

# **Assessing Learning Communities at Indiana University– Purdue University Indianapolis: Comprehensive Approaches, Leveraging Results, Lessons Learned, and Remaining Challenges**

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## **Abstract**

*Comprehensive assessment activities are often necessary to plan, implement, and continuously improve learning communities. This article presents some major strands of learning community assessment such as the use of mixed methods, the increasing need to assess multiple outcomes given the complexity of learning communities, faculty involvement, and mechanisms for leveraging assessment results for planning and improvement. The authors describe assessment strategies implemented at a large, urban, public institution in an effort to articulate how assessment reports have been used to sustain and improve the effectiveness of learning communities. The authors also discuss lessons learned from assessment and some remaining challenges.*

Comprehensive assessment activities are often necessary to plan, implement, and continuously improve learning communities. Learning communities have become almost ubiquitous aspects of the higher education landscape and thus, assessment activities have been designed not only to improve learning community initiatives but also to demonstrate the value of programs (Tinto, 2003). Taken together, past research suggests that participation in learning communities has been linked to a variety of value-added educational experiences. Previous research has shown that participation increases student engagement and persistence (Oates and Leavitt, 2003). In a multiple institutional study, Zhao and Kuh (2004) found that participation in learning communities was positively associated with a variety of educational outcomes such as academic performance, academic effort, academic integration, faculty-student interactions, engagement in diversity-related interactions, enrollment in classes that emphasize higher-order thinking skills, and satisfaction with college experiences. Stassen (2003) conducted an investigation into the effects of different levels of living-

learning communities (e.g., mechanically linked courses in comparison to more faculty coordinated, resource extensive models) and found that even basic learning community designs had positive impacts on academic performance, one-year retention, and academic integration (e.g., contact with peers around academic work, positive academic behaviors, and hours devoted to studying).

The assessment and evaluation of learning communities must take into account the multiple academic and social interactions at work in these environments (Ketcheson and Levine, 1999). It is notable that learning communities take a variety of forms, ranging from mechanical linkages between courses to theme-based linkages, which involve active coordination between faculty and students. Additionally, learning communities often have a variety of implementation strategies and offer a diverse array of approaches, including the following: interdisciplinary, theme-based, service learning-focused, intentional student-faculty and student-student interactive, and collaborative work between students and faculty. Thus, the term “learning communities” encompasses a wide variety of entities, and each type is a complex synergy of experiences. As a result, learning community assessment strategies must necessarily be comprehensive, multi-faceted, and inclusive of multiple frameworks in an effort to systematically assess complex outcomes. MacGregor (2002) suggests that assessment of learning communities should consider multidimensional impacts, including effects on faculty, students, and institutions.

In addition to taking into account the multiple levels of impacts, learning community assessment planners should move beyond merely measuring program impacts on student retention to investigating effects on grade point averages, student-to-student interaction, student-to-faculty interaction, learning objectives, attitudes, and behaviors (Barefoot, 2000; 2001). In other words, learning community programs are typically designed to improve student learning and have multiple outcomes. As such, Simpson (2002) recommends that a variety of qualitative and quantitative instruments should be employed to facilitate understanding regarding “why” programs and interventions produce specific outcomes. With this in mind, an underlying program theory provides the foundation for outcomes assessment and serves to lend insight into exactly what program components need to be changed to achieve desired outcomes. A myopic focus on specific outcomes such as retention rates may not be sufficient for making substantive improvements based on assessment findings.

Although there are many studies that employ multiple methods in an effort to examine student academic performance, retention, and perceptions of their experiences, Taylor, Moore, MacGregor, and Lindbland (2003) found that there are relatively few that examine student intellectual development and learning gains. Additionally, these authors contend that assessment efforts often lack investigations into the administration and implementation of learning communities (e.g., peer mentor roles, coordination among instructional team members, how university structures and policies affect learning

community innovations). In order to facilitate ongoing learning community improvement and to enhance understanding of program outcomes as well as implementation processes at Indiana University–Purdue University in Indianapolis, we have developed comprehensive assessment frameworks and approaches. This article describes the components of our assessment strategies, presents results from our assessment activities, and articulates how assessment results are used to continuously sustain and improve programs. We also propose, as the learning community movement continues its momentum across the higher education landscape, that some critical assessment strands need further consideration, such as improving mechanisms for linking data to action and parsing out what program components lead to particular outcomes.

## **Learning Communities at IUPUI**

Indiana University–Purdue University Indianapolis is a four-year, public institution with an enrollment of approximately 30,000, of which approximately 22,000 are undergraduates. IUPUI was formed in the capital city from a consolidation of Indiana University and Purdue University programs in 1969, and is the third largest university in Indiana. The institution offers more than 185 academic programs from associate degrees to doctoral and professional degrees. Most IUPUI students commute to the campus, and the majority of entering students are first generation.

