I

Introduction

Learning Communities in Research Universities

John O'Connor
New Century College
George Mason University

"Learning Communities combine the personal attention of a small college environment with the unparalleled resources of a large research university. Be part of a friendly, supportive, and intellectually stimulating community while you take advantage of everything the larger campus has to offer." Variations of these sentences can be found in scores of university web sites and admissions brochures. Though learning communities are commonly found in all types of institutions, a recent survey of the freshman year suggests that learning communities are, in fact, most prevalent in the research universities.[1] Research universities have the fiscal, physical, and personnel resources to offer a wide variety of learning communities. Their bureaucracy, multiple missions, and competitive culture, however, make it a challenge to sustain a learning community program. This monograph describes the rationale, forms, challenges, and opportunities for learning communities in research universities and the various forms they take. It includes brief case studies and snapshots of learning communities at some institutions that represent distinctive or model programs.

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What Are Learning Communities?

Learning communities have become widespread in part because the concept has proven so versatile and adaptable. The term is often used broadly: "a vision of faculty and students—and sometimes administrators, staff, and the larger community—working collaboratively toward shared academic goals in environments in which competition is de-emphasized. In a learning community, faculty and students alike have both opportunity and responsibility to learn from and help each other" (Angelo 1997, 3). Generally in this monograph, "learning communities" is used more specifically to refer to the purposeful restructuring of the curriculum by linking or integrating two or more courses during an academic term, often around an interdisciplinary theme, and enrolling a common cohort of students. A variety of approaches are used to build these learning communities, with all intended to restructure the students' time, credit, and learning experiences to build community among students, between students and their teachers, and among faculty members in different disciplines. Learning communities customarily rely upon pedagogies of student engagement, such as collaborative and cooperative learning, discussion-based seminars, problem-centered learning, and have the goal of fostering deep learning and social as well as academic skills.

Some learning community models radically alter the traditional curriculum and conventional teaching patterns. At The Evergreen State College (TESC), for example, learning communities take the form of quarter-long and yearlong, team-taught courses organized around interdisciplinary themes such as "Paradox of Progress," "Science of Mind," "Mirrors of Language," "Human Health and Development," and "Ecological Agriculture." Similarly, the first-year program in

New Century College at George Mason University (GMU) offers four interdisciplinary learning community courses taken sequentially—"Community of Learners," "Natural World," "Social World," and "Self as Citizen." Each learning community course at TESC and GMU carries eight to fifteen/sixteen credits and generally is a student's full-time course load.

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At research universities the predominant learning community models are less dramatic in their curricular restructuring. They work within the constraints of existing patterns of resource allocation and institutional structure in terms of the organization of the curriculum, the dominance of academic departments, faculty teaching loads, and class size. Many research universities have learning communities focused on the freshman year, most often taking the form of linked or clustered courses and/or Freshman Interest Groups (FIGs), which offer some coherence and integration while not upsetting the ideological and fiscal balances of power on campus. Linked or clustered courses typically link general education courses with skills courses, such as English composition. The general education course is often a large lecture class taught in the conventional manner with one or more sections of English composition available for students wishing to co-register for the two. At the University of Washington, an Interdisciplinary Writing Program links the expository writing course with a general education course. The students in the writing course become a subset, a community, within the larger general education course. The writing course activities and assignments grow out of the subject matter of the general education course.

A good cluster program might include shared course themes, texts, activities and assignments, co-curricular events, and performance objectives. In the best programs, pedagogical approaches are reinforced in each class, syllabi reference each course in the cluster, and office hours are coordinated. At Georgia State University, thirty freshmen learning communities enrolling approximately 750 students use the cluster model with up to five courses. A typical Freshman Learning Community at Georgia State includes the student orientation course, an English composition course, and three additional courses from the core curriculum that are centered on the learning community theme. An example of a cluster is "Communication, Media, and Society," a fourteen-credit linkage of courses in speech, composition, film, sociology, and new-student orientation. A distinctive feature of the program is the development of a "perspective" course that addresses institution-wide education outcomes.

The other common model at research universities is the Freshman Interest Group (FIG) that typically links two or three courses through co-enrollment. Students also co-register for a weekly seminar, often led by a senior student or a student affairs specialist. Generally, the weekly seminar is the opportunity for students to make connections among the classes, but the seminars can also vary widely in purpose. The course instructors may or may not be involved in—or even aware—of the linkages. Many of these seminars are focused on orientation to college and personal adjustment issues; others are focused on building specific academic abilities such as research, technological skills, or community service. At the University of Oregon, the FIG seminar enrolls a group of students with a common interest who are also enrolled in two or three first-year courses together.

For example, the environmental science learning community includes geography and environmental science courses and "College Connections." At Washington State University, the freshman seminar focuses on research skills. The FIG model is useful when one of the linked courses is a large lecture with a subset of students in the learning community. The instructor of the lecture course may be very supportive of the learning community program but often does not have the time or the appropriate audience to make the links explicit during his or her lecture. The links are then explored in the seminar.[2]

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Another frequent kind of learning community at large research universities is living and learning programs or residential colleges. Some of these programs extend curricular learning communities through integrative experiential and co-curricular learning. For others, the curricular connections are not as explicit in these settings, with the co-curricular programming and opportunities building community. Nevertheless, the cultural gap between academic and student affairs, especially at research universities and most notably between housing officers and faculty members (even the language defining these groups reflects the differences), makes integration of learning and community a continuing challenge. Nevertheless, many of these programs have successfully survived for many years and others continue to develop.

