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The Assessment Journey of the Learning Communities at Temple University: Learning to Assess and Assessing to Learn

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Jodi Levine Laufgraben

Temple University, a state-related institution in the Commonwealth System of Higher Education, is a comprehensive public research university with more than 29,000 students. Based in Philadelphia, Pennsylvania, the Main Campus in North Philadelphia is home to more than 18,000 undergraduates. Through its various schools and colleges, Temple University offers bachelor's degrees in 127 areas. Temple has offered linked-course learning communities since 1993. The majority of the communities pair a first-year writing course with a general education requirement or an introductory course in a major. Many LCs include a Freshman Seminar as a third course. Our communities are primarily designed for first-semester freshmen, but we recently expanded our offerings for entering transfer students. Communities are available only for the fall semester. In fall 2002, nearly 1,100 students participated in a learning community. Jodi Levine Laufgraben is assistant vice provost for University Studies and has directed Temple's Learning Communities Program since 1994.

In the early 1990s, Temple began considering learning communities as a curricular response to two areas of need: (1) creating a sense of community on a predominantly commuter campus and (2) improving teaching at the freshman level. While the Core Curriculum introduced in the late 1980s provided students a more focused general education, there was little improvement in terms of student performance and persistence toward degrees. Improving achievement and retention became a third, related and important goal.

Leadership for the learning communities effort came originally from the provost, the then vice provost for Undergraduate Studies, and several faculty members. With the support of a three-year grant from The Pew Charitable Trusts, this group designed and developed the first undergraduate learning communities. A Faculty Fellow worked with faculty work groups on curriculum, strategies for marketing the program to incoming students, and some very preliminary assessment planning. A full-time, non-faculty Learning Communities director position (now the assistant vice provost for University Studies) was created to provide additional leadership for the program. The Faculty Fellow and director of Learning Communities were primarily responsible for all assessment decisions.

At the onset of the learning communities initiative, the planning team concentrated on curriculum and pedagogy. The goal was to bring together teams of faculty members to build interdisciplinary learning communities that featured collaborative teaching and learning. Impressed by the interdisciplinary learning communities models at other institutions such as The Evergreen State College and LaGuardia Community College, there was optimism that Temple's learning communities could closely resemble these efforts.

We doubled our enrollment goals annually, and the overall project objectives changed as we learned more about the quality of the first-year experience at Temple.

Assessment was a neglected area during these early years of learning community start-up. Our overriding concern was with recruiting students and enrolling them in communities, and we only gave passing thought to assessing the impact of the experience on students and teachers. During the three-year grant period our assessment focus was primarily summative: it aimed at the minimal amount of information we needed to prove that learning communities were worthwhile. After the grant period, knowing that innovative efforts require assessment efforts directed both toward "proving *and* improving" programs (MacGregor 1995), we moved toward a much more formative and collaborative approach to assessment. This case study is organized by the stages of assessment work: (1) the minimalist approach; (2) the end-of-grant evaluation; and (3) ongoing assessment for program improvement. Lessons learned in each phase contributed not only to the program's ability to demonstrate its progress in meeting stated objectives, but also to the growth and improvement of the learning communities at Temple University.

Stage I: The Minimalist Approach

During the early years of the program, only two individuals were involved in learning community assessment: the Faculty Fellow and director, with some guidance and assistance from the director of our Measurement and Research Center. Our assessment focused on data needed to expand the number of communities offered and to demonstrate the impact of the program on student performance and persistence. The Pew Charitable Trusts required an annual report addressing a series of agreed-upon questions directly tied to the four programmatic objectives outlined in the original grant proposal.

- Temple University will group 15 percent of each entering class into nine learning communities of 100 students each
- the learning community offerings will be taught by faculty and graduate students
- Temple will follow progress of the students in terms of retention and achievement
- Temple will use the grant period to explore the possibility of increasing the number of freshmen involved each year

As so often happens in reform efforts, program growth and development led us to revise these objectives and add others during the grant period. We doubled our enrollment goals annually, and the overall project objectives changed as we learned more about the quality of the first-year experience at Temple.

