An Overview of Learning Communities in Higher Education

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A. Introduction

The learning community model

Since the early 1990s, the concept of the learning community in higher education has gained depth and clarity. The term *community* denotes faculty and students primarily, but may be extended to include all members of the campus community, and indeed members of the community at large. A *learning* community is a group with a common interest in a topic, whose purpose is to create an engaging and authentic learning experience. A learning community (LC) can take the form of

- A learning-focused extra-curricular activity primarily for students
- An problem-based or themed curricular offering, and/or co-curricular activity , with faculty and students working together
- A faculty or administrative learning community, focused on professional development or organizational learning

What characterizes learning communities is their scale (they are small enough that members develop a personal relationship with other community members) and their focus on integrative learning (the breaking down of disciplinary silos, and engagement with complex and challenging "real world" issues). Inserted within the curriculum, a learning community might target an important institutional goal: for example, easing the transition of first-semester students into college studies, or improving retention and engagement in upper-level courses. At many colleges and universities with learning community programs already in place, these goals are achieved though course pairings or clusters, and linked co-curricular activities organized around a specific theme or issue. By way of co-enrolment of students in paired or clustered courses, learning communities stimulate intellectual development by creating and

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reinforcing personal relationships. The scholarly literature evaluating the impact of these practices indicates myriad positive effects:

> The camaraderie of co-enrollment may help students stay in school longer, but learning communities can offer more: curricular coherence; integrative, high-quality learning; collaborative knowledge-construction; and skills and knowledge relevant to living in a complex, messy, diverse world. (Lardner and Malnarich, 2008)

In short, the range of possible adaptations of the learning community concept is wide, and the potential for enhancing the learning experiences of students is great.

The development and now wide-spread adoption in higher education of the learning community model comes as colleges and universities focus their attention on enhancing student engagement and learning, and improving retention and success rates. Higher education is responding to societal calls for graduates who are equipped to enter a world of rapidly changing technologies, a globalized economy and workforce, and complex social and environmental challenges. Students entering this world need a solid foundational knowledge in their chosen areas of specialization. Equally important, if they are to act effectively upon what they know, are a set of integrative capabilities: making connections across different domains of knowledge; approaching and succeeding at problem-solving; recognizing, respecting and integrating different, often conflicting points of views; communicating effectively in the pursuit of shared goals.

Without denying the success of the modern university at scaling up the production of both specialized knowledge and employable graduates, we can still observe that these successes have been accompanied in many instances by an erosion of the original purpose of a liberal education: to shape a well-rounded, adaptable and civic-minded individual, who in turn can contribute positively to a healthy democratic society. Critiques of the 20th century industrial model of higher education, and interest in the effect of peer relationships on positive attitudes, engagement and learning (Astin, 1973, 1993) have led to questions about how colleges can intentionally foster strong personal relationships that support students in their intellectual endeavours. At the core of the LC model is the idea that building personal relationships can have a strong positive impact on learning. LCs aim to create closer ties between students and their peers, between students and faculty, and between faculty and their colleagues. An LC focused college will additionally support the creation of organizational learning communities among professionals, support staff and administrators. In this way, the "community" model can align an entire institution toward the goal of learning.

Content-wise, curricular LCs organize courses around complex, topical themes that require interdisciplinary thinking and problem-solving. Structurally, LCs are characterized by several features: paired or clustered courses that target a specific student demographic at a specific point in their studies; linkage of curricular with co-curricular activities on campus or in the surrounding community that solidify concepts and relationships, and provide experiential opportunities for the application of learning; faculty collaboration on planning and teaching; student-centered pedagogies, such as active learning; and integrative assignments / assessments that emphasize formative feedback on learning.

LCs evolved first in the American context of reform-minded movements in undergraduate education, first in pilot projects in the early 1990s, then by the 2000s fully institutionalized programs organized on the learning community model. The LC model has since been adapted by universities in Canada, Australia and elsewhere. This is due in significant part to the fact that LC innovations have been grounded in and documented by scholarly work. Research in education and the learning sciences, in companion with the evolution of scholarly approaches to teaching and learning (SoTL) have given colleges and universities an evidence-based literature to consult as they consider the design, implementation, and assessment of learning communities on their campuses. Along with several peer-reviewed journals devoted to the topic, there are regional consortia of colleges and universities for collaboration and knowledge-sharing, and a number of well-established national conferences serving scholars and practitioners.

