asked to describe the community sites in which students would be placed, in order to see whether a community partnership had been fully or partially established well before the course would be offered (inter-rater agreement in coding responses to this question = 75%). Second, participants also described what they were doing to ensure that the service-learning experience would be relevant to the content of the course. Third, they described how they planned to evaluate the quality of the students' service to the community. The responses to these questions were coded as to whether or not community partners were mentioned, both with regard to the planning of service experiences and the evaluation of student contributions (inter-rater agreement at 80% and 90%, respectively). For these three issues, we report below the percentages of faculty who specified the community sites in which they would place students, worked with community partners in planning the service experience, and planned to involve community partners in the evaluation of students.
3. *What rewards do you anticipate for offering a new service-learning course?* Rewards mentioned included benefits to students (greater involvement in course content, increased classroom par-

ticipation, greater learning), benefits to the community (service provided by students benefit community agencies), intrinsic rewards to the faculty member (greater enjoyment of teaching, better relationships with students), and extrinsic rewards to the faculty member (awards, enhanced yearly reports, recognition by administrators). The inter-rater agreement in classifying responses into these categories was 79%. The percentages of participants who gave responses within each category are reported below.

4. *What do you perceive to be barriers to faculty involvement in service-learning at your institution*? Participants indicated that development and teaching of a service-learning course required more work than is needed for traditional courses. They described faculty resistance to service-learning, including departmental barriers regarding course offerings. Lack of funding, lack of institutional support, and student resistance to service-learning were also mentioned. Two raters agreed on classification of responses 74% of the time. As was done for the previous questions, the percentages of participants who gave responses within each category are reported below.

Data Collection

At the start of the seminar, the participants completed the FS-LAS. At the end of the seminar, the participants completed the same survey and also answered the questions on the Post Seminar Survey. Seminars took place beginning in the spring of 2004 and continuing through June of 2006, with new groups of faculty taking part each semester. The total number of completed pre- and post-seminar surveys garnered from each participating institution ranged from 4 to 28.

Results

Participants showed highly significant increases from the beginning to the end of the seminar in their responses to all five FS-LAS scales. The initial analysis subjected scores on the scales to a multivariate analysis of variance, involving Semester (5 semesters) as a between-subjects variable and Time of Assessment (2 levels) and Scale (5 scales) as within-subjects variables. This analysis was done to screen for overall patterns, which could then be studied in more detail in separate analyses of each scale. There was no overall difference as a function of the semester in which the seminar was offered. Multivariate tests of the within-subjects variables yielded a significant main effect of Scale, $F(4, 125) = 46.64$, $p < 0.001$, *partial* $\eta^2 = 0.599$,highly significant difference

due to Time of Assessment, $F(1, 128) = 132.29$, $p < 0.001$, *partial* $\eta^2 = 0.508$, and a significant interaction of Scale by Time of Assessment, $F(4, 125) = 30.87$, $p < 0.001$, *partial* $\eta^2 = 0.497$. As shown in Table 3, mean scores on all of the scales increased from pretest to posttest, and there were differences in mean scores on the five scales, with highest scores on the Value of Service-Learning and Institutional Support scales and the lowest scores for Professional Development. The significant interaction of Scale by Time of Assessment shows that the extent to which responses changed over the course of the seminar varied for the five scales. In order to investigate these effects further, each scale was considered separately.

Value of Service-Learning to Students, Faculty, and Community

The study's first research question focused on measuring the extent to which faculty participants' views of the value of the service-learning innovation changed over course of the learning community seminar. Although participants began the seminar with positive attitudes about the value of service-learning, as shown in Table 3, they showed increases by the end of the seminar in their views of service-learning as a practice that enhances student development across a variety of domains, provides benefits to the community, and enriches their own instructional efforts. Whereas service-learning is viewed primarily as a pedagogy that will advance students' academic and civic development, the faculty participants also expected that service-learning would enhance students' personal, social, moral, and vocational development.