Our large, urban, public institution is a microcosm of the levels and types of learning communities offered in the broader undergraduate educational landscape. At IUPUI, we offer a variety of learning community experiences ranging from stand-alone first-year-experience courses to theme-based block scheduled learning community sections. The IUPUI Learning Community Program also serves students from a diverse array of academic backgrounds. Enrollment in learning communities is required by most undergraduate degree-granting units, which have developed their own one- to three-credit versions of an extended orientation format. Approximately 100 sections with a maximum enrollment of 25 students are offered each fall semester. Currently, 73 percent of first-time freshmen are enrolled.

The IUPUI Learning Community Program began in 1995 with seven sections. The first few years of the program's existence were challenging; in addition, early retention and GPA data indicated that students did not benefit from enrolling. The faculty were also largely unhappy with the model. Many complained about student attitudes and their lack of satisfaction with the program. Changes needed to be implemented quickly or the program would die in its infancy.

By the end of the first year, major changes were implemented. The most significant was the creation of the instructional team model, which has become the signature piece for the IUPUI Learning Community Program for the last 10 years. All IUPUI learning communities are taught by an instructional team composed of the faculty

member who is the team leader, an academic advisor, a librarian, and a student mentor. Although during the early years, the IUPUI Learning Community Program offerings were limited to one-credit, stand-alone first-year seminars or seminar sections linked to a three-credit discipline course, the students were, nevertheless, participating in a community of learners and were surrounded by a community of support. The addition of the advisor, librarian, and student mentor to the team also ensured that the faculty member had support in helping students conquer all of the institutional barriers in the transition process. One faculty member's story serves to illustrate the point. On the first day of class, the faculty member asked his students to write a short description of one problem that they had faced during their first week of classes. As he rifled through the stack of identified problems, he suddenly realized to his utter embarrassment that only one of the problems concerned academic issues. Worse, he only knew how to suggest a solution for that one problem. To his immense relief, however, the other members of his instructional team proceeded to address the remaining problems identified by the students.

By the second year, the assessment of the learning community sections indicated that the initiative was working. In addition, the faculty was much happier with the model, and perhaps most importantly, other academic units had begun to express interest in participating in the pilot.

A very simplistic feedback loop — poor retention and GPAs for students coupled with specific complaints from the faculty, which together stimulated major changes in the learning community pilot model — was a learning experience for the administrators of the program. The feedback loop also laid the groundwork for a more sophisticated assessment pattern that has guided the growth and improvement of the IUPUI Learning Community Program for the last 10 years.

The IUPUI Learning Community Program has always depended on a multifaceted assessment plan including both quantitative and qualitative measures based on institutional data and the feedback of faculty, students, advisors, librarians, and administrators. The goal is to utilize the data to improve the program and to ensure that it continues to meet the needs of a changing student population. Some examples include the learning community template, the development and modification of a block schedule initiative, and the current effort to enhance the role of the student mentor on the instructional team.

## **Learning Community Template**

After its second year, the IUPUI Learning Community Program began to grow exponentially. Within a few years, every academic school had developed a learning community model to reflect the disciplines of the school and the interest of the faculty of that school. But it soon became obvious that students were not being well served by the number of options open to them. This was particularly true for the students who

changed majors, which was a frequent occurrence. Clearly, the campus needed an established set of academic objectives that would be covered by every instructional team regardless of the school of origin. In other words, students who enrolled in a School of Nursing learning community needed to learn a basic skill set that would help them make a successful transition to higher education even if they decided to change their majors to engineering or education.

A faculty committee representing a variety of academic schools developed the first learning community template in 1998. The end-of-the-semester course evaluation form was altered to incorporate the assessment of the newly established template goals and objectives. A qualitative researcher met with faculty members and observed them in their classes in an effort to evaluate the effectiveness and appropriateness of specific aspects of the instructional team model. Based on the results of the assessment efforts, the template was revised in 2001.

Common learning outcomes for all IUPUI seminars, based on the 2001 template, include:

- Development of a comprehensive perspective on higher education, including a respect for diversity among individuals, communities, and disciplines.
- Opportunity to establish a network of staff, faculty, and other students.
- Understand and practice basic communication skills appropriate to the academic setting.
- Begin the process of understanding critical thinking.
- Understand and apply information technology in support of academic work.
- Develop knowledge of one's abilities, skills, and life demands in order to more effectively pursue academic goals.
- Understand and make full use of IUPUI resources and services that support learning and campus connections.

## **Themed Learning Communities**

IUPUI participated in a multi-campus, three-year grant project funded by Pew Charitable Trusts. The project was titled Restructuring Urban Education for Student Success, or the "RUSS project." The university partners in the project were Portland State and Temple University, and the focus of much of the work was the learning community programs on the three campuses. As a part of the project, each campus conducted a self-study of its own learning community program. At the completion of the self-study, each university invited faculty and administrators from the participating partners' institutions, as well as national experts on first-year initiatives, to a two-day conference at the host campus. Those individuals were asked to help assess the learning community programs at each institution and make recommendations for improvement.

