TOTAL SYSTEM INTEGRATION FOR ACADEMIC SERVICE-LEARNING - THE UMKC'S SITC EXPERIENCE

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Abstract

The Students in the City (SITC) program at University of Missouri Kansas City (UMKC) has made significant progress toward the academic service-learning (AS-L[1]) goals established in 2002. In 2003, SITC received a three-year grant from the federal agency, the Corporation for National and Community Service. By 2005, the program had experienced substantial multi-disciplinary AS-L expansion. The evolution of UMKC's SITC program provides a benchmark for institutions intent on incorporating AS-L into courses in multiple disciplines. Among the lessons learned are the need for institutional support, role clarification, faculty and staff collaboration, community participation, and appropriate funding.

KEY WORDS: Service-learning, experiential learning, civic engagement, service-learning across the disciplines, program evaluation

INTRODUCTION

Service-learning is becoming a mainstream pedagogy on college and university campuses in the United States and in other countries. The implementation of a campus-wide service-learning program at the University of Missouri-Kansas City[2] (UMKC) is an example. This paper describes the process through which the UMKC program was established and presents some of the lessons learned during the journey. The first section of the paper presents the context, definition, and role of service-learning. The second section describes the process of implementing service-learning at UMKC. The third section summarizes the results to date from the ongoing UMKC program evaluation. The fourth section outlines key lessons learned from the implementation of UMKC's service-learning program. The paper focuses exclusively on service-learning within course-based, credit-bearing programs in institutions of higher education.

THE CONTEXT – CRITICISM OF UNIVERSITIES AND THE SERVICE-LEARNING RESPONSE

U.S. universities have encountered significant criticism for being disconnected from their communities. This section reviews that criticism and the responses, a definition of service-learning, and an overview of the role of service-learning.

CRITICISM OF UNIVERSITIES: IMPETUS FOR SERVICE-LEARNING

The modern U.S. University has transformed markedly during the three centuries of its existence. For most of that time, faculty and students pursued knowledge and scholarship in an environment that was separated from the daily social and cultural workings of surrounding communities. In the late twentieth century, this continuing ivory tower approach in higher education met with increased criticism in the U.S. Critics charged that there was a significant disconnect between what students learned in their degree programs and the knowledge required for understanding and resolving issues in the real world. These critics charged that the traditional classroom instruction was de-contextualized. As a result students were unable to apply the knowledge acquired in the classroom to real issues within their communities [Eyler and Giles, 1999]. For example, in 1998, the specially appointed National Commission on Civic Renewal issued a report on civic disengagement throughout the society. In their report, Commission members indicted higher education by omission. The report offered no role for higher education in providing solutions aimed at rebuilding individual citizen's commitment to civic life [National Commission on Civic Renewal, 1998; Damon, 1998].

SERVICE-LEARNING: A RESPONSE

There were, however, faculty members who sought to engage with their communities. For many, service-learning has been an important way to bridge the divide between acquisition and application of theory. Service-learning as a specific pedagogical approach is relatively new. Most educators trace the roots of service-learning to John Dewey[3] in the early part of the twentieth century; others argue that one should include Jane Addams who founded Hull House and who is credited with multiple social inventions [Daynes and Longo, 2004]. Still others connect the roots of service-learning to the nineteenth century experience of African Americans. In "Unrecognized Roots of Service-Learning in African American Social Thought and Action, 1890-1930," sociologist Charles Stevens argues that African American social thought has long connected action, community service ideals, promotion of democracy, and social justice. He observes that African Americans have used the merging of these channels of action and thought to build strong communities that promote change [Stevens, 2003].

Significant service-learning milestones in the U.S. during the last fifty years include the following:

- 1965 – The U.S. Congress authorizes funding for a work-study program in higher education. The work-study program provides opportunity for students to work within university programs as part of their financial aid awards.
- 1971 - A White House Conference on Youth report calls for linking service and learning. The National Center for Public Service Internships is established, as is the Society for Field Experienced Education. The two merge in 1978 to become the International Society for Internships and Experiential Education.
- 1979 – *The Synergist* publishes "Three Principles of Service-learning", namely: "those being served control the services provided; those being served become better able to serve and be served by their own actions; those who serve also are learners and have significant control over what is expected to be learned [Titlebaum et al, online http://servicelearning.org/welcome_to_service-learning/history/, accessed March 2006]."
- 1980s - Several organizations related to service-learning are established. Among these is Campus Compact. Campus Compact was organized in 1985 by the presidents of three universities and the president of the Education Commission of the States. The main purpose of this organization is to increase programs that fulfill the public service objectives of higher education.[4]
- 1989-90 - President George Bush, Sr. creates the Office of National Service in the White House.