TABLE 3

Means and Standard Deviations for FS-LAS Scales for 152 Participants Measured at the Beginning and End of Faculty Development Seminar

Score	*N*	Pretest *M* (*SD*)	Posttest *M* (*SD*)
1. Value of service-learning	149	3.95 (0.53)	4.19 (0.51)
2. Knowledge of service-learning	140	3.44 (0.78)	4.29 (0.47)
3. Community collaboration in service-learning	136	3.45 (0.83)	4.13 (0.61)
4. Institutional support for service-learning	149	3.93 (0.68)	4.17 (0.62)
5. Service-learning and professional development	138	3.11 (86)	3.37 (0.82)

Note. Mean pretest-posttest difference on each scale were highly significant:
Scale 1: Prepost effect: $F(1, 144) = 31.03$, $p < 0.001$, partial $\eta^2 = 0.177$
Scale 2: Prepost effect: $F(1, 135) = 202.36$, $p < 0.001$, partial $\eta^2 = 0.600$
Scale 3: Prepost effect: $F(1, 131) = 102.00$, $p < 0.001$, partial $\eta^2 = 0.438$
Scale 4: Prepost effect: $F(1, 144) = 22.59$, $p < 0.001$, partial $\eta^2 = 0.136$
Scale 5: Prepost effect: $F(1, 133) = 21.98$, $p < 0.001$, partial $\eta^2 = 0.142$

Knowledge of and Competence in Service-Learning and Community Collaboration

The second research question sought to determine whether faculty participants' competence and facility with the innovation increased over the course of the seminar. These competencies involved both knowledge of the philosophy and practice of service-learning and ability to work with community agencies.

Service-Learning Knowledge and Competence. The greatest pre-post change in mean self-evaluations on the FS-LAS (see Table 3) was for the *Knowledge of and Competence in Service-Learning* Scale (Scale 2), which dealt with learning specific skills for creating service-learning courses. Faculty participants showed increases in knowledge of key programmatic components of service-learning (e.g., distinctions of service-learning from other forms of experiential education, role of reflection, elements of high quality practice, etc.). The participants also indicated their efficacy in managing the various components needed for a successful service-learning experience.

On the Post-Seminar Survey, 75% of the participants described specific pedagogical techniques or knowledge about service-learning that they had acquired through the seminars, further supporting the value of the seminar for specific knowledge and skill acquisition.

Community Collaboration. Over the course of the seminar, the participants also reported a statistically significant change in self-evaluated skill in working with community partners (Scale 3. Community Collaboration in Service-Learning, as shown in Table 3). Seminar participants expressed confidence in developing partnerships in which they share decision-making and expect community partners to assume active roles in planning the service-learning course. An additional finding concerns a change over the course of the project in the impact of the seminar on participants' perceived gains in competence for community collaborations. As shown in Table 4, participants started the learning community seminar at about the same level each semester, but there was a small, but fairly consistent increase over semesters in the magnitude of pre-post gains ($p < 0.10$). During the first semester in which the learning community seminars were offered, the pre-post gain on this scale was 0.44, and in the final offerings of the seminars, the pre-post gain increased to 0.84.

Findings obtained from the Post-Seminar Survey regarding community collaborations also indicated the gains participants made in awareness of the importance of community partners' involvement in service-learning: Community sites with which they planned to place students

TABLE 4

Change over Semesters in Faculty Participants' Self-Assessed Competence for Community Collaboration: Means (and Standard Deviations) for Each Semester

Semester	*N*	Pretest Score *M* (*SD*)	Posttest Score *M* (*SD*)
Spring 2004	37	3.43 (0.79)	3.87 (0.63)
Fall 2004	21	3.44 (0.89)	4.04 (0.73)
Spring 2005	33	3.53 (0.81)	4.20 (0.53)
Fall 2005	17	3.25 (0.91)	4.26 (0.43)
Spring 2006	28	3.52 (0.87)	4.36 (0.57)

Note. Interaction of Semester × Pre-Post change: $F(4, 131) = 2.02$, $p = 0.096$, partial $\eta^2 = 0.058$.

were specified in full or partially by 91% of the participants, plans to work with community partners to ensure the relevance of the service-learning experience were described by 90% of the participants, and involvement of community partners in evaluating students' service was mentioned by 69% of participants.