A sampling of the LC literature suggests a range of potential benefits to institutions considering an investment in improving the quality of post-secondary education. These benefits include

- improved self-reported student engagement and learning
- increased academic success in grades and in earned credits
- increased student retention and graduation rates
- more stimulating curricula for enrichment, through encouraging faculty to focus on complex, messy problems that call for interdisciplinary approaches and integrative assignments
- more flexible, adaptive curricula for targeting students with developmental needs, via the pairing of subjects for intensive skills instruction
- conversion of un-credited learning in experiential extra- and co-curricular activities into for-credit learning
- improved faculty communication and collaboration via collaboration across traditional disciplinary silos
- improved institutional communication resulting from collaborative processes involving academic admin, scheduling, program services, advising, student services and public relations

The rest of this report will sample the LC literature under a variety of headings, in order that we may understand LCs in the context of developments in contemporary higher education, and also assess the evidence regarding their design, implementation and impacts.

B. Background

Origins of the learning community model

Contemporary learning community programs are rooted in what John Tagg has described as a shift to the "learning paradigm" in higher education (Tagg, 1999). This shift has roots in the educational philosophy of John Dewey. Dewey argued that learning was essentially a social activity, and concluded

that effective learning was most likely to occur in situations where personal relationships were fostered, and collaboration toward shared learning goals prioritized. Dewey called, moreover, for increased participation of students in their own learning (Dewey, 1938), noting that much of what passed for modern education consisted in a simple transmission of information, and that the transmission was undertaken with little attention to the nature, experience or aspirations of individual students. Success in education was much more than a mere transfer of information from one vessel to another, or movement of units along a production line. Instead, Dewey called for education to envision the student as a whole person, whose development was critical to the successful functioning of a democracy. As such, Dewey argued, the student needed to be drawn into a collaborative endeavour of inquiry alongside teachers, where both the objects and processes of inquiry were under continual discussion and co-operative development.

A second significant figure for the history of LC development is Alexander Meiklejohn, the founder of the "Experimental College" at the University of Wisconsin. This college-within-a-college opened its doors in 1927, and marked the first attempt in higher education to meld the notion of a liberal arts college with the progressive pedagogical approaches of John Dewey.   The early 20th century was a period of rapid expansion for American universities, both in size and curricular offerings. Witness to this expansion, Meiklejohn observed that the classical ideal of an integrated college curriculum was being discarded in favour of the adoption of the German model of the research university (Meiklejohn, 1932). The modern university, with its multiplying disciplinary departments and its new elective approach to curriculum, might accelerate the advancement of knowledge by virtue of specialization, but only at the cost of an increasingly incoherent experience for the student. Unless someone attended directly to the work of knowledge integration, Meiklejohn argued, the experience of higher learning would inevitably leave the student in possession not merely of fragmented knowledge, but also a fragmented self. Found in Meiklejohn's publications is the first coinage of the phrase "learning community." Ahead of its time, the Experimental College faltered, due to a lack of shared institutional vision and support. Nevertheless, Mieklejohn's ideas were carried forward by numerous faculty and alumni.

Joseph Tussman, impressed by the writings and experiments conducted by Meiklejohn, initiated a similar college-within-a-college at UC-Berkely in the mid-60s (Tussman, 1969). Participants in this effort later brought LC structures to the SUNY and CUNY networks of east coast colleges by the early 1970s. West coast implementations continued to multiply, especially in north-west community colleges that networked and collaborated to share ideas and resources. By the 80s, a national network of LC colleges was forming, organized around the Washington Center at Evergreen State College in Olympia, Washington. The Washington Centre at Evergreen State College now hosts an annual national summer institute for the development of learning communities.

In the wake of calls for improvements in the quality of undergraduate education through the 1990s (for example the Boyer Commission on undergraduate education, 1998), a wide range of colleges and universities, from community college to liberal arts colleges to research intensive universities, developed LC pilots and programs. They did so in order to enhance student engagement and learning, improve

retention and graduation rates, with the over-arching goal of offering students a more stimulating, coherent and personally satisfying learning experience over their years in college.