The 1960s was a period of rapid growth of living and learning programs as universities began to face the enrollment growth of the baby boom, the changing demographics of the student population, and creative responses to the challenges of *in loco parentis*.[3] The large, public research universities adapted the house model of Oxford and the elite Ivies to their conditions (Ryan 1992, 26–35; Ryan 2001; Schoem forthcoming). For example, the Residential College at University of Michigan, begun in 1967, is a liberal arts degree program with about 900 students and sixty faculty whose mission is to challenge students to take the initiative in shaping their own education and to engage with the university community as well as the outside world. The four-year, living-learning community offers an innovative interdisciplinary curriculum and links students' classroom experiences with intellectual, artistic, social, and cultural activities in the residence hall. Similarly, the Lyman Briggs School (LBS) is a residential learning community at Michigan State University with approximately 1,500 students devoted to studying the natural sciences and their impact on society. More than thirty-five years old, LBS encompasses laboratories, classrooms, student residences, a dining hall, and a convenience store under one roof. James Madison, also at Michigan State, Collins at Indiana, and Unit One at the University of Illinois are other examples of living learning programs that began during that period and continue to operate today.[4]

The appropriate learning community model is a local decision. It depends upon many things, including the purpose of the learning community program, student enrollment patterns (e.g., full- or part-time, freshmen or upper-level), residential or commuting students, participating faculty and the teaching loads, the flexibility of academic support staff such as admissions and advising, budget lines and authority, and—of course—local culture or milieu. Reflecting its highly decentralized structure, for example, Iowa State University has each college

develop its own form of learning community, some with a residential component. More than forty-five different learning communities from six of the colleges enroll more than 2,000 students. They share a common emphasis on peer mentors, faculty development, and assessment. The administration of the learning communities began as an informal committee and has gradually moved into the formal academic structures at the university. David Schoem's description in this monograph of the various learning communities at Michigan is a more detailed example of how the concept has been modified and developed to serve multiple purposes on another complex, decentralized campus.

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History of Learning Communities in Research Universities[5]

The history of learning communities can be seen as a recurring attempt, with cycles of expansion and retrenchment, to fashion a coherent, integrative education within an increasingly specialized and departmentalized institutional culture. The idea of learning communities as a restructuring approach originated early in the twentieth century in research universities with the establishment of the Experimental College at the University of Wisconsin under the leadership of educational visionary Alexander Meiklejohn. Meiklejohn lived at a time when the research university and academic departments were gaining ascendancy. At the same time, the elective system was becoming widespread, giving students wide latitude to decide what general education courses they wished to take. Meiklejohn thought the structure and values of the emergent research university were becoming antithetical to the task of preparing students for democratic citizenship. He recognized that the division of the curriculum into smaller and smaller units of credit and the growth of specialized academic departments as critical structural issues would ultimately drive not only relationships between students and faculty but also the curriculum. He predicted that narrow departments would make it difficult to raise complex interdisciplinary issues, and the fragmented nature of the curriculum would frustrate committed teachers trying to create a sense of deep engagement and community in their classrooms. The lower-division general education program, the key arena for promoting citizenship skills and habits of the mind, would, Meiklejohn foresaw, become no one's concern.

The solution, he thought, was to establish a different kind of lower-division education model that was a program, not a collection of courses, with a serious focus on building judgment and a unified "scheme of reference" for democratic citizenship. The Experimental College was organized into a team-taught, two-year curriculum. The first year focused on roots of Western Civilization, the so-called Athens curriculum. The second year focused on American Democracy, moving from its origins to current issues. The students' academic and social lives were integrated since the students lived together in Adams Hall. The pedagogy of the Experimental College was distinctly modern, based upon experiential learning, writing-intensive, discussion-based seminars, and close student-faculty interaction.

Although neither the Experimental College at the University of Wisconsin (1927–32) nor its successor at the University of California-Berkeley (1965-69),

led by Joseph Tussman, were long-lived, their impact was substantial on future learning community innovators who strove to situate learning communities in the distinctive culture of research universities (Meiklejohn 1932, Tussman 1969). The stand-alone, degree-granting college model did not appear to be viable. Attempts during the past decade at Alabama, Arizona, and George Mason to create independent, experimental colleges seem to reconfirm the difficulty of creating a fully stand-alone unit. Nevertheless, some learning communities have a distinct college identity while formally reporting to a traditional college, e.g., Lyman Briggs as a college of Natural Resources College at Michigan State University and the Residential College in the Literature, Science, and the Arts College at the University of Michigan.

In the mid-1970s the next major chapter in curricular learning communities in research universities opened with the work of Patrick Hill at State University of New York at Stony Brook (SUNY-Stony Brook). Deeply schooled in the work of John Dewey and committed to undergraduate education, Hill closely followed the education reform efforts of the 1960s and early 1970s with a keen eye to what might work in a major research university such as Stony Brook. Aware of the Meiklejohn-Tussman legacy, Hill thought their alternative of building a separate college within the research university was inherently unviable. He recognized that various types of (richly-funded) communities already existed at research universities, but he had an interest in a different type of community, one that both reached beyond traditional academic departments and included students. His larger agenda, like Meiklejohn's and Tussman's, was around democratic citizenship and inclusive diverse communities connected to the real world. Hill's solution was the Federated Learning Community model. Rather than team-taught, interdisciplinary courses, Hill developed "federations" by identifying a common theme among existing courses such as "world hunger." An integrating seminar became the vehicle for making the linkages among the existing courses that fit under the thematic frame. The teacher of the seminar was a "master learner," who attended the other courses and modeled the process of finding connections in the learning community course cluster. The universities of Maryland and Tennessee and a number of other research universities emulated the model.

Learning communities received a boost in the mid-1980s with the many reports and calls for greater student involvement and attention to community on campus. The context for these reports was attention to accountability spilling over from the 1983 *Nation at Risk* report on K-12 education, concern about a new generation (gen-x) of seemingly disaffected and apathetic students, and debates over curricular coherence and general education. For many current leaders in both academic and student affairs, the first mention of "learning communities" comes from the 1984 National Institute of Education report, *Involvement in Learning: Realizing the Potential of American Higher Education,* which recommended "Every institution of higher education should strive to create learning communities, organized around specific intellectual themes or tasks." The report went on to note, "the larger the institution, the more critical these niches are in providing a meaningful academic identification for students.