The primary recommendation for IUPUI was to develop more linked learning communities. As a result, IUPUI offered a larger number of first-year experience seminar sections linked with a discipline course. Then in 2001, and again in 2002, the institution also piloted 18 schedule blocks; each of which included a first-year-experience section. The assessment results from that effort, however, were very mixed and primarily not positive.

A faculty task force was formed to study the block schedule pilot and to make recommendations on how to improve the initiative. The committee members made a number of recommendations, including creating a campus position in a centralized office, to manage the block scheduling effort. In addition, the committee recommended that the block schedules be organized around a theme and that extra-curricular activities be offered to support the theme in each block. Finally, the task force recommended a name change for the initiative; block scheduling became the IUPUI Themed Learning Community Program.

In 2003, the IUPUI themed learning communities were piloted with seven sections. Assessment results indicate that the new program has been relatively successful, but more changes are also needed to ensure that the initiative has a positive effect on student achievement as well as the full support of the faculty involved. An advisory team continues to monitor the progress of the initiative.

### **Learning Community Student Mentors**

Approximately 175 students are awarded scholarships for their service as student mentors on the IUPUI campus. The student mentors are involved in a variety of programs, with the learning community representing the largest group. In 2001, a faculty fellowship to study the role of the student mentor was awarded. The report served as the basis for making a number of changes in the training and oversight of the student mentors, including significant alterations in their meeting and personal reflection paper requirements.

Since the completion of the faculty fellow study a number of changes have taken place in the mentor program, including the introduction of the Leadership Scholarship as a more appropriate and fiscally responsible way to honor and reward the services of the student mentors. In addition, the program has continued to grow along with the significant changes in the format of some learning community sections including the themed learning communities, and the connection of some learning communities to the

IUPUI Summer Academy “Bridge” Program. In order to bring the role of the mentor up to date with the changes in the learning community program and to ensure that the needs of the instructional team members, the enrolling students, and the mentors themselves are being effectively served, a new study of the role on the student mentor was initiated in Fall 2004.

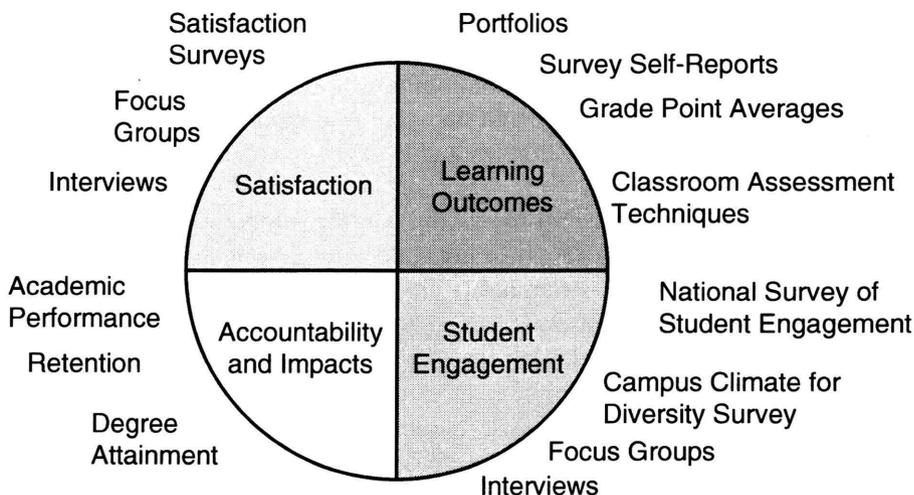
### **Assessment Strategies and Methodologies**

In an effort to respond to the demands of internal and external stakeholders, we have employed qualitative and quantitative approaches to document the complex impacts of learning communities. These two approaches have been employed as complementary techniques. Qualitative methods have been used to enhance understanding of the different ways that programs are implemented, and students’ perceptions of those differences. Institutional improvement also requires developing indicators of program effectiveness, measuring them over time, and using the results to make strategic decisions at different institutional levels (e.g., instruction, administration, and policy development). Quantitative reports are completed in an effort to examine the impacts of learning community participation. For example, in order to understand program-related effects, participants in learning communities are compared to non-participants with regard to academic performance and one-year retention rates while controlling for student academic preparation variables and background characteristics.