- 1990 - Congress passes and President Bush signs the National and Community Service Act of 1990. This legislation authorizes grants to schools to support service-learning and demonstration grants for national service programs to colleges and universities as well as other organizations.
- 1992 - Maryland State Board of Education initiates a requirement that students graduating in 1997 and later have a service requirement as a condition of graduation.
- 1992 - President Clinton signs the National and Community Service Trust Act of 1993. The Act creates a new federal agency, the Corporation for National Service, which later becomes the Corporation for National and Community Service. The Corporation administers Learn and Serve America Higher Education grants and the National Service-Learning Clearinghouse. The latter is a web-based resource that provides the latest service-learning research and best practices [National Service-Learning Clearinghouse, www.servicelearning.org; accessed March 2006].
- 2001 - Two important conferences occur -- the first international Conference on Service-Learning Research and the Wingspread Conference on student civic engagement. The latter provides guidance for evaluating service-learning efforts [Godfrey, 1999; Titlebaum, et. al, 2006].

SERVICE-LEARNING: A DEFINITION

There are many definitions of service-learning [Godfrey, 1999]. One of the most used is the definition that the American Association for Higher Education adapted from the National and Community Service Trust Act of 1993.

"Service-learning means a method under which students learn and develop through thoughtfully organized service that is conducted in and meets the needs of a community and is coordinated with an institution of higher education and with the community; helps foster civic responsibility; is integrated into and enhances the academic curriculum of the students enrolled; and includes structured time for students to reflect on the service experience [Campus Compact, 2003, p.7]."

The 1993 Act established a national vision for service-learning as a pedagogy across all levels of education – elementary, middle, and high school, as well as post-secondary education [National Service-Learning Clearinghouse, www.servicelearning.org; accessed March 2006].

SERVICE-LEARNING: CONNECTING COMMUNITY AND CAMPUS

Some universities have responded to the challenge with campus-wide service-learning programs. Representative examples include the University of Michigan, Pennsylvania State University, and Portland State University. Since the mid-1990's, through service-learning and other outreach programs, these universities have been working collaboratively with their communities towards the mutually beneficial outcomes that service-learning embraces [Lerner and Simon, 1998]. Eyler and Giles [1999] assert that service-learning is an important way in which Higher Education is addressing criticism regarding its disconnectedness. High quality service-learning gives students and faculty opportunities to apply knowledge to community problems and, just as importantly, to apply their experience in the community context for the development of knowledge. Through its emphasis on service to the community, service-learning encourages heightened civic responsibility [McCarthy and Tucker, 2002].

Although some universities have established campus-wide service-learning programs, many service-learning efforts remain the work of individual faculty members and enthusiastic students collaborating with community partners. Faculty often initiated their efforts without the guidance provided by the emerging service-learning literature and the published examples of best-practices [Eyler and Giles, 1999; Godfrey, 1999]. In contrast, UMKC developed the design of its campus-wide service-learning program by relying on the best practices literature and the views of experts in the field.

SITC AT UMKC - BACKGROUND AND HISTORY

In 1999**,** in response to the national, and local, criticism of higher education, UMKC faculty and administrators began an extensive strategic planning process. Over the next seven years, the university initiated significant changes. These changes are helping reshape UMKC's culture as it embraces its mission as an urban university, to be proactive in its responsiveness to its community. A major part of the campus-wide change was the 2001 initiation of the UMKC *Center for the City* (C4C) and its AS-L program, *Students in the City* (SITC). The following describes the institution-wide changes undertaken at UMKC, summarizes the efforts of the C4C's campus-wide task forces and information-dissemination meetings, and overviews SITC's Learn and Serve funding.

INSTITUTION-WIDE CHANGE

During the planning process**,** UMKC adopted a set of core values statements. Among these are: "We nurture positive, visionary, empowering environments." and "We collaborate, partner and interact." One of the stated goals within the new mission is "We are an essential community partner and resource." Specific objectives were enumerated for public scholarship, service-learning, and community service. In 2001, C4C was established with an initial business plan based on recommendations made by the Urban Task Force. The C4C plan articulated as the Center's purpose leveraging UMKC's intellectual and human resources in meeting the needs and concerns of the Kansas City community. C4C was grounded in the university's urban mission and reflected the symbiotic relationship a major urban higher education institution should have with the community it serves.