Understanding Student Enrollment Patterns

Many of the initial learning community offerings were under-enrolled. When we learned anecdotally from talking with academic advisers that many of the courses were not appropriate for entering students, we asked: "Who is our target audience?" and "Who do we want to enroll in learning communities?" We used two sources of data to design the next learning community offerings and to develop a marketing plan. First, we requested reports on the course-taking patterns of entering students. The reports allowed us to identify courses with

significant freshman enrollments. Many of these courses met the requirements of Temple's Core Curriculum or were introductory courses in various majors. Our goals in designing subsequent learning communities offerings were to attract large numbers of first-semester freshmen and to honor guarantees to departments that there would not be under-enrolled sections in learning communities. In retrospect, we realized that the earlier versions of communities resembled a "boutique model" of learning community offerings focusing on topics and course links developed out of the intellectual interests of the faculty. What we needed instead was more an "anchor store model," with mainstay general education classes paired with first-year writing sections; this decision made learning communities much more accessible to students and turned around our enrollments immediately (Levine and Tompkins 1996).

Our second source of data was focus groups. In fall 1993 and 1994, students currently enrolled in learning communities were invited to attend focus group sessions of ten to twelve participants. The focus groups were an efficient and relatively low-cost way to collect useful information on how students perceived participation in a learning community. Students discussed their fears and concerns about coming to Temple, their expectations about learning communities, and their reasons for enrolling in a community. They described their likes and dislikes, the teaching, the academic and social benefits, and the impact they felt participating in a learning community would have on their overall Temple experience.

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In these focus groups, students also reported that learning communities were a wonderful academic and social opportunity where they found it easier to make friends and get to know their professors. They reported that in their learning communities classes they asked questions and participated in class discussions, studied with peers outside of class, and overall felt more connected to the university. One student explained: "Learning communities is the best way to make the transition from high school to college." Because students said their primary reason for enrolling in a learning community was the advice of an academic adviser, we began to sponsor annual learning communities information sessions for professional and faculty advisers. We also featured student comments in the design of a new program brochure. We shared the findings of these focus groups with senior academic administrators and at our annual summer faculty development workshops.

Monitoring Student Performance and Persistence

The second goal for early assessment work was to track student progress. Beginning with the fall 1994 participants, special designation codes were placed on the Student Information System (ISIS) at the midpoint of the fall semester to denote student membership in a learning community cohort. This simplified the process of generating reports on academic performance, retention, and graduation rates. We used these studies to demonstrate the program's progress in meeting its goals and to identify possible differences between learning communities and non-learning communities sections of general education courses.

Grades. Grade distribution studies were conducted after the fall 1993, 1994, and 1995 semesters. We learned that learning communities participants outperformed nonparticipants in several first-year courses and had fewer instances of withdrawals or incompletes. The 1994 and 1995 studies revealed that students enrolled in learning communities sections of college math, general chemistry, pre-calculus, calculus I, and introductory criminal justice, outperformed their peers enrolled in non-learning-communities sections of the same courses. A 1995 study of student performance in college composition showed that students in learning communities sections of composition obtained higher course GPAs than students in other sections even though other indicators of student intake data (SAT verbal score, Descriptive Test of Language Skills reading score, and high school percentiles) were substantially the same for the two groups. All English composition students were required to complete and pass a departmental final exam, whose results were reflected in this course GPA data. This study indicated that even though the learning community composition courses often deviated from the standard syllabus, the LC students still outperformed their peers on the standard departmental final.

Retention. Temple measures retention on a fall-to-fall enrollment basis. Learning communities freshmen continue to be retained at higher rates than their nonparticipant peers. In terms of retention once Honors, and special admit populations are removed, the retention rates for learning communities students are 5–8 percent higher than for non-learning communities students. With Honors and special admit groups included, learning communities participants are generally retained at rates 3–6 percent higher than nonparticipants. The 81 percent retention rate for the fall 1998 learning communities students represents the program's highest retention rate through second fall for all cohorts.

Graduation. Once students in the Honors Program and special admit populations were removed, the graduation rate for learning-communities students from the 1994 cohort was 6 percent higher than the five-year graduation rate for their non-learning-communities peers (43 percent v. 37 percent). Including special admits and Honors, the rate favors learning communities participants by 8 percent (43 percent v. 35 percent). The four-year graduation data for the 1995 cohort also favors learning communities students: 8 percent excluding Honors, and special admit populations (24 percent v. 16 percent) and 5 percent with Honors and special admit groups included (22 percent v. 17 percent). In every cut of the data, the LC students have outperformed their non-LC peers.