Quantitative results have been useful in making data-driven decisions and in demonstrating program worth to administrators and external stakeholders. Demonstrating that learning community participation has positive implications for enhancing academic performance and retention serves to boost resource allocations as well as ensure continued support among higher-level policy decision makers. However, once decisions have been planned and implemented, qualitative techniques have been used to examine the variations underlying different learning community implementations such as service learning components, theme-based, co-curricular activities, and faculty collaboration. Our experience has suggested that faculty and student accounts of their experiences tend to lend insight regarding what implementation strategies produced particular outcomes (e.g., providing more opportunities for student-student interactions resulted in increased satisfaction for the overall learning community experience and increased understanding of diverse perspectives).

As we have improved our capacity to measure a wide array of student outcomes, it has become increasingly important that we develop ways to assess *how* our programs and processes work to increase desirable outcomes and decrease undesirable ones (Duckworth, Hansen, and Evenbeck, 2002). Qualitative evaluations provide the kinds of in-depth process information that allow faculty, staff, and students to better understand when and how certain interventions are effective. Figure 1 displays an outcome assessment framework for Learning Communities employing both qualitative and quantitative methods (adapted from Hansen and Evenbeck, 2004; Jackson, Williams, and Hansen, 2004). As displayed in this figure, we strive to assess multiple outcomes such as student engagement, learning gains, retention, and academic performance. We also use multiple sources and collect information from multiple levels (e.g., faculty, student, and institutional levels of effectiveness).

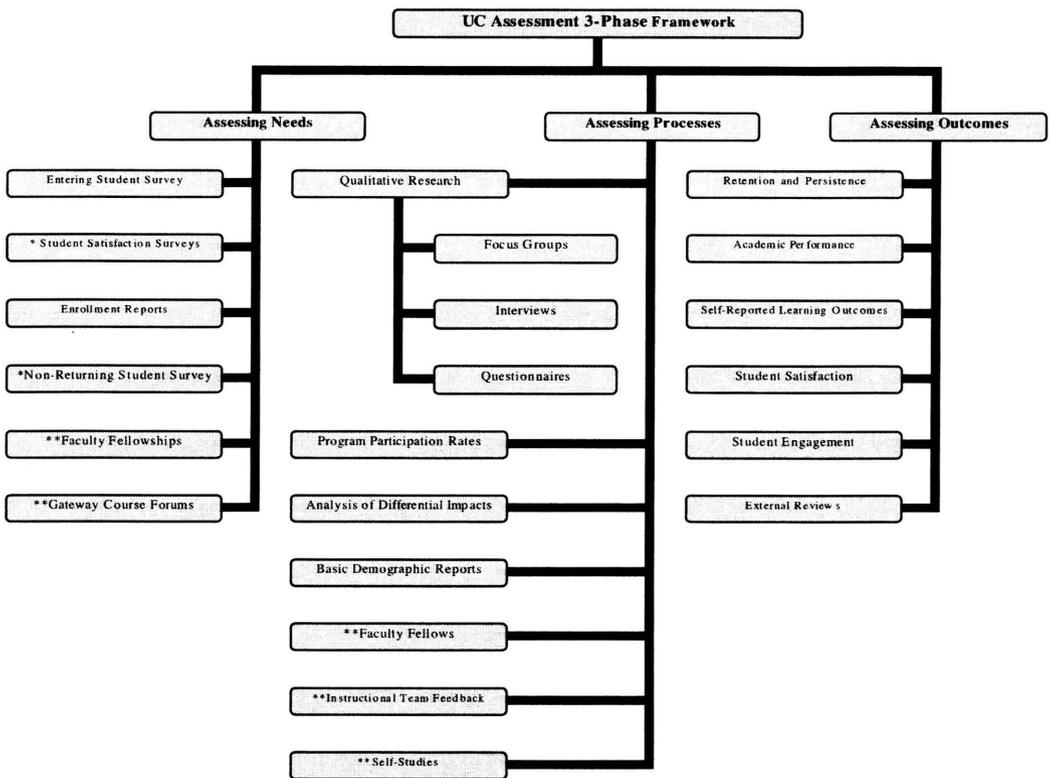
**Figure 1: Learning Community Outcome Assessment Framework**



**Three-Phase Assessment Model**

In addition to examining program outcomes, we also strive to determine if our programs are meeting students’ needs and if they are implemented as conceptualized. Shown in Figure 2 (adapted from Hansen and Evenbeck, 2004) is the three-phase approach to assessing learning communities: assessment of needs, processes, and outcomes.

**Figure 2: A Three-Phase Assessment Framework for Assessing Learning Communities**



\* Some campus-wide surveys appropriately serve to help understand students' needs, student activities and engagement, program processes, and the program outcomes.

\*\* Internal ongoing program assessments are a critical component of the UC Assessment Framework. These formative assessment activities involve all three phases: needs, processes, and outcomes.

**Needs Assessment** We gather information (e.g., student, staff, and faculty perceptions) to determine what programs and services students need. For instance, the “Entering Student Survey” is administered to incoming students to collect a wealth of information regarding students’ needs, expectations, educational goals, and intentions. The data collected via this survey further enables faculty, other instructional team members, and administrators in their efforts to introduce students to the academic culture and help them achieve their goals.