To accomplish its mission, C4C was empowered to establish partnerships between the university and the Kansas City community, act as a proactive and responsive portal between the community and university, and help match UMKC's resources with community priorities. C4C programs were designed to meet the university's teaching, research, and service missions and to engage its constituent groups, i.e., faculty, students, and community members. A C4C Advisory Board provides oversight of the Center's service-learning, research, and community-university linkage programs.

Members of the Task Force had identified UMKC's students as its most valuable resource. Therefore, C4C established its AS-L program as a priority component of its strategy for engaging UMKC students and faculty with the community. A leading service-learning scholar, Edward Zlotkowski, editor of the multi-volume *Series on Service-Learning in the Disciplines* [1997] and editor of *Successful Service-Learning Programs: New Models of Excellence in Higher Education* [1998], stated "highly successful service-learning programs learn not only to claim the mantle of their institution's mission, but also to exploit it [Zlotkowski, 1998, p.9]." C4C's goal was to develop a strong sustainable program that would demonstrate the university's responsiveness to its community. Placing the AS-L program in C4C aligned the program's objectives with the university mission.

In 2001, C4C collected data on experiential learning from all academic units. The data identified that potential for service-learning existed across the University's many centers, departments, and academic units. The units reported on 4,000 courses of which only 266 required any experiential education. About 90% of the experiential courses provided professional students with their required internships or other required field experiences. The remaining experiential courses were associated with the mission of a particular academic unit or undertaken by faculty members whose personal teaching embraced community-based learning. The C4C director was a well-known successful entrepreneur, senior executive, and community leader. From her own experience and through conversations with other community leaders, she identified many AS-L opportunities in the urban core communities surrounding the university. The combination of the internal data and the identification of the external opportunities provided C4C with a starting point for planning a campus-wide AS-L program.

CAMPUS-WIDE DISSEMINATION AND TASK FORCES

In May 2002, UMKC held a campus-community conference called Transformations in Higher Education: Mapping Our Future. The conference consisted of three days of workshops and planning involving university faculty, administration, students, and UMKC's major community partners. During the conference UMKC faculty members and community partners could learn about campus-community

scholarship and service-learning. Among the national scholars providing keynote addresses and workshops were well known authors and speakers Harry Boyte, David Maurrasse, and Amy Driscoll. The Transformations program also included national leaders in service-learning. The purpose of their presentations was to disseminate information on national trends and best practices in other communities. Part of the conference program was a two-day, hands-on, service-learning course design workshop for faculty. Dale Rice and Kathleen Stacy of Eastern Michigan University, who had a run a number of service-learning workshops in Michigan and at other schools throughout U.S.A., facilitated the workshop. During the first day Rice, Stacy, and UMKC faculty with significant service-learning experience made presentations on examples of AS-L course designs. During the second day the presenters assisted the faculty participants in designing service-learning courses.

Following the conference, C4C formed an AS-L task force including faculty from nine of the university's eleven academic units. This group recommended that a campus-wide AS-L program should assist with the administrative burdens of formalizing AS-L partnerships, facilitate on-going university-community partnerships, provide a uniform university approach to managing risk and liability, assist with course/syllabi development, evaluate AS-L outcomes, and seek official recognition of service-learning in the university's promotion and tenure process.

In November 2002, C4C organized focus groups[5] of leaders from community-based organizations. C4C asked the focus group participants to review the proposed AS-L model, provide advice based on their prior experiences working with students in their organizations, and suggest how an AS-L program might best meet the needs of their organizations. The information from the focus groups confirmed the basic design of the proposed AS-L program and also added dimensions to improve its effectiveness. The task force and the focus groups suggested C4C's AS-L program should:

- Delineate clear roles for community organization on-site supervisors, faculty and students;
- Determine ways to match academic background/student skills with the needs of the service-learning partner;
- Provide training for students prior to the community experience, for example:
  - Educate students about community organizations and their missions,
  - Help students write learning objectives,
- Provide drafts for the agreements between the community organizations and faculty members,
- Hold periodic meetings including C4C staff, faculty and community members to update progress on AS-L implementation.