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Effective learning communities have a number of distinctive features:

- They are usually smaller than most other units on campus
- They help overcome the isolation of faculty members from one another and from their students
- They encourage faculty members to relate to one another both as specialists and as educators
- They encourage continuity and integration in the curriculum
- They help build a sense of group identity, cohesion, and 'specialness.' (33)

Conditions for research universities have changed dramatically over the past fifteen years.

About this same time, Alexander Astin, an influential member of the committee that wrote the *Involvement in Learning* report, emphasized the "value added" by colleges to student learning. Astin focused on the importance of students engaging in their own learning and the benefits of living on campus, participating in out-of-class activities, and bringing together student peers, staff, and faculty, noting that "small subgroups of students . . . characterized by a common sense of purpose . . . can be used to build a sense of group identity, cohesiveness, and uniqueness that encourage continuity and the integration of diverse curricular and co-curricular experiences" (Aston 1985. 161). At this same time, the concern about student involvement and community lead to the formation of Campus Compact in 1985, and Frank Newman's report, *Higher Education and the American Resurgence* by the Carnegie Foundation for the Advancement of Teaching, which frequently refers to and builds upon the *Involvement in Learning* report.[6] Also during this period, the Washington Center for Improving the Quality of Undergraduate Education was formed at The Evergreen State College. The Washington Center is a state-funded, public service consortium of two- and four-year colleges and universities in the State of Washington. Among its commitments to undergraduate education has been the support and promotion of learning communities. These efforts have led to the Center becoming a national resource and clearinghouse for the learning community movement.[7]

Why the Current Need and Appeal for Learning Communities?

Conditions for research universities have changed dramatically over the past fifteen years. Rising public accountability, changing student demographics and high school preparation, an increasing variety of undergraduate professional degrees, and continuing fiscal pressures and rounds of capital campaigns are just some of the forces making research universities turn their attention to their teaching missions. Especially during the past five years, learning communities have grown significantly in research universities. In a 2002 survey by The Policy Center on the First Year of College, only 21.7 percent of the research intensive and 18 percent of the research extensive schools that were surveyed reported that they had no learning communities.[8] The development and expectations of learning communities varies on each campus, but most commonly they address:

- the values and coherence of undergraduate education,
- widespread concern about community on campus, and
- increasing interest in faculty development for teaching and learning.

Undergraduate education. Research universities frequently face serious disagreements about what must be required in undergraduate, particularly general, education. These differences reflect a healthy questioning about what a college education should be; they also reflect the pressures of internal accounting methods and departmental resources and staffing. The growing acceptance of various forms of active and collaborative learning and congruent innovations such as first-year experience, writing-across-the-curriculum, computer-mediated coursework, service-learning, problem- or inquiry-based learning, and diversity initiatives have also been significant factors in the rise of learning communities.

In the late 1990s, two reports focusing on research universities, and numerous resulting articles and conference presentations, highlighted the importance of these influences and intensified the interest in learning communities. In 1997, the National Association of State Universities and Land-Grant Colleges (NASULGC) published a series of monographs sponsored by the Kellogg Foundation. *Returning to Our Roots* describes the gap between the teaching and research missions with the resulting change in faculty roles and rewards and neglect of undergraduate education.[9] The report challenges the distinctiveness of a university general education by pointing to research that shows, "the difference in net first-year gains in reading comprehension, mathematics, and critical thinking between students in two- or four-year colleges was 'trivial and nonsignificant'." In addition, similar studies show that admissions selectivity seems to make little difference in students' growth in critical thinking skills. In a recent summary of this research, Ernest Pascarella notes that "colleges and universities that are particularly potent in terms of developing intellectual talent are characterized more by what they implement programmatically than simply by the level of intellectual talent they can enroll" (Pascarella 2001, 21-22). Thus, the challenge and the opportunity, given the range of resources at research universities, were to develop programs that intentionally addressed student learning.

In 1998, the Boyer Commission on Educating Undergraduates in the Research University published *Reinventing Undergraduate Education: A Blueprint for America's Research Universities*, asserting that the nation's 125 research institutions were placing more emphasis on research than teaching, and setting forth an Academic Bill of Rights—elements of a quality education that every undergraduate at a research university should be guaranteed. Underlying the list of elements is the assertion that "the research university owes every student an integrated educational experience in which the totality is deeper and more comprehensive than can be measured by earned credits."

A 2002 follow-up study, *Reinventing Undergraduate Education, Three Years After the Boyer Report*, notes that "developing or expanding freshman seminars and developing or expanding learning communities or block scheduling programs are two of the most frequently cited actions research universities have taken in the last three years to improve undergraduate education" (12). The survey supports The Policy Center on the First Year of College data that learning communities are commonplace for at least some first-year students at research universities, but observes that "most efforts have been directed at the best students; the challenge for almost all is to reach a broader spectrum of students."

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It also notes that more than one-third of the block scheduling programs have no or not much coordination among the faculty. The new report observes that undergraduate research, inquiry-based learning, and collaborative learning are rapidly-expanding teaching methods, but does not address whether the "integrated educational experience . . . is deeper and more comprehensive"—the overriding challenge of the initial report. James Anderson's description in this monograph of the Hewlett Initiative offers an example of how to connect a research university's mission with the undergraduate educational experience. By focusing its learning community effort on "inquiry-guided learning" and a "culture of evidence," the North Carolina State program is increasing the number of faculty and departments involved in the program.

The locus of much of the learning community effort has been in the first semester, because of the concern about retention. Current students enter college with a great range of preparation, many are first-generation college students, and many work. Self-identification as a college student; clear, appropriate expectations; and a sense of fitting in are not natural or automatic feelings for these students. Vincent Tinto's research on retention in learning communities has led to five important findings that explain their higher retention rates than in the conventional first-year experience: (1) students tend to form self-supporting groups that extend beyond the classroom, (2) students spend more time learning together both inside and outside the classroom, (3) quality of learning is enhanced, (4) students see themselves as more engaged in their learning and on their campus, and (5) students feel an increased sense of responsibility for their learning and for the learning of others (Tinto 1999, 8).