**Process Assessment** Process assessments are conducted to determine if programs are implemented as conceptualized, to ascertain if leadership and institutional structures are providing the support required by instructional teams to sustain learning community initiatives, to monitor who uses the programs and services, and to ensure that the intended student populations are participating in the programs. In an effort to ascertain if our implementations are positively impacting all student participants, we conduct quantitative analyses to determine if learning communities are having differential impacts on diverse groups of students (e.g., underrepresented ethnic groups, first-generation students, students working for pay off-campus, commuting students, conditional admits, and students older than 25 years of age). Past results have shown that learning communities are particularly helpful for students who are not academically prepared (conditionally admitted students).

Qualitative approaches such as focus groups, interviews, and questionnaires are used to gather in-depth information about program components and processes. For example, questionnaires were administered to faculty members teaching in block-scheduled learning communities, and findings suggested that faculty felt they lacked opportunities to actively coordinate with other faculty members in linked courses (Haas, 2004). Results also suggested they experienced negative feelings about their perception of an increased workload, and they did not feel “rewarded” by their academic departments for participating. In response to these findings, learning community administrators created a series of new policies and structures to increase faculty coordination and decrease feelings of work overload and perceptions of lack of recognition among participating faculty members. Regular retreat and team meetings are now scheduled to create opportunities for active faculty interaction and the development of pedagogical strategies. In an effort to mitigate the feelings of course demand overload and lack of rewards, stipends are now awarded to participating faculty members in thematic learning communities and release time is available for course development.

Based our more recent process assessments we have found that faculty teaching in learning communities enjoy opportunities for professional development (e.g., opportunities to build knowledge across disciplines, enhanced understanding of teaching diverse students, and rejuvenation of learning in their own disciplines (Brown, 2003; Minkler, 2002; Rye, 1997; Tollefson 1990 as cited in Taylor, Moore, MacGregor, and Lindblad, 2003).

**Outcomes Assessment** Outcome assessments are employed to answer fundamental questions about the value of learning communities, such as: Do programs do what they intend to do? Results from comprehensive outcome assessments help to further understanding about how learning communities ease students’ transitions to college, enhance student learning, and impact academic performance and retention. We strive to begin all outcome assessments with a clear articulation of program goals and a careful selection of valid instruments and protocols that are sensitive to program goals.

**Ongoing Formative Assessment** At IUPUI we conduct ongoing internal formative evaluations to continuously develop innovations and enhance the learning community experience for students and instructional teams. Through these internal evaluations, learning community faculty and administrators may identify an unmet need, implement a program to better serve the need, monitor the program implementation, and conduct an outcome assessment once a program component is in operation. For example, a series of qualitative investigations with faculty and students suggested that the articulated goals and instructional strategies proposed in a “template” for learning communities were overly broad and complicated. Based on this series of focus groups and survey results, administrators simplified the template and included clearer intended course learning outcomes.

## **IUPUI Learning Community Assessment Highlights**

Our large, urban, public institution is a microcosm of the levels and types of learning communities offered in the broader undergraduate education landscape. We have offered a variety of learning community experiences ranging from stand-alone first-year seminars, to first-year seminars linked to discipline courses, to mechanical linkages between courses (“Block Scheduling”), to Thematic Learning Communities. This section highlights some of the assessment reports we have produced to demonstrate the value of LCs and to improve program implementations.

### **First-Year Seminars**

IUPUI students who are beginners or who transfer with fewer than 18 hours are required to enroll in a First-Year Seminar. Most First-Year Seminars are linked to two or more discipline courses, and thus form a “learning community.” All seminars follow the same course template, which outlines the learning objectives for students enrolled in these sections, but each school tailors its seminar to meet the particular needs of its majors.

IUPUI has sponsored extensive qualitative assessment of its First-Year Seminar courses employing interviews with faculty and students. Findings, summarized in Table 1, indicate that the complexity of the template for the First-Year Seminar resulted in instructor variation in emphasis on different learning outcomes, although extended, integrative assignments helped somewhat to reduce the problem of coordinating many short assignments aimed at specific outcomes. In response to these findings, the template for the First-Year Seminar was simplified and clarified, and recommendations on effective practices are being disseminated among First-Year Seminar instructors.