Shortly afterward C4C announced the new AS-L program called *Students in the City* (SITC). The program's mandate was to support faculty and community partners in implementing AS-L throughout the University. C4C staff worked with university departments to create a program infrastructure and to make certain that AS-L worked well with existing programs and systems. During the Fall 2002 and Spring 2003 semesters, SITC worked with the University office of risk management, representatives from the UM system, and University counsel to establish guidelines and policies for safety and liability issues faculty task force members had identified as top concerns.

LEARN AND SERVE AMERICA GRANT

In March 2003, with input from a grant task force, C4C's program director wrote and submitted a proposal for a *2003 Learn and Serve America*[6] higher education grant. The proposal sought funds to implement the recommendations from the 2002 task force and focus groups. The three-year grant was awarded in the summer of 2003. With this significant financial support, SITC has been able to fund a full-time program director, a part-time coordinator, and a 20% FTE faculty director. The grant has also provided for twenty $1000 grants each year to help faculty incorporate AS-L into existing or newly created courses. Recipients are designated as "SITC Faculty Fellows". To date, SITC's Steering Committee has selected 57 Faculty Fellows through a twice-yearly competitive process. The grant has increased SITC's capacity to support quality AS-L and has contributed to tremendous growth of the program.

The grant's performance measures stipulated that by the end of the third year of the grant: 1) 2900 UMKC students will each have engaged in twenty or more hours of AS-L projects, 2) 60 faculty members will have taught one or more AS-L courses, and 3) AS-L classes will have partnered with 90 community-based organizations for their AS-L projects. As Table 1 indicates, SITC had made significant progress

toward its goals by the end of academic year 2004-05. By the end of Fall 2005 semester, the program had exceeded its goals - 62 faculty members had taught a total of 165 AS-L classes with enrollments exceeding 4,100 students.

Aside from sheer growth in numbers, the practice of AS-L has broadened to include ten of the eleven academic units on campus. One, the School of Pharmacy, requires students to complete a two-course AS-L sequence for graduation. Others, including the schools of Nursing and Dentistry, are moving toward such a requirement. Table 2 shows the variety of AS-L projects across nearly every academic unit at UMKC. Also stipulated in the grant is the requirement for ongoing assessment of the AS-L experience of all participants (students, faculty, and community partners). The assessment results are discussed in the next section.

TABLE 1
COMPARATIVE RESULTS OF SERVICE-LEARNING PARTICIPATION AT UMKC

	Academic Year			
	2001-02	2002-03	2003-04	2004-05
# of AS-L Courses	5	11	47	46
# of Students enrolled in the courses	61	188	1147	1359
# of Community-Based Organizations (CBOs) participating	Over 3	Over 10	Over 50	Over 85
Dollars saved by CBOs (Estimated at $15.71/volunteer hour in Missouri as calculated by *Independent Sector*, a non-profit organization.)	$22,860	$59,131	$407,593	$544,372[7]

ASSESSMENT RESULTS

SITC based its assessment design on the Gelman-Holland-Driscoll model [Gelman et al, 2001]. This model provides specific recommendations for measuring how service-learning and other civic engagement programs impact participants. SITC administers the assessment surveys electronically and confidentially every semester. After each semester's surveys are compiled, the evaluator (an independent contractor employed by another UMKC department) analyzes the data and issues separate summary reports for each constituent group. SITC's Steering and Advisory Committees review the reports for each semester. The Steering Committee is composed of a cross-section of UMKC faculty and meets several times during a semester. The Advisory Committee is a larger body composed of all three constituent group representatives and meets twice a year. The feedback from these two groups forms a basis for subsequent changes to the AS-L program.

TABLE 2
UMKC AS-L COURSES ACROSS THE CURRICULUM[8]