Along with meeting an obvious need for new students, first-semester learning communities generally are easier to develop. They can take advantage of the smaller class size of the usually-required freshman composition and the common student success seminar that addresses college transitions. SUNY-Stony Brook and University of Oregon were pioneers of this model. After the first semester, however, there is often not the small class base upon which to build a learning community, and the apparent need for student transitions is less. Nonetheless, learning communities can also serve various academic goals—e.g., professional studies, gateway courses, capstone experiences—and other student populations—from honors to at-risk students. Nancy Shapiro describes in this monograph how the University of Maryland's learning community program went from a retention and recruitment initiative to one that helps create a coherent, interdisciplinary curriculum and a solid foundation for work in the major. Learning communities can be a good antidote to the competitive, individualistic training of many honor students. They can create a supportive environment for at-risk students. They can also solve some of the structural problems of defining and administering interdisciplinary programs.

Campus community. In an oft-quoted passage from *The Uses of the University*, Clark Kerr stated, "the multiversity is an inconsistent institution. It is not one community but several . . . Devoted to equality of opportunity, it is itself a class society. A community, like the medieval communities of masters and

students, should have common interests; in the multiversity, they are quite varied, even conflicting. A community should have a soul, a single animating principle; the multiversity has several" (Kerr 1995, 14). Learning communities are often seen as an antidote to this fragmentation. Learning communities promote coherence, community, and a sense of common purpose in an institutional environment otherwise characterized by social and intellectual division (Gabelnick et al. 1990). As student retention, satisfaction, and academic success have become common concerns in universities, attempts to make the large university smaller and more responsive have fueled various efforts to create community and a college identity. Learning communities help achieve goals that cut across individual courses and departments, cross student and academic affairs borders, and connect the campus silos. As the curriculum can be more coherent and integrated through learning communities that make intentional and explicit the links among subjects, so community can be fostered by intentional student and faculty interaction with explicit attention to peer learning and integration of academic and social lives. According to Leon Gardiner, "community is not only a feel-good notion; it is empirically related to the educational impact of general education programs . . . Development of community—hence, effective outcomes for general education programs—involves relationships in three intertwined dimensions: among students, between faculty and students, and among faculty" (Gardiner, 1994). Later in this monograph, Karen Oates describes the integration of experiential and classroom learning to foster a more intentional community and a more coherent education. For that program to be successful, she points out that faculty and student interaction extends not only beyond the classroom but also beyond the semester or academic year and the campus environs.

Learning communities can be programs for learning to create and sustain community in a pluralistic democracy.

Living and learning programs have advantages in creating community and for integrating social and academic lives of students. Curriculum-based learning communities can adapt some features of residential programs by including various out-of-class activities—arts programming, visiting lectures, adventure or experiential learning—as well as some defining rituals or traditions, such as a semester-opening convocation, an online newsletter, and a showcase of student work at the end of the term. In large universities, despite the inevitable space crunches, study lounges or computer rooms can be reserved for the learning community to encourage greater group identity. Within the classroom, the challenge is to create a sense of group identity built upon shared experience and trust that also enables multiple perspectives, lively exchanges, and appreciative inquiry.

Research universities are often places of significant student diversity in race, ethnicity, class, and age. This diversity has educational potential but also can be a source of social tension. Gardiner cites research about the hostile campus environments for women and minority students (77–85). Learning communities can be programs for learning to create and sustain community in a pluralistic democracy. Attention to community can build trust among the participants so that difficult questions and different perspectives can be considered. Adrianna Kezar notes that "intergroup relations courses and learning

communities have been developed on the notion (and research illustrates) that purposively placing a diverse group of students together in a supportive environment leads to outcomes such as cognitive complexity, understanding human differences, appreciation for the aesthetic qualities of life, and position taking" (Kezar 1991, 31, citing D. Smith, *Diversity Works).*

Good collaboration takes time and effort; basic disciplinary differences in language, evaluation criteria, and status need to be recognized and discussed.

Learning communities should be diverse, reflecting our diverse society. They can be an effective formal structure for students to discuss differences in meaningful and safe ways by developing communication, conflict, and collaboration skills. Learning communities provide opportunities for students to develop the trust needed to engage difficult and controversial issues, to challenge one another, and to work through and with differences, finding common ground from which to address complex public issues. These opportunities can engage learners and build communities. Classroom and campus practices that recognize differences can lead to a greater understanding of complex community and contemporary citizenship issues. Learning communities are widely recognized as a fertile environment for leadership and citizenship education; Kenneth Bruffee writes, "a college education also has to help both neophyte citizens and community leaders to understand people who are less acquainted with the cultural traditions of 'our' civil society. Most of all, perhaps, we must help future community leaders understand the needs and fears that flourish along the cultural boundaries of their constituents . . . Learning to negotiate boundaries among cultures entails becoming aware of the implications of that solidarity and loyalty in concrete and, occasionally, distressing detail" (Bruffee 2002, 13).

Faculty development. Learning communities also interest research universities for their faculty development potential. Increasingly, calls for full-time and senior faculty to teach undergraduates, even first-year students, are an opportunity to leverage the experience and knowledge of those faculty members to learn from each other and mentor junior faculty. When two or more faculty members collaborate on developing linked or integrated courses, both curricular and pedagogical issues arise. Younger faculty members can reenergize senior faculty, who in turn can offer specific and contextualized advice to junior faculty facing classroom challenges. Mid-career faculty who are looking for variety or new challenges can find stimulation and fresh opportunities by working outside their traditional disciplinary and departmental framework. At IUPUI, the regular, informal meeting of faculty teaching teams, called "pods," results in more collegial conversations and interactions across traditional boundaries and increased opportunities for presentation of work to university and national audiences (Evenbeck et al. 1999).