**Table 1. First-Year Seminar Process and Outcome Assessment Findings**  
***Findings on First-Year Seminar Outcomes: Instructors' Ratings of Student Intellectual Development***

	Min	Max	Mean	S.D.
Values of Higher Education	3	5	3.78	.81
Positive Learning Environment	2	5	4.22	.94
Communication Skills	2	5	4.17	.92
Critical Thinking	1	5	3.39	1.09
Use of Library	2	5	3.72	1.18
Use of Information Technology	1	5	4.08	1.11
Self-Awareness as Learner	1	5	3.94	1.11
Full Use of IUPUI Resources	1	5	3.53	1.04

(1=low attainment; 5=high attainment; n=18)  
*Students' Report of Learning Gains (n=221)*

Find resources at IUPUI	62%
Use the library	53%
Seek help when needed	52%
Use online resources	51%
Understand course expectations	47%
Participation in class discussion	47%
Manage own time	39%
Cope with stress	28%
Write for course assignments	24%
Think critically	23%

***Students' Report of Changes in Behavior***

About half the 221 students reported changes in one or both of two clusters of attitudes and behavior: becoming a better student and becoming more outgoing.

*Becoming a better student*

- Taking course demands more seriously
- Developing better study habits
- Organizing time better
- Becoming more outgoing
- Trying to get to know students and instructors in other courses
- Expressing self more, having more self-confidence

***Program Implications for First-Year Seminar:***

- Simplify, clarify template learning outcomes
- Front-load seminar in semester
- Differentiate, clarify, and integrate team member responsibilities
- Improve preparation and ongoing support for faculty
- Clarify relationship to linked academic course
- Give students more feeling of having accomplished something
- Make amount of work appropriate for one credit course
- Treat students like college students, not children

Shown in Table 2 are the results of a series of quantitative analyses examining the impacts of First-Year Seminar Courses on one-year retention rates and academic performance. Multivariate analysis of covariance procedures are employed to investigate impacts on grade point averages and logistical regression procedures are employed to examine impacts on one-year retention rates. Please note that all one-year retention results are based on logistical multiple regression analyses. However, results are displayed in the formats below in an effort to increase understanding among most readers. Shown in Table 2 are the results of analyses examining the impact of First-Year Seminar Courses on one-year retention rates and academic performance for Fall 2002. Students participating in First-Year Seminars were retained at a significantly higher rate compared to non-participating students, even after controlling for student background and enrollment characteristics. There was a nine percent difference in retention rates for participants compared to non-participants. Results displayed in Table 3 suggest that conditionally admitted students participating First-Year Seminars had significantly higher cumulative grade point averages compared to non-participating conditionally admitted students, even while controlling for student background enrollment characteristics.

**Table 2: The Impacts of First-Year Seminars on Fall 2002 One-Year Retention Rates and Academic Performance**

**Impact of Participation in a First-Year Seminar for All Students:  
Average First Semester GPA (excluding Seminar grade)**

First-Year Seminar	N	Average Fall GPA	Adjusted Fall GPA
Non-Participants	481	2.56	2.52
Participants	1201	2.54	2.56
Overall	1682	2.55	

Note: Adjusted controlling for differences in demographics, enrollment, academic preparation, and other academic support program participation. Differences in GPA among participants and non-participants are not significant.

**Impact of Participation in a First-Year Seminar for All Students:  
One-Year Retention**

First-Year Seminar	N	Retention Rate	Adjusted Retention
Non-Participants	493	58%	<b>60%</b>
Participants	1229	69%	<b>69%</b>
Overall	1722	66%	

Note: Adjusted controlling for differences in demographics, enrollment, academic preparation, and other academic support program participation. The impact of First-Year Seminar Participation on retention is significant ( $p < .01$ )

Data suggests that participation in a First-Year Seminar adds on average of 9 percentage points to retention rate.

**Table 3: The Impacts of First-Year Seminars on Fall 2002 Academic Performance for Regular and Conditional Admits Impact of Participation in a First-Year Seminar: Average First Semester GPA (excluding Seminar grade)**

Seminar	N	Average Fall GPA	Adjusted Fall GPA
<i>Regular Admits</i>			
Non-Participants	295	2.82	2.83
Participants	642	2.71	2.71
Overall	937	2.75	
<i>Conditional Admits</i>			
Non-Participants	186	2.13	<b>2.07</b>
Participants	559	2.34	<b>2.36</b>
Overall	745	2.23	

Note: Adjusted controlling for differences in demographics, enrollment, academic preparation, and other academic support program participation. Differences in GPAs among participants and non-participants are significant for Conditional Admits ( $p < .01$ )

In order to increase understanding of students' self-reported learning outcomes and to provide feedback to instructional teams, we created and administer a First-Year Seminar/Learning Community Survey. This instrument is designed to measure the extent to which learning communities are achieving intended goals and to facilitate ongoing improvements in course pedagogy. Results are analyzed in the aggregate and used to monitor overall learning community effectiveness and to recommend programmatic improvements (Displayed in Table 4 are some results from the Fall 2002 and 2003, reported in aggregate; boldface items denote significant differences). Reports such as this are shared with administrators and instructional teams to enhance understanding of overall program effectiveness. For instance, these results suggest that the learning community program had notable improvements in helping students adjust to college, manage time, cope with stress, and decide on a major during Fall 2003 in comparison to Fall 2002.