Academic Unit	Department	AS-L Project	Community Partner/s
College of Arts & Sciences	Geosciences	Students provide Geographic Information Systems (GIS) mapping services to aid urban neighborhood council in planning and problem-solving regarding crime and litter	Ivanhoe Neighborhood Council
College of Arts & Sciences	Communications Studies	Students create a video about and for a small youth-focused anti-drug and anti-violence organization	POSSE (Peers Organized to Support Student Excellence)
College of Arts & Sciences	Foreign Languages	Students contribute to the Library of Congress call for veterans' accounts of their wartime experiences; spend time with and interview veterans about their experiences	Veterans Administration Medical Center
Bloch School of Business & Public Admin.	Public Administration	Students undertake comprehensive survey and interview project to help foundation establish priorities	Susan G. Komen Breast Cancer Foundation
School of Computing & Engineering	Civil Engineering	Students design a secondary bridge for and in collaboration with the City of Kansas City, Missouri	Kansas City, Missouri Department of Public Works
Conservatory Of Music	Music Education	Students teach music skills and conduct a New Horizons band, a community-based performance program for adults age 50+	Roeland Park Community Center
School of Dentistry	Dental Public Health & Dental Hygiene	Students develop service systems and identify ways underserved children can gain access to preventive dental care	Boys and Girls Clubs of Greater Kansas City
School of Law	N/A	Students represent indigent clients through Legal Aid services	Legal Aid of Western Missouri
School of Medicine	Medical Humanities	Students make home visits to chronically and seriously ill patients in the urban core	St. Luke's Homecare and Hospice
School of Nursing	N/A	Students provide services to organizations that provide geriatric care to senior citizens	Guadalupe Center, Don Bosco Senior Center, and others
School of Pharmacy	Pharmacology	Students serve at agencies who assist immigrant population,; learn about clients' religious and cultural practices affecting their health care issues and choices, and advise clients accordingly	Don Bosco Center and El Centro, Inc.

STUDENT RESPONSES

The assessment data from Spring 2004 through Fall 2005 indicated that:
- About 90% of the students believed that they could become more involved in their community.
- Over 85% saw that they had a responsibility to serve in their community.
- About 80% noted that the classes gave them an opportunity to discuss their community work and its relationship to the course material.
- Just over 60% reported that the work they did in the community enhanced their ability to learn in a "real world" setting.
- About 65% believed that the interactions with the community partners enhanced their learning in this course.

These results were similar across the four semesters. However, several aspects of AS-L students' experiences improved markedly from Spring 2004 to Fall 2005. Students' understanding of how their service-learning projects benefited community organizations, attitudes regarding civic engagement, sense of personal achievement, understanding of social-cultural differences, and development of functional life skills improved the most. (See Table 3).

TABLE 3
COMPARATIVE STUDENT EVALUATION RESULTS*

Item	Spring 2004 (n=205)	Fall 2005 (n=269)
I feel that the work I did through the course benefited the community.	65%	80%
My service-learning experience had a moderate effect on my attitude toward community involvement/ citizenship	62.4%	80.6%
My service-learning experience had a moderate effect on my sense of personal achievement.	60.9%	73%
My service-learning experience had a moderate effect on my ability to work and learn independently	53.8%	63%
My service-learning experience had a moderate effect on development of functional life skills, e.g., communications, assertiveness, problem-solving	61%	66%
My service-learning experience had a moderate effect on my understanding of social cultural differences.	59.5%	74.5%
I would participate in another AS-L project	64.5%	71.2%

*% of students indicating they strongly or moderately agreed with the statement.

Only about a third of the student respondents indicated that the AS-L class made a major difference in the choice of their career path. UMKC is an urban university with a high percentage of older students who are typically upperclassmen (juniors and seniors) and graduate students. These students are often already committed to a career path. Therefore, this percentage is not surprising. Overall the results demonstrate that students learn about themselves, their responsibilities to their communities, and their future careers while participating in AS-L classes.

FACULTY AND COMMUNITY ORGANIZATION RESPONSES

The number of faculty and community organization responses has been disappointingly low. Therefore, the results must be considered tentative. The number of faculty responding has been less than a dozen per semester. Faculty results included:

- About two thirds would participate in AS-L in the future.
- Less than half (about 40%) felt that the community partners fully understood their roles.
- Somewhat over half indicated that students fully understood their roles and responsibilities.
- Almost three-fourths felt AS-L fit into their courses.

The benefits identified by faculty respondents included improved faculty-student and faculty-community partner relationships and increased student understanding of how they can apply classroom concepts. Faculty participants also identified some of their challenges in teaching AS-L courses. These included the unpredictable nature of community work, time constraints, coordination of placements, supervision of students, reduced time for classroom instruction, assessment of students, and communication with community partners. Among the faculty suggestions for program improvements were a small stipend for AS-L books and resources, better coordination with the community partners, greater effort to assure that the community organizations' student supervisors understand AS-L, and earlier orientation of the students to the community organizations because of the pace of the academic term.

All of the respondents from the community agencies[9] indicated that they would participate in the AS-L program again. Their responses indicated that that involvement with SITC faculty and students benefited them in several ways including:

- Enhanced offerings of services,
- Increased number of clients served,
- New connections with other organizations,
- Increased number of services offered, and
- Increased leverage of financial and other resources.