Today there are hundreds of LC programs in colleges and universities across North America; a recent survey puts the number at more than 800 (Smith et al., 2009). US institutions outnumber Canadian ones, but since the late 1990s, there has been a steady growth of Canadian schools developing LC programs, at the University of Toronto, University of Saskatchewan, Saint Mary's University, University of British Columbia, and Mount Royal University, to name a few examples. Canadian schools are undoubtedly reacting (if a step or two behind) to the same factors as their American counterparts: calls for increased accountability for achieving learning outcomes; calls to improve the quality of undergraduate education, with special attention to integrative learning; the rapid growth and diffusion of research and data on engagement and learning (from NSSE & CSSE surveys and related analysis); and scholarly work on innovation in teaching and learning. Consideration of these factors is now germane to institutional strategic planning across North America.

C. Learning Community Curricular Structures

Learning communities in the formal curriculum

The literature presents numerous overviews of typical LC structures (eg. Lenning and Ebbers, 1999; Smith et al., 2004; Love, 2012; Lenning, et al. 2013), all of which reproduce a similar distinction of four categories: Curricular, classroom, student-focused and residential LCs.

 1.Curricular LCs

The most common format for LCs is the curricular LC. Organized around an interdisciplinary theme, or a complex issue or problem, its learning activities and assignments are integrative, meaning they require the student to draw on multiple domains of knowledge and ways of thinking. The course is also structured to reach outside of the classroom walls, including very often campus and/or community activities dictated by the thematic focus of the LC. Curricular LCs include

- First-year or first-term **seminars or special interest groups (SIGs)**, either stand alone or as sub-sections of larger classes
- **Paired or linked sets of two courses**, team taught by teachers from different disciplines
- **Course clusters** that see students co-enrolled in three courses simultaneously
- **Coordinated studies** LCs, which offer various degrees of horizontal coordination across multiple courses in a program, and/or vertical coordination through a sequence of courses.

Of these formats, the two most widely deployed are seminars / SIGs and paired courses.

Seminars / special interest groups often target incoming students with the objective of socializing them into the college environment. As they introduce students to college level intellectual work, they build awareness of the requisite skills for college success, and create a supportive peer and faculty mentor network for the reinforcement of those skills and attitudes. SIGs may be stand alone seminars, or they may be small groups of students who are also enrolled in several of the same larger first-year requirement courses. The limited enrolment of the SIG (typically 12-20 students) creates an environment for personal relationships to develop, relationships which are a particular help to new students at larger institutions, who may feel alienated and lost in big classrooms populated by mostly unfamiliar faces. For example, at UBC freshman interest groups take the form of both Arts One and First-Year Science Seminars. At the University of Washington, Freshman Interest Groups across a range of themes help with the transition to university and encourage entering students to think about the eventual selection of their major. 50% of new students sign up for FIGs of the U of W.

The paired or linked course format involves enrolling the same students in two courses that are typically scheduled back to back, and taught by two faculty members from different departments who design integrative learning activities and assignments around an interdisciplinary theme or issue. Paired courses might focus on first-semester transition to college, or target developmental skills in companion with a content or a general education requirement, or form a capstone experience in a major. The strengths of the paired course format are several: A truly interdisciplinary approach to a theme or issue, reflected in learning activities and assignments that require students to connect the dots between disparate fields of knowledge; back-to-back scheduling permits a wider range of in-depth in-class and out-of-class learning activities; enrolling the same cohort for both classes allows personal relationships to form that can build and reinforce positive "community" attitudes toward collaborative intellectual work. Baruch College is one of a number of colleges in the CUNY network with a LC program organized around paired courses. Students can select from 26 different options of themed, paired courses, designed by teams of faculty to draw on the culture, history and geography of New York City for focal issues and themes. At Mount Royal University in Calgary, students can complete their first-semester General Education requirements by enrolling in themed LCs (for example, Gender, Technology and Human Rights; Religion and the Public Sphere; Resources, Balance and the End of Nature; War, Technology and Violence). These themed LCs are team taught by 3 faculty members, and limited to an enrollment of 30.

2. Single Course LCs

Many of the qualities associated with the LC approach are still available within the traditional single course format, if the coursework is supplemented with a well-organized co-curricular activity, and the teacher gives attention in course design to active learning, collaboration, and integrative assignments. For example, many colleges and universities have requirements in service learning, which are organized around a required course in the major or in general education, and contain a significant campus or community outreach component. For example Portland State University and Wagner College have service learning requirements within Gen Ed, and these can typically be fulfilled within a stand-alone LC course (Smith, et al., 2004).