Stage II: The End-of-Grant Evaluation

With the Pew grant drawing to a close in 1996–1997, we shifted our focus to the end-of-grant evaluation. The Faculty Fellow and director continued to lead the learning communities assessment effort, with occasional advice from assessment professionals on our campus. At this point, we were ready to raise questions central to the long-term continuation of the Learning Communities Program: (1) are learning communities an effective way to structure the freshman year experience for Temple undergraduates? And (2) what is the organizational context for the Learning Communities Program at Temple University? The

information gathered would direct post-grant decisions about the organization and administration of the overall learning community initiative. We chose a case study research design to answer these questions.

A related interest was how learning community participation affected students' levels of involvement in in-class and out-of-class learning activities. What were the quantity and quality of students' interaction with their teachers and peers as well as their attitudes about their first-year experience? An external research firm, Research for Action, was brought in to conduct the case study. The Learning Communities Program staff administered a student survey, and also continued to collect grade and retention data.

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Commissioned Case Study

The research conducted by Research for Action had two prongs. The researchers used three learning communities as settings for exploring how teachers and students experience their participation in these learning environments. The Faculty Fellow for Learning Communities, the Learning Communities Director, and the research consultants selected three learning communities that varied in size and structure and mostly involved students from Liberal Arts, Business and Management, Communications and Theater, and Education. Research for Action also examined the organizational and structural context of the program to better understand what supports and sustains the work of learning communities. Their research activities included classroom observations; interviews/focus groups with students, teachers, and relevant administrative staff; shadowing of students both in and out of class; and review of documents. Four research questions emerged:

- How do differently positioned people define the goals of learning communities?
- How do students experience learning communities? What makes for a strong experience for students?
- How do professors and graduate assistants experience learning communities?
- What kinds of connections does the Learning Community Program have to the university as a whole?

The study indicated that the structure and experience of learning communities differed across the three communities in terms of curricular integration, collaboration among teachers, and sense of community among students. Participants in all three communities spoke highly of the experience and cited different ways in which involvement in a community had enhanced their academic experience during their first semester at Temple. Students felt their learning community helped them connect with other students, mostly in-class, but outside class as well.

The case study also revealed important information about the faculty experience in learning communities. Faculty members said their learning community involvement had affected their teaching in ways that were generally positive. Professors who had been teaching at Temple for some time were the most energized by their LC teaching experience. Faculty members reported that

they initiated or used group work in different ways. Furthermore, several teachers reported incorporating many effective changes in their non-learning-communities classes. "I felt my mind turning around a little bit and in fact the way I treated that [LC] class in the fall is the way I'm trying to treat the students in this class now, although it's not a learning communities class. I felt like I was a much better teacher," said one professor (Reumann-Moore, et al. 1997, 28). Graduate assistants, who teach a large number of the first-year writing courses included in Temple's LCs, felt the program made a positive contribution to their growth and development as teachers. One graduate assistant commented that teaching in a learning community helped him interact with professors as colleagues and that these kinds of connections were enabling him to learn how to better communicate across disciplines (Reumann-Moore, et al. 1997, 33).

The survey revealed that learning communities students expected and experienced more frequent interactions with faculty and participated in more out-of-class learning activities then nonparticipants.

In synthesizing the experiences of students and teachers in the learning community program, the case study report recommended four areas for improvement: (1) better articulate the goals of the LC program to students and faculty; (2) develop a better structure for supporting faculty in making interdisciplinary connections among their courses; (3) expand and improve the freshman seminar; and (4) revisit the shape of learning communities at Temple and consider opportunities for variation and innovation. This critical feedback led to several changes. We produced a faculty handbook, developed new recruitment presentations for students, and implemented a curricular planning process for learning community teaching teams. Teachers now complete a "community plan worksheet" that outlines the curricular theme for the community and how teachers will integrate this theme across their courses. They must also comment on the intended outcomes for their community and present their plans for assessing student learning. (The Research for Action study, "Friends for School Purposes," can be viewed at:www.temple.edu/lc/reports.html.)