Institutional Support for Service-Learning

The study's third research question pertained to faculty participants' views of institutional support for service-learning. As shown in Table 3, seminar participants completing the FS-LAS began with positive views of support for service-learning at their institutions, perhaps due in part to the fact that their school had volunteered to participate in the Learn and Serve America consortium project. However, by the end of the learning community seminar, the participants showed significantly greater awareness of this support. Progress of the participating campuses in the institutionalization of service-learning is reflected in recent recognition; five of the eight institutions participating in the Learn and Serve America grant (and in this research) have been awarded the Community Engagement elective designation in the either the 2006 or 2008 Carnegie Foundation classifications (Carnegie Foundation for the Advancement of Teaching, 2009). Further, six of the institutions are listed on the Learn and Serve America President's Higher Education Commu-

nity Service Honor Roll, four of them "With Distinction" (Learn and Serve America, 2009).

In response to a question on the Post-Seminar Survey about rewards anticipated for offering a service-learning course, a substantial number (70%) of respondents mentioned benefits to students, while 41% referred to intrinsic rewards they themselves would gain, 29% mentioned benefits to the community, and 6% described other kinds of rewards. While on the FS-LAS, these faculty participants had indicated that their institutions supported service-learning, on the Post-Seminar Survey only 3% of them offered that they expected to receive extrinsic rewards for service-learning as part of institutional support.

The Post-Seminar Survey asked participants about possible barriers to faculty involvement in service-learning at their institutions. Most often mentioned, by 55% of the participants, was faculty resistance due to workload. Faculty members expressed concerns about the work that a faculty member must do in order to develop and implement a service-learning course. Resistance among colleagues and department leaders was mentioned by 32% of the participants. Interestingly, lack of institutional support for service-learning was noted by 42% of the participants even though participants had indicated generally positive views on the FS-LAS of institutional support for service-learning. In addition to this resistance, 12% mentioned lack of funding as a barrier while 11% described other barriers, such as perceived lack of control over students' learning or reduced classroom time for traditional instructional activities. Student resistance was mentioned by only 3% of the participants.

Service-Learning and Professional Development

With regard to the fourth research question, we explored faculty participants' views of the innovation in terms of their own professional development. As Williams et al. (2007) suggest, when faculty members are made to see how new practices can tie to their work and practice, greater faculty support for the innovation can be garnered. Of all the scales in the FS-LAS, participants' pre-test scores were lowest for this scale, indicating that they did not view service-learning as providing professional development opportunities. Over the course of the learning community experience, however, participants came to an increased awareness that service-learning could contribute to their teaching, research, and service at the institution (See Table 3).

Additional Finding: Faculty Status and Seminar Impact

In order to determine whether faculty rank qualified any of the findings above, a comparison was made between groups representing differ-

ent ranks at the institution. Groups compared were Instructors and Adjunct faculty ($N = 15$), Assistant Professors ($N = 61$), and senior faculty (including Associate Professors, Professors, and department chairs, $N = 64$). These three groups showed comparable increases from pretest to posttest on each of the five scales included in the FS-LAS. One overall difference was seen, with the Instructor/Adjunct faculty group producing a higher mean score on the scale, Value of Service-Learning to Students, Faculty, and Community ($M = 4.39$, $SD = 0.32$, $N = 14$) than did either the Assistant Professors ($M = 3.98$, $SD = 0.41$, $N = 59$) or the senior faculty ($M = 4.10$, $SD = 0.39$, $N = 64$). A univariate analysis of variance of scores indicated that the group difference was significant, $F(2, 134) = 6.43$, $p < 0.01$, *partial* $\eta^2 = 0.088$; follow up tests of the means showed that the Instructor/Adjunct group was significantly higher than the other two groups, which did not differ significantly from each other.

Discussion

The topic-based faculty learning communities that were established through this project provided structure, content, and peer-networking opportunities that helped enhance faculty participants' understanding of service-learning and strengthened their buy-in and support for this instructional innovation. In a number of ways, the learning communities created the conditions for faculty participants to develop their competency with service-learning, gain a better understanding of the extent to which the institution supported the practice, and explore the value of the pedagogy for student growth and their own professional development.