Alternately, what have traditionally been extra-curricular activities can find a home within the curriculum, if departments and requirements are flexible enough. If this is the case, students then can earn credit for learning experiences that have traditionally remained outside of the credit structure. Colleges may offer travel-study opportunities under this format. At the University of Saskatchewan, The Global Experience LC prepares students for study abroad opportunities

3. Student-focused LCs

Lenning and Ebbers third category identifies LCs by a specific purpose: these LCs are enrolled according to special needs particular to a specific college or university student population. They might address developmental skills, under-served ethnic or demographic groups, or focus on enrichment (honours colleges), or intensive or off-campus student work in the major (capstones, service learning, practicum/fieldwork). The impact of LC formats on student success in the area of developmental skills for example, has been carefully documented in a wide range of settings. Second language students, along with students who arrive at college under-prepared, or lacking prerequisites, or needing a supportive environment because they are first generation college attendees, have all been found to benefit from the support of faculty and peers within LCs. For these students, an LC that, for example, pairs a skills course with a course in the student's chosen program, provides a direct reinforcement of the linkage between the development of basic skills, in math or reading or writing for example, and advancement in program-specific coursework. SIGs or paired courses, when they employ learner-focused instructional design and pedagogy, and when they provide a positive social reinforcement through peer and faculty mentoring, can be a critical form of support for students with special needs. At LaGuardia Community College-CUNY, New Student House is a longstanding LC for second language students. Designed by CUNY faculty and administrators as a response to the demand for college access for the diverse cultural communities of the NY area, New Student House is an example of an LC targeting developmental skills. Paired courses in skill areas, including language and math/science upgrading, and content areas like accounting, business, and psychology are complemented by structured weekly seminars involving students and the NSH faculty team. Other CUNY colleges exploit the paired course format to link developmental skills courses with content courses - developmental math with accounting, for example, at Kingsborough Community College.

4. Residential LCs

A final format for LCs is specific to institutions with on-campus student housing. In this adaptation, new students can opt into a residence floor that is occupied uniquely by students in their major. Students live and study together, attending the same core seminars and courses, and participating in residence-based co-curricular activities that create a shared experience of social and intellectual learning and growth.

D. Learning Community Impacts on Student Engagement and Success

Evidence linking LCs with student success

The impact of LCs on student learning, engagement, persistence and graduation rates has been the focus of both single and multi-institution studies since the early 1990s. These studies rely on qualitative and quantitative data gathered by tailored assessments for learning outcomes; student satisfaction surveys and faculty surveys; and comparisons of results and progress of LC participants versus non-participants. These studies range from single-college projects carried out internally by institutional research units all the way up to national meta-analyses of data aggregated by NSSE and CCSE instruments.

For example, research by Tinto, Love and Russo (1994) involving 1200 students at three very different institutions (University of Washington, LaGuardia Community College, Seattle Central Community College) examined LCs in the form of freshman interest groups (University of Washington), course clusters (LaGuardia CC) and coordinated studies course (Seattle CC). The authors concluded that LCs had a set of identifiable positive impacts on participants. First, LC students formed and maintained more peer group friendships when compared to students in stand-alone classes. Second, students reported that these social relationships were supportive of the learning that was undertaken in the classroom: motivated by the endeavour of shared learning, they devoted more time-on-task to learning, both in and out of the classroom. Third, LC students reported higher intellectual gains and a greater satisfaction with participation in knowledge-creation in the LC courses, both attributes being linked to the interdisciplinary and collaborative character of LC courses. And fourthly, first-year LC students persisted in their studies at a higher rate than non-LC students (Tinto et al., 1994, 2003).

Since 2000, more recent single institution studies have yielded more specific information about impacts on LC participants:

- Closer relationships, higher engagement (Kuh and Zhao, 2004)
- Higher grade point averages, retention rates, progress towards graduation than non-participants (Buch and Spaulding, 2008)
- Higher levels of self-reported engaged learning, civic responsibility and personal well-being in LC student surveys vs non-participants (Finely, 2009)
- Higher results for students in an LC experimental class cluster (chemistry/calculus/composition/integrative seminar) across a course sequence of calculus assignments compared with a control class of students taking only calculus (Hanson and Heller, 2009)
- Higher retention and higher pass rates for both underprepared and ESL students enrolled in developmental skills LCs emphasizing collaborative learning, peer study groups and facilitated access to student services (Engstrom, 2008)