Faculty working across disciplinary and departmental boundaries on developing and teaching a learning community can share current knowledge about a field at a level of detail that is often missing in review essays or one-shot faculty seminars. This cross-fertilization of knowledge-bases, methodological perspectives, and kinds of evidence can lead to new knowledge formation. This collaborative course work can lead faculty members into other forms and occasions for partnerships, such as new research problems and new courses in a

subject area. Good collaboration takes time and effort; basic disciplinary differences in language, evaluation criteria, and status need to be recognized and discussed. These differences can also be effectively dramatized for students who can learn about different ways of knowing (Eby 2001).

Learning communities are also an opportunity for faculty members to connect more deeply to their universities by working with faculty, professional staff, and graduate students outside their department or discipline. Librarians, for example, can be effective partners in thinking through integrative activities and assignments that bridge subject matter differences and reinforce fundamental skills. Professional staff in academic support offices or student affairs know about resources on campus of which faculty often are not aware. Graduate students and part-time faculty account for much of the lower-division teaching in research universities. In learning communities, they can be better connected to the campus community and participate more equally in faculty development. For graduate students in particular, learning communities offer opportunities for closer-grained mentoring by experienced faculty. Using faculty development workshops to explore the differing perspectives of faculty from the liberal arts and the professional schools, as well as the professional staff, can help each other become more aware of their own assumptions and biases. This peer learning combined with individual and group reflection can also be a model for collaborative student learning. Jodi Levine Laufgraben describes in this monograph how Temple University went through stages of faculty development as it expanded and revised its program. The major shift has been from involving new faculty to "continuously engag[ing] our returning faculty in conversations."

Appropriately trained faculty and staff are very important for sustaining a learning community effort. So is the faculty reward structure.

Appropriately trained faculty and staff are very important for sustaining a learning community effort. So is the faculty reward structure. Faculty engaging in integrative learning community programs often do so after the tenure decision has been made. They recognize the workload in learning communities is often not in line with faculty reward systems. In research universities, collaboration and teaching often do not match the overriding criterion of individual research in tenure decisions. Many institutions are reluctant to modify the established criteria that emphasize traditional, solitary, disciplinary work, whether it is teaching or research. Too often, after the initial start-up of learning communities by the innovative faculty who are the early adopters of an educational reform (writing-across-the-curriculum, information technology, service-learning, etc.), the learning community program continues with part-time and contract faculty and graduate assistants. Among the inherent problems of using mostly non-full-time faculty are the turnover and the out-of-class commitments that can make collaboration and faculty development a greater challenge than usual. These challenges can be overcome by developing formal structures to support learning communities rather than by depending upon the dedication of a few individuals.

Compromises and Trade-offs

Research universities are places of great tradition and powerful innovation. Learning communities appeal to a range of faculty, administrators, and professional staff at research universities interested in change. But individuals and institutions face significant challenges in implementing the new priority of

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learning communities. These challenges include multiple missions, a history that emphasizes research and graduate training, large enrollments, a scale and size that fosters decentralization and departmental autonomy, the inadequate backgrounds of many students, a lack of resources, and an agenda driven by external factors such as national rankings and the generation of external funding.[10] In particular, the political economy distributes resources to the upper-division and graduate programs by running large freshman classes, especially when taught by graduate students and contract faculty. These contextual factors limit the viable models for learning communities in a research university and need to be considered when establishing a new learning community program. Learning communities must be a local creation reflecting the mission, tradition, curriculum, resources, and pockets of energy and interest on each campus. But there are some recurring issues and concerns.

Structures. The local organization of academic units can impact how learning communities are structured and administered. In highly decentralized campuses, such as Iowa State University and Texas A & M University, each college or school may develop its own form of learning community. While this model can flourish by adapting to the local culture and curriculum, it has powerful implication for faculty development, for student advising, and for continuing innovation. Some structural solutions have a separate cadre of full-time tenured faculty focused on undergraduate teaching, but this model often provokes considerable resistance. It seems a challenge to natural order, even though disciplines and departments are profoundly social constructs and faculty already identify themselves through a number of overlapping groups. An alternative model is the University College structure, e.g., at Indiana University-Purdue University Indianapolis (IUPUI), University of Wyoming, and University of Texas at El Paso (UTEP), that can foster a more common experience for a broader range of entering students, but often has limited faculty participation and significant challenges for financing faculty paybacks and counting student credits. In any case, learning communities need to find a structural anchor within the institution. Learning communities that depend upon the energy of individual efforts or one-time money tend to drift away with the tide of change.

Generally, learning community programs in research universities work within the dominant existing structures, with an individual coordinating the program. Many universities are adopting models that fit fairly easily within the existing structure and are not very costly, but they also have lower impact (Lenning and Ebbers 1999, 18). They have the least payoff in terms of student intellectual development, faculty involvement, and genuinely-felt community. For example, the model that links a large lecture course with freshman composition or a student-success seminar may reduce anonymity and encourage study groups in the lecture course, but the large-course lecturer struggles with trying to reach two audiences, those in the linked course and those who are not. In addition, the writing course often becomes another form of recitation section. This inequality can be compounded by who teaches each of these courses; senior tenured faculty, part-time faculty, graduate students, and professional staff hold different levels of

power and authority on research campuses, making genuine collaboration difficult.