As was presented earlier, one condition for securing faculty support for innovation is the presence of an alignment between the innovation and faculty members' values, interests, and concerns (Koslowski, 2006). The readings and discussions offered in the learning community seminars exposed faculty members to the essential components of service-learning, giving them the tools, information, and support necessary for successful practice. This process, which blended a focus on individual participants' needs with a focus on cultivating a community of service-learning faculty leaders, offered participants the opportunity to explore different service-learning practices and to select the ones would best meet the needs of their course. By having the opportunity to tie the innovation to their own classroom needs and practice through the development of a course syllabus, the faculty members were able to see how the service-learning innovation might fit into their regular teaching repertoire.

In addition to seeing an alignment between the innovation and their own practice, faculty members' must also feel confident in their facility and expertise with an innovation before their support for the innovation can be fully secured (Baxley et al., 1999; Koslowski, 2006). An important aspect of this project's learning community curriculum was the engagement of participants in building their understanding of how to incorporate community involvement into the course, specifically focusing on how to engage community partners as co-educators. Indeed, as the three-year project progressed, the need to emphasize collaborative alliances with community partnerships became more evident. Seminar leaders made a greater effort over time to make community partnership issues a central focus of the seminar. This was accomplished by inviting community members to join and participate in the seminars, incorporating more readings about effective practices for campus/community collaboration, and impressing on faculty the importance of partnering with community members early in the planning of a service-learning course. As a result of these efforts, faculty participants showed gains in their self-assessed abilities to work effectively with community partners, having strengthened their sense of facility with one of the most essential elements of the innovation.

Young et al. (2007) suggest that faculty buy-in and support for an innovation is garnered when faculty members become convinced that the institution is making a genuine, long-term commitment to the innovation. The findings of the present study show that faculty participants' views of institutional support for service-learning became more positive as they completed the learning community seminars, possibly reflecting real changes seen on the campus as is evidenced by recognition that some of the participating institutions received from the Carnegie Foundation and Learn and Serve America. Yet, at the end of the seminars, faculty participants continued to identify the lack of broad institutional support and ongoing, broader faculty resistance as barriers to advancing and institutionalizing service-learning. This view was held most strongly by tenure track faculty members (assistant professors and senior faculty) who had statistically significantly lower scores for the value of service-learning than did non-tenure-track faculty (adjunct faculty and instructors). This finding suggests that while the learning communities might have strengthened participants' beliefs that the institution values service-learning, they were not effective in mitigating participants' prevailing skepticism about the extent to which the academy as a whole, especially when considering the broader faculty body, genuinely supports the innovation.

One explanation for this finding may be that tenure track faculty may realize the potential risks associated with experimenting with new teaching innovations like service-learning, given the importance that is given to more traditional and more institutionalized requirements and expectations for faculty promotion and tenure (O'Meara & Rice, 2005; Ward, 2003). Another explanation may be that the faculty participants are considering the possibility that they perhaps are not representative of the rest of the faculty. Indeed, as a group, the seminar participants began the project with an already high regard for a practice that is not generally accepted by faculty, as was indicated on the pre-survey data. Their continued reporting of institutional barriers at the end of the seminar may be an acknowledgment that the broader faculty body, which did not experience the seminars and thus perhaps continues to have less knowledge of and facility with the practice, remains skeptical about the promise of service-learning. This supports results from Bell et al.'s (2000) national service-learning institutionalization study, which revealed that some faculty who are strong supporters of service-learning remain skeptical about its advancement because they believe that faculty who do not support service-learning will begin to speak out more adamantly against the practice once it becomes more widespread and infiltrates the institution's core academic fabric.

While securing faculty involvement is a key to advancing and institutionalizing an instructional innovation, this involvement must be coupled with other factors that support the innovation, such as campus leadership, alignment with institutional mission, departmental opportunities, resources allocation, and faculty reward structures. For service-learning, this requires: campus leaders who make the practice a campus priority (Furco & Holland, 2004); showing the value of service-learning for accomplishing campus-wide priorities (Hinck & Brandell, 2000); support from deans and department chairs for faculty engagement in service-learning; funding for service-learning support staff (Furco, 2002); and procedures for rewarding and recognizing faculty for their service-learning work (Ward, 2003). The learning communities provided a safe environment for faculty participants to discuss these institutional challenges openly with peers, offering them opportunities to extend their reflections beyond their own courses and to consider broader, more institution-wide roles and purposes for the innovation.