- Higher self-reported engagement and integration into the college environment, higher number of earned credits, and better results on communications exit exams
(Scrivener et al., 2008)

A study by Engstrom and Tinto (2008) of 13 community colleges focused on low-income and under-prepared LC students. Assessing both quantitative data on engagement, success and retention, along with qualitative student interviews, Engstrom and Tinto conclude that gains in all these areas result from a combination of very high expectations and very high levels of support. One Cerritos College student emphasizes how closer peer relationships were transformative:

> Before I took the linked LC course, I only communicated with the teacher. Now you spend so much more time with your classmates, and we are sort of a community. In this environment you become more confident, you become more alive, you become more responsible for your own opinions and you aren't afraid to speak your views, you aren't afraid to speak up.
> (Engstrom and Tinto, 2008, p.13)

Another student speaks to the quality of the student-faculty relationships in her LC classes:

> It is amazing the impact these teachers in the learning community have on students because you have teachers that want to learn from you and they want to talk to you about how you're learning and how you are developing. They just want to show that they really care, like it's sincere and it's not just something to do for a paycheck. It means a lot more and makes you want to view life differently. It makes you want to view life positively because teachers actually care about you. You are like "wow!"
> (Engstrom and Tinto, 2008, p. 17)

Accompanied with quantitative data on significant gains in engagement, learning and success, individual comments like these lend credibility to a key theoretical idea: creating environments that combine the social and the academic leads to enhanced learning, greater personal satisfaction, and improved persistence toward educational goals. An LC experience may be transformative, especially for disadvantaged students who manage to arrive at college, but lack the social and economic stability which are traditionally strong predictors for success.

As might be expected, there are also studies that reach more cautious conclusions about the impacts of first-term LCs, especially with respect to impacts on under-prepared students. Scrivener et al. (2008), cited above, assessed student persistence via surveys in 6 different community college settings that followed participants in developmental first-term LCs through to graduation. They concluded that any impact of first-term LCs was not statistically significant for persistence until the end of the fourth semester, and improvements at that point could only be described as small. Their results raise questions about how the impacts of early LC-type interventions may or may not accumulate over time,

and how first semester LCs may need to be followed more programmatically with upper-level LCs if the positive impacts are to be sustained over multiple semesters. These questions were pursued in a broader MDRC study (2012) of success and persistence of under-prepared students at 6 other community colleges, which reached similar conclusions. While 1st-semester LCs do offer short-term positive impacts for under-prepared students, the myriad factors bearing on the progress of under-prepared students means that the single experience of participating in a 1st-semester LC is unlikely to have a determining influence on their graduation prospects (Vishner et al., 2012). Expectations that 1st-term LCs, on their own, represent a breakthrough innovation in the curriculum for under-prepared students, are potentially unrealistic.

Nevertheless, overviews of the best available evidence still conclude that there are a wide range of positive impacts associated with LC initiatives, when we consider the full spectrum of student needs, and when we consider institutions as a whole:

> We will not draw sweeping generalizations based on studies that vary widely in the nature of their curricular interventions, although they all fall under the umbrella term "learning communities." That disclaimer aside, we can say definitively that those studies that looked at retention, academic success, and satisfaction reported overwhelmingly positive results. These findings held without regard to the size of the study or the type of learning community undertaken, suggesting that even modest learning community initiatives are likely to reap positive outcomes.
> (Taylor et al., 2003)

Whether LCs target a specific demographic or a broad spectrum of students, the fact that there are a variety of different LC formats gives institutions the liberty to design within institutional constraints, and nevertheless remain confident that the result is likely to be the same:

> Evidence continues to mount documenting successes that learning communities have achieved. Students and faculty report positive outcomes as a result of enhanced engagement with each other and the integration of ideas and experiences. At an institutional level, faculty and administrators report new partnerships, new programs, and invigorated departments as a result of LC implementation and development.
> (Goodsell-Love, 2012, p. 16)

Learning communities as a "high impact practice"

The past two decades have seen growing interest in assessment for learning outcomes, and in identifying and sharing knowledge about evidence-based teaching approaches that are likely to have an appreciable effect on those outcomes. Given the volume of research conducted to this point on LCs, it is not surprising that the recent literature focusing attention on improved student learning outcomes includes LCs in the list of best practices that can be adopted by colleges and universities, regardless of

size or mission. Best-known of a number of post-2000 reports is George Kuh's 2008 report for the Association of American Colleges and Universities, *High-Impact Educational Practices: What They Are, Who Has Access to Them, and Why They Matter* (Kuh, 2008). Working with NSSE data from both students and faculty, Kuh identifies ten "high impact practices" which are likely to increase student engagement, learning, and eventual success. The practices are first-year seminars; integrated core/gen ed curriculum; learning communities; writing-intensive courses; collaborative assignments; undergrad research; diversity & global learning; service learning; internships; and capstone courses & projects.