Learning Communities Survey

For our part of the end-of-grant evaluation, we developed a questionnaire to obtain information on students' attitudes and expectations about their first year at Temple University. The survey was based in part on items used on the College Student Experience Questionnaire (Pace 1990) and an instrument used in learning communities studies conducted by the National Center for Postsecondary Teaching, Learning, and Assessment (Tinto, et al. 1994). The survey consisted of four scales of student perceptions: about faculty interaction; in-class learning activities; out-of-class learning activities; and the university environment.

The survey was administered at three points during the academic year: within the first three weeks of the fall 1996 semester, at the end of the fall semester, and at the conclusion of the 1996–97 academic year. For each survey administration, a group of non-learning communities students served as the comparison group. The survey revealed that learning communities students expected and experienced more frequent interactions with faculty and participated in more out-of-class learning activities then nonparticipants. They also held a more positive view of the university climate than their non-learning-communities peers.

The case study, "Friends for School Purposes," and our survey results were the centerpieces of our final report to The Pew Charitable Trusts. They were also disseminated to key leaders on campus, and in 1999–2000, they were included in Temple's institutional self-study report for our accreditation with the Middle States Commission on Higher Education.

Stage III: Ongoing Assessment for Program Improvement

In the first two stages of our assessment journey, we learned how to collect and present summative data to internal and external audiences. Early experiences with assessment also taught us the value of making assessment decisions in tandem with other administrative decisions about budget, enrollment management, and marketing. What remained, however, was a desire to demonstrate the program's value to the undergraduate curriculum in terms of meaningful changes in how students learned and how teachers taught—the curricular and pedagogical missions of learning communities. Combine this assessment goal with those of a new president who established program review and accountability among his priorities, and it was clear that assessing learning communities would need to move beyond retention statistics. The task for this stage of assessment became gathering the types of formative data needed to both improve and further institutionalize the program.

During this phase of assessment, the priority was to gain a deeper understanding of student and faculty experiences in learning communities.

During this phase of assessment, the priority was to gain a deeper understanding of student and faculty experiences in learning communities. After a seven-year focus on start-up and rapid expansion of the initiative, we were ready for new information and ideas for revitalizing the program and we wanted to involve new faculty members. Even though the general consensus around campus was that learning communities worked, we sensed a gap between the literature on the characteristics of effective learning communities and the curricular realities of the linked-course learning communities at Temple.

In addition to our continuing annual retention studies, we started to involve learning communities students in broader university-wide assessment projects. This was a deliberate strategy to firm up the program's post-grant position within the university. For example, data derived from the university's New Student Questionnaire (NSQ) and Continuing Student Survey (CSS) provided information for comparing the aspirations and experiences of students inside and outside learning communities. Including LC assessment in larger university studies helped the program obtain useful and credible data without committing sparse Learning Communities Program resources to duplicate assessment efforts. Our participation in Temple's other assessment activities provided a venue to discuss learning communities with senior administrators, deans, and faculty groups examining data on the undergraduate experience. Additionally, learning community program stakeholders were at the table when important questions about student learning and satisfaction were raised.

By 2000, the program was at a point where we had at least fifty learning community offerings each fall semester, consistently enrolling 1,100 to 1,200 students. Still, our case study research had revealed that students' learning community experiences, while very positive, were not as rich as we had hoped. The case study and survey research completed in 1997 revealed that in some

communities, students were experiencing active learning environments characterized by deeper connections with their peers, teachers, and subject matter, while in others, students were only gaining the social benefits of taking two or three classes with the same group of students. Reflecting on this information, we decided it was time to renew discussion on curriculum and pedagogy in learning communities, and to use student data to raise expectations for faculty members teaching in linked courses.

We were now at a point where we wanted to look more closely within and across communities, and because we were the stakeholders —the teachers in the communities and the program leadership— we felt secure enough to pursue this deeper level of assessment together.