Seminar participants also showed increased expectations that service-learning would be useful to their professional development in teaching, research, and service. In many ways the environment fostered by the

faculty learning communities provided faculty participants' with opportunities to explore how service-learning could be tied to a broad range of faculty scholarly activities, such as community-based research, experiential learning, interdisciplinary investigations, and multicultural competency development. As with securing faculty involvement in the innovation, institutional support is also a key to getting faculty to see the opportunities the innovation can provide to their professional development (O'Meara & Rice, 2005).

An important aspect of the seminars was the opportunity for faculty to convene with peers regularly to form a true, collegial learning community. The seminars provided a safe place to talk with supportive colleagues about teaching and learning in general, and to gain feedback and offer suggestions to others in the process of developing service-learning courses. Participation opened the way for continued conversation and collaboration after the seminar ended, thus providing support for faculty members that could benefit their professional development and lead them to a more positive view of the opportunities available at their institution. These findings are consistent with those of previous studies that have explored faculty development for service-learning (Conville & Borden, 2005; Harwood et al., 2005). Our findings are also consistent with studies of other kinds of faculty learning communities. For example, Layne et al. (2002) reported that engaging faculty members in year-long weekly meetings in which faculty convene to explore instructional innovations broadened the faculty members' understanding of learning and helped them gain expertise with alternative and innovative approaches to teaching. Similarly, Cox and Richlin (in Cox & Richlin, 2004) reported positive outcomes for faculty learning communities at several universities, with faculty participants reporting enriched conceptualizations of teaching and learning, greater understanding how individual differences may influence learning, and improved learning outcomes for students in their courses.

Several limitations to the present study should be noted. Firstly, the generalizability of the study's findings is limited. The faculty participants in this project joined the seminars of their own volition, beginning with positive views with the value of the innovation. With this self-selected sample, it is likely that the participating faculty had a higher propensity for change and innovation than the broader faculty populations at the eight institutions. Therefore, the results of this study may not be representative of the faculty body as a whole. In addition, because faculty members' participation in the seminars was voluntary, it is not known whether or not a mandated service-learning seminar initiative would have produced the positive effects seen here.

Secondly, the absence of a control or comparison group to evaluate change as a function of time in the absence of the intervention ultimately limits the extent to which we can attribute changes and gains among the faculty participants primarily to their involvement in the learning community seminars. It is possible that the changes noted among faculty might have manifested without the learning community experience. While we would not expect to see spontaneous short-term changes in the attitudes measured, the design of the study does not rule out such an effect. Thirdly, the sample size (in terms of number of institutions and number of participants within each institutional type) was not robust enough to allow us to compare faculty attitudes and development across institutional types (e.g., secular vs. faith-based, large vs. small, urban vs. rural, etc.). Future research studies should consider these issues in their study design and implementation.

Overall, the successes of the learning community approach used here were likely due to the design, emphases, curriculum, and structure of the seminars. The seminars incorporated many of the factors that have been identified in prior research as essential for securing faculty buy-in and support for educational innovations. The intended goals and structure of the seminars were clearly communicated to participants; participants voluntarily signed on to the seminars, agreeing to fulfill the various attendance and product requirements. The participants were involved as both creators and critics, working to develop their own expertise while serving as critical friends to peers. The seminars provided an opportunity to bring to the fore key issues in service-learning, as well as instruction in general, that were of most concern to faculty; the seminars offered a safe space for faculty to discuss these issues. The seminars were supported by through a three-year grant through which each participating campus was committed to developing and institutionalizing the innovation of service-learning. Finally, faculty participants saw rewards for acceptance of the innovation in terms of their own professional development and intrinsic rewards for teaching, as well as through the positive outcomes for students and local community members involved in their new service-learning courses. It is the combination of these factors, coupled with institutional support and commitment, which appear to have further secured faculty participants' involvement for service-learning at the eight institutions that were part of this study. As institutions of higher education implement other instructional innovations, the learning community approach to faculty development can be an effective tool for reducing faculty resistance and securing stronger faculty support and commitment.

References

Abes, E. S., Jackson, G., & Jones, S. R. (2002). Factors that motivate and deter faculty use of service-learning. *Michigan Journal of Community Service Learning, 9,* 5–17.