Kuh suggests that these practices have six features in common. First, they require more dedicated time-on-task committed to learning activities and assignments than traditional course work. Second they involve students in more interactions with fellow students and faculty that are supportive of learning. Kuh notes especially the critical importance of peer relationships in determining student attitudes toward their college endeavours, a factor already well documented in the research of Astin (1977, 1993).   Third, they tend to expose students to a diversity of ideas and people that can lead to more complex understanding. Fourth, because the learning is active and collaborative, these practices tend to provide more forms of feedback to the student on her own learning, permitting a more accurate assessment of progress. Fifth, these practices offer opportunities that permit students to apply their learning outside the formal environment of the classroom, and thus better appreciate the relevance of their learning to real world issues and concerns. Finally, to the extent that these approaches tend to address the student as a whole person, permitting reference to prior experience and involving students in experiential learning, they potentially offer students a transformative experience that can alter the course of interests and pursuits for the rest of their lives (Kuh, 2008). The significant positive impacts of these practices individually have been subsequently validated by recent multi-institution studies (Kilgo et al 2013). Kuh concludes by encouraging colleges to offer students the opportunity to participate in at least two different high-impact activities over their course of studies. Given what we know about the complexity of factors bearing on student learning and success, it is best to consider high-impact practices as a suite of promising approaches: no one is a silver bullet, but the available evidence suggests that more is better.

Building then on the question of access to these practices, in "Disrupting Ourselves: The Problem of Learning in Higher Education" (2012), Randy Bass asks, "If the formal curriculum is not where the high-impact practices are located, what are our possible responses?" (26). The appropriate response, he suggests, is to re-envision the curriculum by bringing all of these practices together from the periphery to the centre. The LC model arguably offers a significant step in the direction of this goal. Multiple high-impact practices can be integrated within an LC framework. For example, a first-year interest group can be a writing intensive course; a capstone program LC can focus on undergraduate research; an internship LC can combine service learning with collaborative learning. From this view, the flexibility of the LC model makes it a "meta" high-impact practice.

E. Design Principles for Learning Communities

Deep versus surface learning

The 2007 AAC&U report, "College Learning in the New Global Century," states that higher education is under an obligation to offer an education which prioritizes more than just the development of a knowledge base in the traditional disciplines. Once students enter a complex and rapidly changing world, foundational knowledge will not be enough, the report argues, if it is not paired with capabilities and attitudes that support integrative learning and problem solving. According to the AAC&U, an education that privileges "deep" over "surface" learning must furthermore be accessible to all, and not just those enrolled in enrichment activities or elite honours programs.

Marton and Booth (1997) characterize the transmission model of instruction as one occupied with "surface learning," and contrast it with a model focused "deep learning." Surface learning denotes learning that relies heavily on memorization, and is likely to be measured in summative assessments like end-of-term examinations. "Deep" learning, in contrast, is learning that begins with an acknowledgement of prior experience; accrues relevance for students because they have actively participated in the construction and negotiation of meaning; and is completed with opportunities to apply skills and knowledge in different situations (Marton and Booth, 1997).

Principles of the "learning paradigm" college

What principles guide the development of an effective curriculum for deep learning? Twenty years ago, Barr and Tagg observed that a significant shift was already underway in higher education in North America, a shift from a teaching and instruction paradigm to a "learning paradigm" (Barr and Tagg, 1995). Traditionally, modern universities made their most important decisions in consideration of a relatively small and fixed set of *how* factors: how many students enrolled, earning how many credit hours, involving the departmental staffing of how many teachers and scheduling of how many courses, and the prospective retention and graduation of how many students. "To say that the purpose of colleges is to provide instruction," remarks Tagg, " is like saying that General Motors' business is to operate assembly lines or that the purpose of medical care is to fill hospital beds" (Tagg 1995, p. 13). In short, the modern university mistakes the means for the end, focusing on the *how* in the delivery of instruction, instead of attending to *what* and *whether* students are learning. Revisiting the topic in *The Learning Paradigm College* (Tagg 2003), Tagg notes that the widening attention to learning outcomes and student engagement of the 1990s signals that change is well underway in many places, evidence of a steady and irrevocable trend. The learning paradigm college, Tagg argues, has 5 distinguishing characteristics:

> i) It supports students in the setting and pursuit of their own goals. Students feel a sense of ownership of their learning process and goals: they are involved in validating learning outcomes, in making choices throughout courses and programs, and also in modelling and adopting the attitude of what Tagg calls the "good beginner" - someone who is confident in launching into

complex and unfamiliar endeavours, and who does so in awareness that "learning to learn" involves risk-taking and mistakes.

ii) Assessments are tied to learning versus coverage of content, and are considered first in the design process, and not as an afterthought to the coverage of content. Assessments are meaningful, authentic to the contexts of topical problems or themes, frequent enough and carefully timed to provide meaningful consistent feedback to the student on the progress of their learning.

iii) Feedback is integrated in such a manner that it is formative, not merely summative, and that it offers timely, meaningful information to both the student, on the progress of their learning, and to teachers on their instructional design choices.

iv) The time-frame for learning is a long one. Expectations for learning are framed by the idea that mastery is a worthy but also distant goal, and that the cultivation of a disposition toward learning is as important as the evaluation, at any given moment in time, of what the student knows or what the student can do. Students' intrinsic learning goals are linked with the development of lifelong learning skills, even as they advance toward the immediate objective of a diploma.

v) Communities that reflect an understanding of teaching and learning as foremost a social activity are created and maintained. These communities aim to overcome the isolation of individual students in stand-alone courses, so that the power of personal relationships can be brought to bear on the learning process; and also create situations of "legitimate peripheral participation" (Wenger 1998) where students move back and forth between observation of modeled expert behaviour, opportunities to practice as apprentices, and reflection on the progress of their learning.

An effective manner of achieving these ends within the formal curriculum, Tagg concludes, is through the learning community model.

Designing for effective learning communities

On the specific question of design principles for curricular learning communities, in *Learning Communities: Reforming Undergraduate Education*, Smith et al. (2004) identify 6 guiding concepts: community, integrative curriculum, diversity, active learning pedagogy, reflection and outcomes-based assessment. Noting that these concerns inevitably overlap and influence each other, the authors elaborate how each can be addressed in the conception and design:

Design for *community* by
- creating opportunities in the classroom for new interpersonal relationships, which early in college can significantly impact learning and retention, esp. in the first semester (Tinto, 1987)
- creating collaborative activities and assignments that build positive social relationships and support dedication to coursework
- selecting the concept of community itself as the focus for learning community theme, for eg. "Harlem on My Mind" (LaGuardia CC), "Finding Community in a Changing World (Chander-Gilber CC/ ASU), and "Asian Pacific American: Whose Values / Who is Valued?" (Seattle Central CC)

Design for *diversity* by
- designing curricular content with an eye to acknowledging and valuing a diversity of ideas
- designing inquiry-guided learning activities that engage students from diverse backgrounds, as well as students with specific needs,
- selecting topics, themes, issues and problems, that are relevant across social, cultural and economic boundaries
- providing classroom opportunities for divergent views to be raised and discussed constructively
- varying pedagogy and assessments to be sensitive to different learning styles, to adapt to gender and cultural differences, and to facilitate the move between theoretical and applied learning in the interest of keeping all types of students engaged.

Design for *integration* by
- being aware of contemporary theories of learning and cognitive development, and staying oriented towards deep vs surface learning, especially steering to the top of Bloom's taxonomy: analysis, synthesis evaluation
- selecting messy, complex, "wicked" problems as course themes that call out for an emphasis on making connections between disparate fields of knowledge
- supporting interdisciplinary planning and delivery of curriculum by teams of faculty from complementary fields
- creating inquiry-guided curriculum in ways that reveal relationships/tensions between different disciplinary ways of knowing
- organizing co-curricular activities that foreground connections between learning in college and applications in community and personal life beyond the campus.