Community organization respondents identified challenges as including too little contact with the faculty, excess demands upon staff time, and a need for more (and sometimes fewer) students. When asked about recommendations for changes SITC might make to the program, most community agency representatives responded that no changes were needed. A few made suggestions such as:

- SITC should provide more orientation about the community organizations for students and faculty.
- More effort was needed to coordinate student and community organization schedules.
- The community organizations wanted:
   - Mid-term communication from students and faculty and
   - Feedback from the students about their AS-L experiences.

Overall the C4C Steering Committee concluded that the community organizations' responses indicate that students involved with AS-L classes make positive differences in the Kansas City community. The Steering Committee and the C4C staff utilize the information from all of the respondent groups for continuous program improvement.

CONCLUSIONS

The UMKC AS-L model can provide guidance for other institutions planning to develop a service-learning program. The lessons learned by participants in the UMKC experience are reflected in the following recommendations regarding classroom AS-L practice and institutional-level change.

1. *The professor must focus effort on clarifying roles and responsibilities*:
   - As course designer and instructor, the professor must clearly delineate the roles of students, the institution, and community partners.
   - It is important that the professor negotiate the service project agreement with the community partner.
   - The professor must translate the agreement with the community partner into clear instructions in the syllabus and communicate these verbally to the students.
2. *The professor should work with the community partner during the project to*:
   - Determine whether the students are going to the community organization, doing the work, and meet the needs of the community partner;
   - Make adjustments to the project such as the number of students involved;
   - Gather input for advance planning for future projects at the partner organization.

3. *AS-L programs must be flexible as one model of AS-L does not fit all classes, all students, and all community needs.* For example:
   - Traditional students can undertake AS-L projects during the day. Students who work full-time day jobs need projects that can be completed at night or on the weekends**.** Thus, the professor must adjust the course design.
   - There may also be significant shifts in community needs that provide opportunity for AS-L projects. For example, the aftermath of Hurricane Katrina provided opportunity for an AS-L class at UMKC to work with urban planners in a New Orleans suburb.
4. *The community organizations and students should request and receive direct feedback from each other.* Such feedback should be built into the course as interim as well as end-of-project requirements. For example, students might be required to share written or oral reports with the client (i.e., not "just" the professor).

UMKC's experience with AS-L indicates how critical institutional commitment is for a sustainable campus-wide program. Institutions must address such issues as:
   - Institutions must devote resources to faculty development.
     - Professors who are inexperienced with AS-L need training and assistance to incorporate AS-L components in their classes.
     - Professors who are experienced with AS-L need assistance to improve or expand AS-L components within their classes.
   - There must be recognition at the institutional and individual academic unit levels for the efforts of faculty who are involved in AS-L.
   - The promotion and awards systems must recognize AS-L activities.
   - The university should have a community outreach component in its mission and core values**.**
   - The university must devote resources to developing and sustaining relationships with community organizations that offer AS-L opportunities.

The UMKC experience demonstrates positive AS-L outcomes for the participants. The community partners and their sites provide students with cultural, economic, and political contexts within which students address real-world issues. Students' services help community organizations stretch tight budgets, increase organizational capacities, and solve problems. Faculty members fulfill their teaching responsibilities as their students expand their knowledge and service-learning experiences provide faculty with improved relationships with students and community members.

Achieving a high-quality AS-L experience requires input from all constituent groups. Institutional support is critical as is funding for service-learning support staff and faculty incentives. Participation from community partners requires continuing effort to develop and sustain. Faculty, staff, and community participants must have direct and regular communication in planning and conducting service-learning classes. When all constituent groups understand their roles and carry out their commitments, service-learning can meet the needs of the community, foster civic responsibility among students, and enhance the academic curriculum.

ENDNOTES

1. The term used in the literature is "service-learning". In this article, AS-L refers to service-learning at UMKC. UMKC decided to use the term *academic* service-learning (AS-L) to emphasize that service-learning is academic in nature and needs to be integrated into the curriculum at departmental curricula and individual course levels. In this article, AS-L refers to service-learning at UMKC.

2. The University of Missouri-Kansas City (UMKC) is part of a four-campus system within the University of Missouri (UM). UMKC began as the University of Kansas City in 1933 and joined the UM system in 1963. The campus is located in the urban core of Kansas City, the 37th largest U.S. city with a metropolitan population of nearly two million. In 2005, UMKC had 1,055 faculty and a student enrollment of 14,310. There are eleven academic units within UMKC; seven are professional schools, including a nationally acclaimed Conservatory of Music and regionally-known business/public administration, law, and medical schools.