The Learning Communities Questionnaire

Our next assessment project, then, was to create an end-of-semester LC evaluation survey that would provide faculty members with specific information on how students perceived the learning environment and activities in their learning communities. We wanted to be able to communicate these perceptions directly to faculty members, to stimulate them to reflect on their learning communities, and strengthen both curricular connections and pedagogy. We created a faculty work group of about five individuals drawn from LC teaching teams, plus the assistant vice provost and the director of the Measurement and Research Center, to design the questionnaire, and created a new faculty position, a Learning Communities research associate, to direct this new assessment effort. Up to this point, assessment decisions were made primarily by the Faculty Fellow and program director, but when the grant concluded and there were no longer funds for a year-round Faculty Fellow, it became essential to ask others in the program to participate in assessment work. This was an important and crucial step in our approach to assessment. Now a larger group of individuals was being invited into assessment conversations, and program leadership was no longer shouldering all the work by ourselves. New thinking was being added, we learned more about how various disciplines approach assessment, and we increased the credibility of our results.

The process of designing the instrument was as useful as the findings. Instead of measuring student satisfaction with elements of the LC program, we wanted to learn if students recognized and benefited from the curricular links between their learning communities courses and if they considered their learning communities classrooms more stimulating and engaging than their non-learning communities courses.

This new Learning Communities Questionnaire (LCQ) represented our first focus on the effectiveness of *individual* learning communities—individual pairs or clusters of courses—as opposed to the *overall student experience* in our Learning Communities Program. We were now at a point where we wanted to look more closely within and across communities, and because we were the stakeholders—the teachers in the communities and the program leadership—we felt secure enough to pursue this deeper level of assessment together. We administered the survey in fall 2000 and again in fall 2001, with a slightly modified version.

The LCQ survey asked students to report on the frequency with which they participated in activities related to the goals of learning communities and the extent to which they perceived these activities helped them learn. For the

"frequency of activity" and "helpfulness to learning" questions (2001 administration), factor analysis was used to reduce the items to six factors or dimensions labeled: (1) in-class interaction; (2) curricular connections; (3) peer learning; (4) socialization/communication; (5) communication with teacher; and (6) out-of-class activities.

Frequency of activities. In our first two administrations of the LCQ, the students reported that they regularly attended class and completed assignments in a timely manner. They socialized with other students in the community and formed friendships they intended to maintain beyond the learning community experience. They reported that in their learning communities classes they were comfortable expressing their opinions, participating in class discussions, and sharing ideas with students from different backgrounds. Students reported that they seldom worked with a teacher on non-course-related activities, seldom sent postings to a learning community listserv, or seldom met with teachers during office hours to discuss grades. A surprising finding was that they never or seldom studied for a quiz or exam with other students from the learning community. One possible explanation for this finding is that the survey was primarily administered in first-year writing courses, classes in which exams and quizzes are not typically given. Although the survey's written instructions and the directions read aloud stressed that students were to consider their *learning community courses*, students may have responded to the question about studying for exams considering only their experience in the writing class. We learned an important lesson about survey question design and administration.

In terms of their overall experience in learning communities, 58 percent of the students said they learned more in their learning community than in the courses outside the community.

Helpfulness of activities. Students reported that regularly attending class and completing assignments were considered the most helpful activities in terms of their learning. Forming lasting friendships and socializing with other students in the community were also considered helpful. Using the web for information for a course assignment, participating in class discussions, and asking a classmate for help also contributed to learning. Working with a teacher on a non-course-related activity, posting to listservs, and attending off-campus activities with other learning communities students were considered least helpful for learning.

Curricular connections. Students were also asked a series of questions related to the curricular connections among their learning communities courses. Sixty-one percent of the students agreed that the courses in their community shared a common theme, but only 45 percent agreed that the material covered in one course was relevant to the material in the other(s). Fifty percent agreed that the assignments in one course were related to assignments in the other(s), and when asked if the individual courses were related to each other, 54 percent agreed. Tellingly, 60 percent said participating in a learning community helped them to see ways courses not in a learning community relate to one another.

Overall experience. In terms of their overall experience in learning communities, 58 percent of the students said they learned more in their learning community than in the courses outside the community. Seventy-seven percent felt their grades in the learning community would accurately reflect their learning and 71 percent felt their grades would reflect their effort. And if they had it to do

over again, 81 percent said they would enroll in a community and 83 percent would recommend it to a friend.

The Learning Communities research associate then took the data analysis beyond frequencies and factor analysis and performed cluster analysis. "Cluster analysis" is a statistical protocol that we used to determine whether or not meaningful and distinct student learning community groups or types existed within and across communities. We wanted to learn whether particular types of students can be identified in terms of two distinct sets of questions—those describing the extent to which students experienced different course-related activities in their learning community courses and secondly, their assessment of the extent to which any of these activities helped in their learning.