Please note that all instructional teams are also provided with individualized reports so they can develop an enhanced understanding regarding how their particular instructional strategies may have affected student perceptions and self-reported learning outcomes in their respective courses. Overall survey results from the Fall 2003 administration suggested that students perceived that the seminar course was particularly helpful in the following areas (when taking into consideration the highest aggregate mean ratings): becoming familiar with campus and academic support resources; use of library resources for academic work/research; deciding on a major or future career; making connections with other students, peer mentors, faculty, and advisors; and achieving their educational goals. Seventy-eight percent of the Fall 2003 respondents would recommend the course to other students.

**Table 4: Example of Learning Community Survey Assessment Report Prepared for Administrators and Instructional Teams**

	2003 N	Mean Aggregate Fall 2003	Mean Aggregate Fall 2002
Familiarity with campus surroundings	421	<b>2.89</b>	<b>2.53</b>
Use University technology	418	<b>3.14</b>	<b>2.78</b>
Set priorities so I can accomplish what is most important to me	423	<b>2.74</b>	<b>2.45</b>
Manage my time to meet my responsibilities	422	<b>2.64</b>	<b>2.34</b>
Establish an effective study schedule	423	<b>2.52</b>	<b>2.24</b>
Prepare for tests and exams	418	<b>2.47</b>	<b>2.14</b>
See multiple sides of issues	418	2.65	2.42
Evaluate the quality of information	418	2.61	2.35
Critically examine ideas and issues	419	2.58	2.40
Complete well written papers	417	2.39	2.22
Actively participate in class discussions	423	<b>2.87</b>	<b>2.56</b>
Give oral presentations	420	2.64	2.40
Work with other students on class assignments	425	2.86	2.65
Find what I need at the library	422	<b>2.94</b>	<b>2.68</b>
Use library resources for a academic work or research	418	2.91	No data
Manage and cope with stress	417	<b>2.50</b>	<b>2.15</b>
Decide on a major or future career	417	<b>2.59</b>	<b>2.17</b>
Succeed academically	421	<b>2.72</b>	<b>2.40</b>
Adjust to college life	421	<b>2.91</b>	<b>2.60</b>

Response Scale: The response scale was 0 to 4, with 0 being not at all and 4 being a great deal.

N: The total number of valid responses for each question.

Mean: Multiply n by its corresponding scale value, add totals and divide by N.

Mean Aggregate: The mean of each item of the evaluation for U110 sections that were taught during the Fall 2003 and Fall 2002 semesters.

Bolded items are statistically significant based on independent samples t-tests ( $p < .01$ )

## **Thematic Learning Communities and Block Scheduling Courses**

Seven thematic learning communities were piloted in Fall 2003. A total of 136 students completed a thematic learning community course. Results suggest that the thematic learning community students performed significantly better academically (fall semester cumulative grade point averages) compared to non-participants (while controlling for all background characteristics and First-Year Seminar participation [Shown in Table 5]). Thematic learning community students did *not* perform significantly better than the students enrolled in Fall 2003 “Block Scheduling” (no coordinated theme component [Results displayed in Table 6]). It is notable that the thematic learning communities were *pilots*. (Please note that the campus offered both initiatives, block schedules and thematic learning communities, in Fall 2003, making a comparison possible. As of Fall 2004, the block scheduling option was discontinued.)

Students enrolled in block scheduling (no thematic learning community) did significantly better in terms of academic performance compared to non-participants (while controlling for all background characteristics and First-Year Seminar participation [Shown in Table 7]). These preliminary results suggest that simple mechanical linkage between courses serves to positively impact academic performance and retention. However, further investigation is necessary to determine if themed learning communities on our campus produce other value-added educational outcomes such as integration of learning across disciplines and enhanced critical thinking skills. These outcomes may not be as readily apparent by linking courses together in the absence of active faculty coordination.

**Table 5. Impact of Participation in a TLC for All Students:  
Average First Semester GPA\***

TLC	N	Average Fall GPA	Adjusted Fall GPA
Participants	120	2.75	<b>2.84</b>
Non-Participants	1140	2.59	<b>2.58</b>
Overall	1260	2.61	

Note: Adjusted controlling for differences in demographics, enrollment, academic preparation, and other academic support program participation. Differences in GPA among participants and non-participants are significant ( $p < .007$ ) (based on an analysis of covariance).

**Table 6. Impact of Participation in a TLC in Comparison to Block Scheduling Participation: Average First Semester GPA\***

	N	Average Fall GPA	Adjusted Fall GPA
TLC Participants	120	2.75	2.78
Block Participants	161	2.68	2.66
Overall	281	2.71	

Note: Adjusted controlling for differences in demographics, enrollment, academic preparation, and other academic support program participation. Differences in GPA among TLC participants and Block Scheduling participants are not significantly different (based on an analysis of covariance).