3. Considered by some to be America's most important educational philosopher [See: Saltmarsh, John. A New University with a Soul: A Response to Arthur Levine," Tomorrow's Professor(SM) Listserv (Tuesday, May 2, 2000) and Dewey, John. *Experience and Education* (Macmillan Co., 1952)].

4. Campus Compact currently includes 950 college and university presidents who have joined forces with the main purpose of increasing service programs in higher education. Through a national office and a network of 31 state offices, member institutions gain access to the resources they need to build campus-community partnerships and teach students the skills and values of democracy. Combined enrollment at member campuses is over five million students [www.compact.org; accessed March 2006].

5. Marketing research practitioners often use focus groups for gathering consumers' qualitative opinions about product design or other information. In this instance, C4C wanted community leaders' opinions.

6. Learn and Serve America, a major program of the Corporation for National and Community Service in the United States, provides direct federal funding to schools, institutions of higher education, community-based organizations, and tribal nations. The purpose of the funding is to increase the number and quality of service-learning programs [www.learnandserve.org and www.nationalservice.org; accessed March 2006].

7. The U.S. experience demonstrates that service-learning is making a significant economic contribution to not-for-profit agencies at a time when their budgets are severely strained. According to the Campus Compact annual membership survey, member institutions provided service to communities that totaled $4.5 billion in 2004 [http://www.compact.org/news/detail.php?id=9; accessed March 2006].

8. Selected from 165 AS-L classes to date. On average, over seven semesters since the Spring semester 2003, twenty-four AS-L classes have been taught by twenty-two faculty. Of the 62 faculty members who have taught AS-L classes, 53 are "Faculty Fellows" as designated under stipulations of the Learn and Serve grant.

9. The number of responses from community organizations the first semester was six and has risen to about a dozen per semester.

REFERENCES

Boyer, Ernest L. Scholarship Reconsidered: Priorities of the Professoriate (John Wiley & Sons, Incorporated, 1997).

Boyte, Harry C. et al. Building America: The Democratic Promise of Public Work (Temple University Press, 1996).

Butin, D. (Ed). Service-Learning in Higher Education: Critical Issues and Directions (Palgrave MacMillan, 2005).

Campus Compact. Introduction to Service-Learning Toolkit: Readings and Resources for Faculty (Campus Compact, 2003).

Campus Compact. 2004 Annual Membership Survey (http://www.compact.org/news/detail.php?id=9; accessed March 2006).

Canada, Mark et al. Understanding the Role of Academic and Student Affairs Collaboration in Creating a Successful Learning Environment: New Directions for Higher Education (John Wiley & Sons, Inc. - Jossey-Bass, 2002).

Checkoway, B. "Reinventing the Research University for Public Service." <u>Journal of Planning Literature</u> (November 1997), pp. 307-319.

Daynes, G. and N. Longo. "Jane Addams and the Origins of Service-Learning Practice in the United States," <u>Michigan Journal of Community Service Learning</u> (Fall 2004), pp. 5-13.

Dewey, John. <u>Experience and Education</u> (Macmillan Co., 1952).

Dowd, Steven B. "Deep or Surface Learning," <u>The Teaching Professor</u> (January 1996), pp. 5-6.

Eyler, J. and D. Giles, Jr. <u>Where's the Learning in Service-Learning?</u> (Jossey-Bass, 1999).

Gelman, Sherril B. et al. <u>Assessing Service-Learning and Civic Engagement: Principles and Techniques</u> (Campus Compact, 2001).

Godfrey, Paul C. Service-learning and management education: A call to action. <u>Journal of Management Inquiry</u> (Vol. 8, Iss. 4, Dec. 1999), pp. 363-379.

Grasso, E. and P. Godfrey (Eds.). <u>Service-Learning in the Discipline of Management</u> (American Association of Higher Education Monograph Series: Service-learning in the Disciplines, 2000).

Lerner, R. and Simon, L. A. (Eds.) <u>University-Community Collaborations for the Twenty-First Century: Outreach Scholarship for Youth and Families</u> (Garland Publishing, 1998).

Long, Sarah. The New Student Politics: The Wingspread Statement on Student Civic Engagement (<u>www.actionforchange.org</u>, accessed March 2006).