Baker, P. (1999). Creating learning communities: The unfinished agenda. In B. A. Pescosolido & R. Aminzade (Eds.), *The social works of higher education* Thousand Oaks, CA: Pine Forge Press.

Baxley, E. G., Probst, J. C., Schell, B. J., Bogdewic, S. P., & Cleghorn, G. D. (1999). Program-centered education: A new model for faculty development. *Teaching and Learning in Medicine*, *11*(2), 94–99.

Bell, R., Furco, A., Ammon, M., Muller, & P., Sorgen, V. (2000). *Institutionalizing service-learning in higher education*. Report to the Western Region Campus Compact Consortium. Unpublished manuscript. Berkeley: University of California.

Boice, R. (1990). Faculty resistance to writing-intensive courses. *Teaching of Psychology, 17,* 13–17.

Bringle, R. G., & Hatcher, J. A. (1995). A service-learning curriculum for faculty. *Michigan Journal of Community Service Learning, 2,* 112–122.

Bringle, R. G., & Hatcher, J. A. (2000). Institutionalization of service-learning in higher education. *The Journal of Higher Education, 71,* 273–290.

Brooks, C. H. (2008). Community connections: Lessons learned developing and maintaining a computer science service-learning program. *Proceedings of the 39th SIGCSE Technical Symposium on Computer Science Education*. New York: Association for Computing Machinery, 352–356

Campus Compact. (2007). *2007 Service statistics highlights and trends of Campus Compact's Annual Membership Survey.* Providence, RI: Brown University.

Carnegie Foundation for the Advancement of Teaching, Community Engagement Elective Classification. Retrieved March 15, 2009, from http://www.carnegiefoundation.org/classifications/index.asp?key=1213

Conville, R., & Borden, A. (2005, April). *Faculty views of service-learning training: Implications for institutionalization*. Paper presented at the 3rd annual Gulf South Summit on Service-Learning and Civic Engagement through Higher Education. Coco Beach, FL.

Cox, M. D. (2001). Faculty learning communities: Change agents for transforming institutions into learning organizations. *To Improve the Academy, 19,* 69–93.

Cox, M. D., & Richlin, L. (Eds.). (2004). Building faculty learning communities. *New Directions for Teaching and Learning*, *97*. San Francisco: Jossey-Bass.

Cross, K. P. (1998, July-Aug). Why learning communities? Why now? *About Campus,* 4–11.

Davidson-Shivers, G. V., Salazar, J., & Hamilton, K. M. (2005). Design of faculty development workshops: Attempting to practice what we preach. *College Student Journal, 39*(*3*), 528–539.

Dotolo, L. G. (1999). Faculty development: Working together to improve teaching and learning. *New Directions for Higher Education* (Vol. 106). San Francisco: Jossey-Bass.

Eisen, A., & Barlett, P. (2006). The Piedmont Project: Fostering faculty development toward sustainability. *The Journal of Environmental Education, 38*(*1*), 25–35.

Eyler, J., & Giles, D. E., Jr. (1999). *Where's the learning in service-learning?* San Francisco: Jossey Bass.

Furco, A. (2002). Institutionalizing service-learning in higher education. *Journal of Public Affairs, 6,* 39–67.

Furco, A. (2003). *Self-assessment rubric for the institutionalization of service-learning in higher education* (Rev. 2003). Berkeley: University of California.

Furco, A., & Holland, B. (2004). Institutionalizing service-learning in higher education: Issues and strategies for chief academic officers. In M. Langseth & W. M. Plater (Eds.), *Public work and the academy*. Bolton, MA: Anker Publishing Company.

Gottlieb, H. (2009). Learning communities/communities of practice/learning circles: What are they? How do they work? Why would we want one? Retrieved February 20, 2009, from http://www.help4nonprofits.com/NP_EDU-Cm_Learning_Communities.htm

Haas, P. F., & Keeley, S. M. (1998). Coping with faculty resistance to teaching critical thinking. *College Teaching, 46*(*2*), 63–68.