The linked-course model is difficult to sustain after the first semester because of the reliance on the composition course or the freshman seminar. The FIG model shares many of the same problems. They are popular because they partially accomplish many of the transition and retention goals set for learning communities. Yet research universities have the size and resources to consider various forms of learning communities beyond the first year; advanced general education, gateways to the major, and synthesis courses are examples of prospects for innovative development. Many research universities have multiple learning community programs, a result of their large scale and multiple centers of interest. At the University of Wisconsin, for example, there are eight different kinds of learning community programs, some residence-based, some focusing on particular groups of students or majors. Learning communities might be self-selected or a thematic interest for a particular group of students; for example, the universities of Michigan, Wisconsin, Syracuse, and Georgia Institute of Technology have women in science learning communities. Professional schools have the focus to offer continued integration beyond the first semester, as in the Drexel Engineering Curriculum (tDEC). Florida State University has a music living-learning center. Community-based learning is the unifying theme for the Michigan Community Scholars Program and for the Civicus learning community at the University of Maryland. The University of Washington has interest groups for transfer students, a growing population in many public research universities.

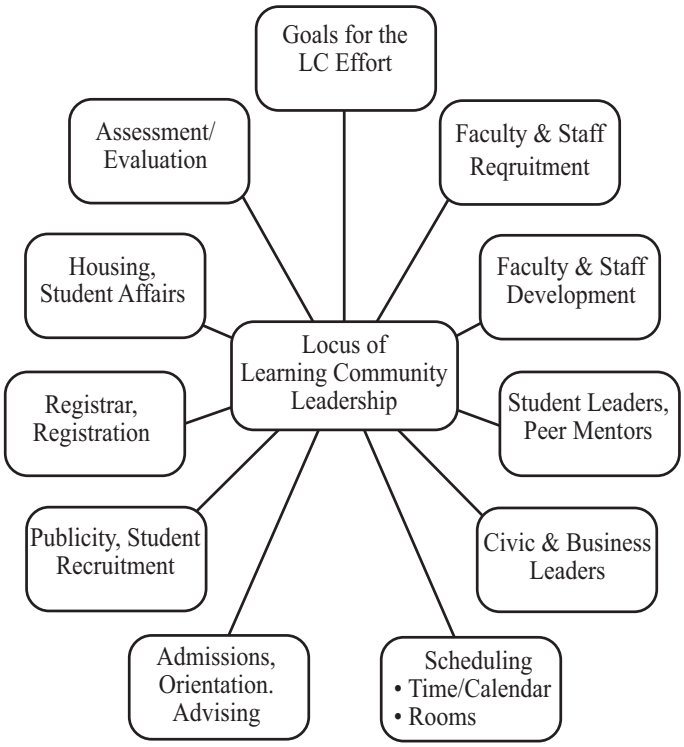
Many research universities have multiple learning community programs, a result of their large scale and multiple centers of interest.

Residential learning communities also have the advantage of continuing past the first semester of college, but the academic integration needs to be explicitly addressed. Residential life's priority is generally on community issues and order and harmony; academic affairs' priority is student learning, and critique and inquiry are prized. In balance they are a powerful combination, but time, energy, and trust are essential factors for a successful partnership.

Coordination and collaboration. Successful learning communities require the involvement of numerous offices on a large campus. Admissions and orientation help recruit students but also set expectations (e.g., "learning communities are fun"). Academic support offices—the registrar, advising, possibly the library and computing center—need to understand and support the initiative. Student information systems are now flexible enough to solve the many logistical problems of registering a cohort, but policies and procedures for the many exigencies that students encounter during a term need to be settled and communicated to a wide range of people. Many of these people are integrally involved in the more complex and expansive forms of learning communities. Student affairs and academic affairs should be partners in addressing the whole student and integrating curricular and co-curricular, or formal and informal, learning. For example, Syracuse has a learning community steering committee that includes representatives from each of the offices essential to a well functioning program.

Successful Learning Community Implementation[11]

Successful Learning Community Implementation requires extensive cross-unit coordination.



Every campus is likely to have a particular source of energy and resources that can provide an anchor for a start-up program.

Every campus is likely to have a particular source of energy and resources that can provide an anchor for a start-up program. It might be a women's studies program, or career services, or freshman orientation. The challenge is to move beyond the interested few or the individual office while retaining a focus for the project. For first-semester freshmen learning communities, the first-year experience program is a natural partner. Twenty-five percent of the first-year programs that responded to a recent survey of more than 1,000 institutions, reported linkages to learning communities.[12] For first-year programs, the admissions, orientation, and advising offices are essential partners. They are also valuable sources for identifying and training peer mentors. For learning communities that extend beyond the first semester or on highly decentralized campuses, centers for teaching and learning and for faculty development might provide the coordinating function. These centers can be an important source for new faculty involvement and training. Assessment offices are another valuable partner that can help refine program goals and objectives and how to measure them.

Learning communities are likely to be only one of a number of learning initiatives on campus. Instead of competing for the same dollars, faculty, and students, these programs should collaborate and reinforce each other. Service-learning, diversity programs, undergraduate research, leadership development, writing-across-the-curriculum, and problem-based learning are some of the initiatives that can work together to promote student learning and effectively use limited resources, whether they are dollars or people's attention. In many cases, the shared focus on active student learning becomes the bridge. Many of the programs can enrich each other, deepening the sense of community in learning communities, and extending the learning experience in the other programs (Schoem 2002).

The institutional justification for learning communities should drive the structure and the budget.

Cost. Cost is not usually an insurmountable barrier. Many programs started and are sustained without a new infusion of money or grants. Grants can help get a program started but they can also create a false sense of stability and set expectations for support that cannot be sustained. Iowa State University has made a persuasive argument that the money saved or gained through student retention is a deserved and adequate revenue source. Sometimes student affairs or residential life is seen as a source of income for curricular learning communities. In those cases, everyone should be clear about who is in charge and how conflicts will be mediated.

For many, the greatest cost challenge is internal accounting—what are the departmental paybacks or buyouts for faculty teaching a learning community that is not already part of the departmental curriculum or general education requirements? If the course is interdisciplinary or team taught, who gets the student "FTE" if that is the unit of measure or accounting? These questions often explain why the linked course rather than the coordinated course model prevails in research universities. Programs other than learning communities also have a stake in the eventual solution to these questions.