Maurrasse, D. <u>Beyond the Campus</u> (Routledge, 2001).
McCarthy, Anne M. and Mary L Tucker. Encouraging community service through service learning. <u>Journal of Management Education (</u>Vol. 26, Iss. 6, Dec 2002), pp. 629-658.

National Commission on Civic Renewal (1998). *A Nation of Spectators: How Civic Disengagement Weakens America and What We Can Do About It* (<u>www.pauf.umd.edu/civicrenewal</u>; accessed March 2006).

Parsons, M. and C. Lisman (Eds.). <u>Promoting Community Renewal through Civic Literacy and Service-Learning</u> (Jossey-Bass, 1996).

Petri, Alexis, Amy Kenworthy-U'Ren, and Marilyn Taylor. Service-learning: International case study of diffusion of an interactive, experiential pedagogy – Insights from Barbara Holland. <u>WACRA Conference Proceedings</u>, Brisbane, July 2006.

Rhodes, Frank T. <u>The Creation of the Future</u> (Cornell University Press, 2001).

Rothman, M. (Ed.) <u>Service Matters: Engaging Higher Education in the Renewal of America's Communities and American Democracy</u> (Campus Compact, 1998).

Saltmarsh, John. "Building Bridges," in Boyte, Harry C., <u>Going Public: Academics and Public Life</u> (Charles F. Kettering Foundation, 2004), pp. 14-15.

Simon, L.A., Kenny, M., Brubeck, K., & Lerner, R.M. (Eds.). <u>*Learning to Serve: Promoting Civil Society through Service-Learning*</u> (Kluwer Academic Publishers, 2001).

Speck, B. and Hoppe, S. (Eds.). Service-learning: History, Theory and Issues (Praeger, 1994).

Stanton, T. Giles, Jr. D. and Cruz, N. (Eds.). <u>Service-Learning: A Movement's Pioneers Reflect on Its Origins, Practice and Future </u>(Jossey-Bass, 1999).

Stevens, C. "Unrecognized Roots of Service-Learning in African American Social Thought and Action, 1890-1930," <u>Michigan Journal of Community Service Learning</u> (Winter 2003), pp. 25-34.

Taylor, M., "A Service-Learning Kaleidoscope of Insights: Conversations with Mihaly Csikszentmihalyi, Theorist/Systems Change Artist; Bernard Milano, Practitioner/ Foundation Leader; and John Saltmarsh, Historian/Service-Learning Educator," <u>Academy of Management Learning & Education</u> (September 2005), pp. 363-376.

Titlebaum, P., G. Williamson, C. Daprano, J. Baer & J. Brahler, Annotated History of Service Learning (<u>http://servicelearning.org/welcome_to_service-learning/history/</u>; accessed March 2006).

Welch, M. and Billig, S. <u>New Perspectives in Service-Learning: Research to Advance the Field</u> (Information Age Publishing, 2004).

Zlotkowski, E. New Models of Excellence. <u>Successful Service-Learning Programs: New Models of Excellence in Higher Education</u> (Anker Publishing, 1998).

Zlotkowski, E. (Ed). <u>Series on Service-Learning in the Disciplines</u> (American Association for Higher Education, 1997).

Integration and system testing is mainly done by a team who focuses only on the software testing phase in the system development life cycle. In software testing each testing level build on from the previous level so it is important that the testing is done in the correct order, access to the information is passed on to the next level. Integration. integration testing in the software testing model comes before system testing and after the unit testing has been done. 1 page, 356 words. There are some different types of integration testing that can be conducted, below is a list of the different integration testing types; Big Bang. The way this integration testing type works is, most or all of the modules are integrated together to form nearly a complete system. Beachler, C., Petri, A., Euler, M., Rinck, C., Taylor, M.: 2006, Total System Integration for Academic Service-Learning: The UMKC's SITC Experience, International Journal of Case Method Research and Application 18(2), 157–169Google Scholar. Bringle, R. G., Phillips, M. A., Hudson, M.: 2005, The Measure of Service Learning: Research Scales to Assess Student Experiences (American Psychological Association: Washington D.C.)Google Scholar. Brody, S. M., Wright, S. C.: 2004, Expanding the Self through Service-Learning, Michigan Journal of Community Service Learning 11(1), 14–24Google Scholar. An experienced System Integration Engineer with 10-19 years of experience earns an average total compensation of $93,755 based on 182 salaries. In their late career (20 years and higher), employees earn an average total compensation of $112,774. Pay Difference by Location. Learn more about cost of living by city. Los Angeles, California. ⌐²12%.