Halasz, J., Brinckner, M., Gambs, D., Geraci, D., Queeley, A., & Solovyova, S. (2006, August 24). Making it your own: Writing fellows re-evaluate faculty "resistance." *Across the Disciplines, 3*. Retrieved February 22, 2008, from http://wac.colostate.edu/atd/articles/halasz2006.cfm

Harwood, A. M., Ochs, L., Currier, D., Duke, S., Hammond, J., Moulds, L., Stout, K., & Werder, C. (2005). Communities for growth: Cultivating and sustaining service-learning teaching and scholarship in a faculty fellows program. *Michigan Journal of Community Service Learning, 12*(1), 41–51.

Hinck, S. S., & Brandell, M. E. (2000). The relationship between institutional support and campus acceptance of academic service learning. *American Behavioral Scientist, (43)*5, 868–881.

Koslowski, F. (2006, April). *Overcoming faculty resistance to assessment*. Paper presented at the Undergraduate Assessment Symposium, North Carolina State University. PowerPoint available at http://www.ncsu.edu/assessment/symposium/presentations/A.10_Koslowski.pdf

Layne, J., Froyd, J., Morgan, J., & Kenimer, A. (2002, November). *Faculty Learning Communities*. Paper presented at the 32nd ASEE/IEEE Frontiers in Education Conference, Boston, MA.

Lazerson, M., Wagener, U., & Shumanis, N. (2000). What makes a revolution? *Change, 32*(*3*), 12–20.

Learn and Serve America, Corporation for National and Community Service, President's Higher Education Community Service Honor Roll. Retrieved March 15, 2009, from http://www.learnandserve.gov/about/programs/higher_ed_honorroll.asp

Levine, M. A. (1994). Seven steps to getting faculty involved in service-learning: How a traditional faculty member came to teach a course on "volunteerism, community, and citizenship." *Michigan Journal of Community Service Learning, 1*(1), 110–114.

Lueddeke, G. R. (1999). Toward a constructivist framework for guiding change and innovation in higher education. *The Journal of Higher Education, 70,* 235–260.

O'Meara, K., & Rice, R. E. (2005). *Faculty priorities reconsidered: Rewarding multiple forms of scholarship.* San Francisco: Jossey-Bass.

Rice, D., & Stacey, K. (1997). Small group dynamics as a catalyst for change: A faculty development model for academic service-learning. *Michigan Journal of Community Service Learning, 4,* 64–71.

Rice, R. E. (2006). From Athens and Berlin to LA: Faculty work and the new academy. *Liberal Education, 92*(4), 6–13.

Serow, R. C., Brawner, C. E., & Demery, T. (1999). Instructional reform at research universities: Studying faculty motivation. *The Review of Higher Education, 22*(4), 411–423.

Shapiro, N. S. & Levine, J. H. (1999). Creating learning communities: A practical guide to winning support, organizing for change, and implementing programs. San Francisco: Jossey-Bass.

Stacey, K., & Rice, D. (1997). *Academic service-learning: Faculty development manual*. Unpublished manuscript, Eastern Michigan University, Ypsilanti, MI.

Tomlinson, C. A. (2007). Learning to love assessment. *Educational Leadership, 65*(4), 8–13.

Ward, K. (2003). *Faculty service roles and the scholarship of engagement.* San Francisco: Jossey Bass.

Williams, B. C., Weber, V., Babbott, S. F., Kirk, L. M., Heflin, M. T., O'Toole, E., … Landefeld, S. (2007). Faculty development for the 21st Century: Lessons from the Society of General Internal Medicine-Hartford Collaborative Centers for the care of older adults. *Journal of the American Geriatrics Society, 55*(6), 941–947.

Yanowitz, K. L., & Hans-Vaughn, D. L. (2007). Changes in student-centered assessment by post-secondary science and non-science faculty. *Teaching in Higher Education, 12*(2), 171–184.

Young, C. A., Shinnar, R. S., Ackerman, R. L., Carruthers, C. P., & Young, D. A. (2007). Implementing and sustaining service-learning at the institutional level. *Journal of Experiential Education, 29*(3), 344–365.

Zlotkowski, E. (1998). A service-learning approach to faculty development. *New Directions in Higher Education* (Vol. 73, pp. 81–89). San Francisco: Jossey-Bass.

Zlotkowski, E., & Williams, D. (2003). The faculty role in civic engagement. *Peer Review, 5*(3), 9–12.