**Table 7. Impact of Participation in a Block Scheduling: Average First Semester GPA \***

	N	Average Fall GPA	Adjusted Fall GPA
Block Participants	161	2.68	<b>2.74</b>
Non-Participants	990	2.58	<b>2.56</b>
Overall	1151	2.59	

Note: Adjusted controlling for differences in demographics, enrollment, and academic preparation. Differences in GPA among participants and non-participants are significant ( $p < .05$ ) (based on an analysis of covariance).

In order to assess students' self-reported learning outcomes and to provide feedback to course instructors, we created and administered a Thematic Learning Community Course Outcome Survey. This instrument was designed to measure the extent to which thematic learning communities are achieving intended goals and to facilitate ongoing improvements in course pedagogy. Results analyzed in the aggregate are used to monitor overall course effectiveness and to recommend programmatic improvements. Results from the Fall 2003 administration suggested that the thematic learning communities were perceived as particularly beneficial to students in the following areas: student interacting with other students, writing abilities, making learning connections between courses, and applying classroom learning to larger social issues.

## **Leveraging Assessment Results for Program Improvement**

Implementing comprehensive assessment methodologies to assess learning communities at a large, urban, public university has many challenges given its complexity and diversity of implementations. However, we have embraced the challenge and intentionally developed assessment strategies that result in genuine commitment and support for ongoing program and institutional improvements. Results from a series of qualitative investigations (in-depth focus groups with student participants and responses to open-ended questionnaire items) have suggested that the most valuable aspects of the learning community experiences are the following: having opportunities for interactions with other students, enjoying regular contacts with advisors and faculty members, learning to meet the demands of college (e.g., study skills, time-management skills, and expectations of higher education), and gaining an understanding about available campus resources (e.g., Math Assistance Center, Writing Center, Career Center, and Student Life Activities).

Based on our experiences, we have learned that merely developing comprehensive assessment reports and distributing them to instructional teams often fails as an effective practice for translating assessment results into notable program improvements. Employing a participatory action research approach is one strategy we are implementing to effectively communicate assessment findings, to ensure results are used to facilitate ongoing learning and change, and to monitor progress toward achieving critical goals and mission alignment (Hansen and Borden, 2003; Hansen and Evenbeck, 2004). The action research model is a powerful method for ensuring that faculty and other instructional team members are active participants in the research process and that research results are used for program improvements (Corey, 1953; Dymond, 2001; Ferrance, 2000; Lewin, 1952). With this approach a research question is posed (e.g., Are learning community courses increasing faculty-student interactions outside of class?) through an interactive discussion among stakeholders and researchers. Assessment results are reviewed as part of a stakeholder action-planning activity rather than static Web- or paper-based assessment reports. Based on data-driven action planning meetings, interventions are implemented and data is again collected to evaluate the effectiveness of the implementations. The action research model is thus a cyclical process of diagnosis, change, and evaluation. We are increasingly employing this approach to enhance use of assessment results and to assess the extent to which learning communities are improving educational outcomes for students and enhancing professional development for faculty.

Another way that we have facilitated faculty involvement in assessment and promoted use of assessment results is by awarding faculty fellowships. Through the faculty fellowship program, faculty design and implement research projects in an effort to improve various academic support program initiatives. The faculty fellowships also provide faculty with opportunities to engage in interdisciplinary work, build on their teaching repertoires, and further build on a shared understanding of the scholarship of assessment.

## **Conclusions**

This article presented a diverse array of assessment strategies available to enhance understanding of the impacts of learning communities. Additionally, we described how qualitative and quantitative methods work best in dialogue, and we provided effective strategies for linking results with course improvements. Through our assessment efforts we have found that learning community participation has been positively associated with valuable educational outcomes such as academic performance; retention; student connections with other students, faculty, and advisors; adjustment to college; and intellectual development. We have also learned that in order to sustain and improve learning communities it is essential to create structures and procedures that allow faculty to collaborate, engage in interdisciplinary pedagogies, and participate in active dialogues about the interpretation and actual use of assessment results.

Although the learning community assessment movement has gained momentum over the last decade, there are relatively few studies conducted that effectively examine what aspects of learning communities produce desired outcomes. In other words, learning communities are synergistic experiences with multiple components (e.g., service learning, positive peer interactions, faculty-student interactions, diversity appreciation). One challenge to assessment involves identifying exactly *what aspects* of the experience are leading to specifically positive outcomes (i.e., the intervening variables). Although we do not advocate a reductionism evaluation approach, we do believe it is critical to identify what particular learning community strategies are most effective. As such, we plan to refocus and refine our assessment activities in an effort to understand what aspects of the “learning community experience” make the most notable contributions to student academic achievement and personal success.

## **Author Information**

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