Nonetheless, some real costs are involved in starting and sustaining a learning community program. Oftentimes the costs can be distributed across various offices on campus, if there is a shared sense of purpose. Start-up costs include planning meetings and external consultants to stimulate conversation and provide advice. Assessment and evaluation resources should be considered a start-up cost as well. Recruitment of prospective learning community students is essential and too often a hard-earned lesson; these costs may include a special brochure and web pages, but they also should include training for orientation of staff and academic advisors. In larger programs, classrooms, labs and study lounges, and residence halls may need to be renovated or refitted. Faculty and staff development should include a semester or annual retreat.

The institutional justification for learning communities should drive the structure and the budget. If student retention is the driving force for learning communities, then faculty members should be willing to work closely with student affairs and be proactive in meeting with students beyond class time. If curricular coherence is paramount, the faculty should be knowledgeable about courses and subjects outside their discipline and be willing to spend considerable time finding common ground upon which to build collaborations with others outside their field of expertise. Most programs have multiple and changing goals for learning

communities; thus, programs should be varied and continuously updated (Oates and O'Connor 2001).

Assessing Learning Communities in Research Universities

Overall, learning community assessment is in an early stage. Studies and surveys have been undertaken at many levels and with different foci (Heller 1998; Mullen 2001). Results are fairly consistent about the easy things to measure such as student achievement (as measured by grades), student satisfaction and retention, but little is known in a more sophisticated way about student learning outcomes. Pedagogical approaches within learning communities have been assessed, as have faculty satisfaction, involvement, and other professional development factors. Qualitative and quantitative methods from statistical analyses to Classroom Assessment Techniques have been used to gauge the overall effect of the learning community approach. Generally speaking, these assessment studies have been limited in scope and vary widely in quality (Heller; Mullen). The National Learning Communities Project has produced two new monographs that provide the most recent assessment information: *What We Know Now about Learning Community Research and Assessment* and *Doing Learning Communities Assessment: Five Campus Stories* (Taylor et al. 2003; MacGregor 2003).

Tinto's research demonstrated learning community effectiveness, confirming that students in learning communities persist in school and learn more.

Vincent Tinto's assessment of learning communities was the earliest and remains the most comprehensive. Focusing on both research universities and community colleges with large commuter populations, Tinto's research demonstrated learning community effectiveness, confirming that students in learning communities persist in school and learn more. "Furthermore, they learn from each other and develop a sense of responsibility for the learning of others" (Tinto et al., 10). Tinto painted a complex picture of the many factors that contribute to highly effective learning environments. While his previous work suggested that "student involvement" was key, the learning community study carefully described how this could be fostered through contexts for collaborative learning. The research produced the dramatic insight that involving and academically challenging campus environments could be purposefully built, even on commuter campuses and within the constraints of current budgets (Goodsell and Tinto 1994).

Recently the National Survey of Student Engagement (NSSE) has attempted to assess the extent to which students are engaged in empirically derived effective educational practices and what they gain from their college experience. The scope of NSSE is much broader than learning communities, although the survey can be useful as another indicator of how learning communities are working. The NSSE 2002 report, "From Promise to Progress: How Colleges and Universities are Using Student Engagement Results to Improve Collegiate Quality," gives schools an idea of how well students are learning and what they are putting into and getting out of their undergraduate experience. Learning communities are identified as a program that works: "Nationally, 29 percent of first-year students and 22 percent of seniors report participating (or planning to participate) in some type of learning community . . . Learning communities are positively related to all of the five [NSSE] benchmarks, diversity experiences, student gains in personal and social development, practical

competence, general education, and overall satisfaction with the undergraduate college experience. This is true for both first-year and senior students, though the effects are greatest for first-year students (as would be expected as they are more likely to have had the experience recently) . . . First-year students at Doctoral Extensive and Masters' institutions have the highest participation rates (about 30 percent). Among the students most likely to gravitate to learning communities are:

- Women
- Full-time students
- Students living in Greek housing
- Native students (contrasted with transfer students)
- International students
- Students majoring in health-related fields; education; ethnic, cultural and area studies; park, recreation and sports management; agriculture; and liberal/ general studies."[13]

A number of universities—Temple, Indiana State, Hartford, and Iowa State—have developed more specialized, local assessment surveys of student performance in learning communities, often building upon national surveys such as the College Student Experience Questionnaire (CSEQ), the Your First College Year survey (YFCY), and the National Survey of Student Engagement (NSSE). These nationally-available surveys as well as locally developed questionnaires attempt to measure the "value added" by learning communities and are still being refined. They build on earlier work by Jean MacGregor using the Measure of Intellectual Development (MID) that showed that, in learning communities where an intentional goal was more integrated learning, "students generally made a significant and unusual leap in intellectual development during their learning community experience. Students in learning communities in the Washington Center study exited as early 'Multiplists,' (3.1 to 3.5) significantly more advanced developmentally than their counterparts in comparison groups. This indicates that the meanings these learning community students are making of their academic environment are more typical of college juniors and seniors" (MacGregor 1991). Initial results presented at national higher education conferences confirm other studies of the positive effects of collaborative and active learning.

These nationally-available surveys as well as locally developed questionnaires attempt to measure the "value added" by learning communities . . .

The challenge for surveys like the CSEQ, NSSE and YFCY is that they are student self-reports. In addition, as Victor Borden has observed, "as we improve our capacity to measure a wide array of student outcomes, it becomes increasingly important that we develop ways to assess *how* our programs and processes work to increase desirable outcomes and decrease undesirable ones. Such assessments will generally take the form of qualitative inquiries into the experiences of students, faculty, and staff in these programs" (Borden and Rooney 1998).