Interestingly, students' reasons for selecting a learning community in the first place may indicate whether or not a student will go beyond the basic tasks of attending class and completing assignments.

Five clusters were identified for the "activities" and "helpfulness" data sets. It was useful and interesting to learn that within a particular community and across communities, there were groups of students who engaged in several activities characteristic of LCs that they found helpful to their learning (the "experiencing LCs" cluster), while at the other end of the spectrum there were the "independents," students who were not engaged with one another or their teachers and who didn't fully participate in learning communities activities in or out of the classroom. While the largest cluster was the "experiencing LCs" group, these findings revealed that there were also students having a less positive or effective LC experience. These findings were presented to faculty at our annual summer workshop, followed by a discussion on the different demands and needs of students within communities and strategies for getting the "independents" more engaged. (A full description of the factors and clusters can be found in the paper, "Developing an Empirically Based Typology of Attitudes Toward Learning Communities Courses," available on our website: www.temple.edu/lc/reports.html.)

The report then examined the relationship between the cluster typology and the reasons students decided to enroll in a learning community and looked at the relationship between the activity type and the helpfulness type. Interestingly, students' reasons for selecting a learning community in the first place may indicate whether or not a student will go beyond the basic tasks of attending class and completing assignments. We now recommend that teachers take time at the beginning of the term to ask students why they selected a learning community. Students who indicate they registered because learning communities were the only available courses should be reminded of the rationale for and benefits of learning communities, such as curricular connections and studying with peers.

In the spring, each teaching team received a copy of the summary report along with the descriptive statistics for its learning community. These individual reports included how the team's learning community scored for each mean compared to the overall mean for all learning communities in the program. The reports included similar data for the frequency-of-activity factors and the perceived helpfulness-in-learning factors. For those returning to teach in the program, the information helps teachers better integrate their curriculum, more efficiently plan class time, and develop assignments that promote collaborative and active learning.

The findings from this project and the discussions at the summer faculty development workshops refocused on our work on the curricular and pedagogical elements of learning communities. We used the survey findings to engage faculty in more intentional curricular planning. Another faculty team was brought together to attend a regional learning communities retreat with the task of working on new goals for the program. They created a new section for our 2002 faculty handbook that described the goals and offered strategies to help teachers achieve these goals. (Our faculty handbook is available online at www.temple.edu/lc/faculty_resources.html.) We also developed new marketing pieces for students that clearly stated these new goals for learning communities and helped students better understand the characteristics and benefits of participation.

Where at the beginning we felt like Atlas doing it all, over time a network of shapers, coaches, and workers are initiating and implementing assessment efforts.

Summary: Lessons Learned

Positive retention results are valuable, but simply gathering retention data does not a program evaluation make. At Temple, learning communities students are being retained at rates 4–9 percent higher than comparison groups of nonparticipants and some senior administrators considered this to be sufficient evidence for ongoing support of the program. This data, however, gave us no useful information with which to understand the program at a deeper level and improve it.

The end-of-grant case study and conversations with faculty and students told us that we were not achieving the level of curricular integration we sought in learning communities and that in some communities students were only experiencing the social benefits of taking two or three courses with a common group of students. As the program developed, it became increasingly clear that a comprehensive assessment of learning communities should include both qualitative and quantitative measures.

Along this assessment journey it also became apparent that rich and meaningful learning communities assessment requires collaboration and that more than a "committee of one" must lead evaluation efforts. The case study conducted by Research for Action and the ensuing conversations with faculty and administration when the case was disseminated led to productive dialogue about students' and teachers' experiences in learning communities and about our goals for the future of the program. The case study created a tangible blueprint for program improvements.

The assessment effort, as it evolved, has drawn in more and more players. Where at the beginning we felt like Atlas doing it all, over time a network of shapers, coaches, and workers are initiating and implementing assessment efforts. The faculty assessment workgroup formed in fall 2000 has been extremely productive. A larger group is thinking carefully about what constitutes learning community effectiveness and ways to assess it. Teaching teams now have ongoing information with which to plan or strengthen their learning community offerings. And with this expanding base of knowledge we can submit the program for deeper, more public layers of evaluation.

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