A growing interest nationally is in portfolio assessment, "that is, examining what students actually produce in the course of their education rather than relying on tests and measures that are disconnected from the classroom experience. Though harder to quantify and use for comparative purposes than standardized tests, actual examples of student work possess greater 'ecological validity' than test results in the sense that they are direct products of the educational experience, not artifacts of contrived testing methods and situations" (Borden and Rooney).

The existing literature suggests that learning communities can be a powerful force for faculty development and renewal . . .

The next step is electronic portfolios, which provide an easily accessible body of work to track, share, learn about, assess, and identify pedagogies, curricula, research, and practices that foster learning community collaborations. Because electronic portfolios can be open and accessible to all constituents and are continuously updateable, they offer a feasible means to learn continuously from ongoing efforts and enable communication across distance and time. Electronic portfolios are potential equalizers between members of a learning community: a common, open platform for sharing and exchanging and assessing their collective work and challenges. The conversations and decisions about what is included in the portfolio and the level of openness in the descriptions of activities will help drive the collaboration by all parties. A number of schools with significant learning community programs are exploring the use of electronic portfolios. IUPUI, Georgia State, and Portland State were part of the Pew-funded Urban Universities Portfolio Project and have considerable experience with going public and using institutional electronic portfolios for assessment.[14] The Portland State experience with electronic portfolios is discussed in a related monograph, *Doing Learning Communities Assessment: Five Campus Stories* (MacGregor 2003).

While there is considerable anecdotal evidence of the positive effect of learning communities on faculty members, only a few formal research studies have examined the impact on them. Most of the existing studies related to faculty members who teach in learning communities are dissertations that focus on faculty members in team-taught learning communities in Washington state (Taylor et al.), where there is a long-standing statewide infrastructure supporting the learning communities through the Washington Center for Improving the Quality of Undergraduate Education.[15] The existing literature suggests that learning communities can be a powerful force for faculty development and renewal; collaboratively planning and teaching in a learning community builds new collegial relationships among faculty members and for learning from one another about disciplinary perspectives and about effective teaching and assessment methods as well. These studies also reveal the importance of institutional support through careful, long-term faculty development efforts.

Conclusion

The reasons for starting and sustaining a learning community program at a research university vary widely. Permutations on the basic models and structures reflect local conditions and offer the possibility for continued innovation. A learning community program is not an end itself, rather it is a means to achieve other goals; for example, to make the scale of a research university more human, to prepare students for a world of difference and change, to respond to the reshaping of knowledge and research into effective learning. The snapshots section of this monograph, in particular, offers examples of various goals—from reforming general education and establishing an academic culture among entering students to developing community and encouraging greater campus cohesion—addressed by learning communities. While local conditions may create unique programs, many lessons can be learned from other campuses. The following case studies and snapshots offer information and insights about learning communities in the research university.

Endnotes

All web pages referenced in this article were accessed on April 26, 2003.

1. www.brevard.edu/fyc/ruproject/essay.htm. What and who defines a research university varies. The Association of American Universities (AAU) has sixty-two member institutions selected by invitation; The Boyer Commission on Educating Undergraduates in the Research University lists 125 universities; the Carnegie Foundation for the Advancement of Teaching lists 261 Doctoral/Research Universities in its 2000 report.
2. For more information about definitions, models, and learning communities structures see learningcommons.evergreen.edu, Gabelnick et al, Lenning and Ebbers, and Levine and Shapiro.
3. www.naspa.org/netresults/article.cfm?ID=71&category=Forum.
4. www.bgsu.edu/colleges/as/clc/rlcch/. This Bowling Green State University website has descriptions of many living and learning programs.
5. This history is deeply indebted to Barbara Leigh Smith's work on this topic, in particular her 2001 essay in *Peer Review*; she has written an extended history of the learning community movement in her forthcoming Jossey-Bass book *Learning Communities: Re-forming Undergraduate Education*.
6. The Carnegie Foundation's concern for campus community continued with *College, The Undergraduate Experience in America* (1987) by Ernest Boyer, the Foundation's President, and the 1990 report *Campus Life: In Search of Community*: "What is needed, we believe, is a larger, more integrative vision of community in higher education, one that focuses not on the length of time students spend on campus, but on the quality of the encounter, and relates not only to social activities, but to the classroom, too. The goal as we see it is to clarify both academic and civic standards, and above all, to define with some precision the enduring values that undergird a community of learning . . . And perhaps it is not too much to hope that as colleges and universities affirm a new vision of community on campus, they may also promote the common good in the neighborhood, the nation, and the world."
7. www.evergreen.edu/washcenter/. "Learning Communities: A Convergence Zone for Statewide Educational Reform," in *Re-Inventing Ourselves.* Barbara L. Smith and John McCann, eds. (Bolton, MA: Anker, 2001).
8. From Policy Center on the First Year of College: "Learning Communities are Central to New Efforts. Both residential and nonresidential universities are making learning communities—cohort enrollment in a few or all classes, perhaps supported by residence life or other cocurricular design—central to new and expanded efforts to improve the first-year experience. A general goal seems to be what one university called an effort to reduce the university to human scale for new students, with additional benefits of increased retention, better social indicators, and disciplinary/interdisciplinary exploration. Some of these efforts, such as those at Temple University, go back a decade or more. More often, the learning communities approach has taken hold only in the past two or three years. *Examples: Georgia State, Wisconsin, Hawaii, Syracuse, Illinois, Utah, Iowa State,"* Cutright, Marc. "Research Universities and First-Year Students: Now for the Good News" Policy Center on the First Year of College, April 2002.
9. www.nasulgc.org/Kellogg/kellogg.htm.
10. www.sunysb.edu/Reinventioncenter/resfresh.html.
11. Adapted from "Learning Community Models," learningcommons.evergreen.edu 03_start_entry.asp#What_are.
12. www.sc.edu/fye/research/surveys/survey00.htm.
13. www.iub.edu/~nsse/html/report-2002.shtml.
14. www.imir.iupui.edu/portfolio.
15. For a history of this effort see Smith 2001.

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