Design for *active learning* by
- emphasizing the posing meaningful contexts and problems versus coverage of content; beware of "inert ideas" (Whitehead, 1927)

- building in interactive components that push beyond transmission & passive reception as goal
- casting teacher as guide vs sage, breaking reliance on lecture mode and banking model
- encourage student leadership: flipped classroom, problem-solving, role-playing, simulations, collaboration, peer review, situated performance assessment; drawing in prior experience, developing social leadership for learning

Design for *reflection* and *assessment*
- coupling activity/performance with opportunities for self-reflection on progress, challenges opportunities
- building in reflection as meta-cognitive aptitude: "reflective practitioners" (Schon, 1983) have awareness and autonomy
- clarifying explicit learning goals for all, explicit link to assessments, and tie to intrinsic motivations of students
- emphasizing formative vs summative assessment that feeds the learning process
- providing many opportunities for assessment performances, to create consistent and timely feedback to student and teacher on progress of learning

Lichtenstein (2005) underscores the importance of a careful consideration of these kinds of factors in the design and planning phase of an LC initiative; critical to the success of LCs are intentional choices in curriculum and instructional approaches. Simply calling a pair of linked courses a learning community is not a recipe for positive classroom learning environments. Challenges in design and implementation for effective learning communities can only be addressed in a coordinated manner by LC faculty if they are supported in their efforts by substantial institutional resources (Brownell, 2009).

F. Faculty Development for Learning Communities

The research on LC development inevitably touches on the central issue of faculty development, for obvious reasons: Participating in a learning community initiative makes new and challenging demands on teachers. We will see that these new conditions can spur a rejuvenation of energy and interest in teaching. But a necessary condition for the initial and ongoing success of LCs is carefully implemented support for faculty involved in the development and delivery of LC courses.

Faculty development in higher education and the promise of community

Historically, colleges and universities have varied widely in the support they offer teachers in terms of individual professional development and the creation of communities of professional practice. Committed to knowledge production and the fostering of learning, colleges and universities would seem to lend themselves naturally to the development of what Schon has called "reflective practitioners" (1987). Yet for decades critics have pointed out that, as often as not, institutional support for faculty

development can be intermittent, inconsistent and incoherent. Grub (1999) found that as community college teachers describe their careers, many refer to a sense of professional isolation. Much planning, teaching and grading is of necessity done alone. Teachers may benefit from an informal collegiality while on campus, but this collegiality may be limited to brief exchanges in department meetings, or happenstance encounters in halls or faculty rooms. If teaching aims to produce an invaluable public good in the form of educated and autonomous citizens, then it is indeed paradoxical, notes Lee Shulman (1999), that higher education environments often tacitly endorse the notion that the teaching profession is essentially a "private" endeavour.

Colleges can make determined efforts towards faculty development in the form of information bulletins, workshops and pedagogical days, but these actions may fall still short if the goal is to develop meaningful, ongoing relationships among teachers, and to foster truly productive discussions about what the ultimate ends of teaching and education are (Smith et al., 2004). Trends of the past two decades favouring the creation of centers for teaching and learning (CTLs), accompanied by growing recognition of the scholarship of teaching and learning (SoTL), have made a difference. If CTLs initiate ongoing communities of practice that connect teachers with each other, and introduce professors to evidence-based approaches to teaching, they can lead a transformation of professional practices and relationships.

Yet the view of teaching as a solitary, private activity has undeniable staying power. Reinforced by the compartmentalization of the work of teachers within courses, departments, and programs, this view carries profound consequences. John Tagg notes that teachers may not think to intentionally create meaningful communities for students because they are not encouraged to create and participate in them themselves. In many cases, "there is no living community of practice among the faculty that is actively negotiating the meaning of teaching and participating in revising the tools they use and the rules that govern them. Only if the teachers are learners, and are seen to be learners, can they genuinely model deep learning for the apprentice learners in the community" (Tagg, 2003, p. 262-263). From this perspective, learning communities represent a potential opportunity to recast teaching and learning within a collaborative community framework.

It is important to recognize that for academics, professional and personal identities have been formed within an intellectual tradition that values freedom in research and teaching activities, and many teachers understandably carry the idea of academic freedom into the classroom with an emphatic closing of "my" classroom door. Not all teachers will find attractive the idea of a collaborative approach to what has been an autonomous professional activity. This will hold especially where teachers have been subject to unwelcome intrusions and demands, issuing from bureaucracies and administrations that are unsympathetic to faculty concerns.

On the other hand, there will be faculty who seek out opportunities to create new collegial and collaborative relationships; whose prior research and teaching experience has already included collaborative work; who will thrive on interdisciplinary conversations; who will be stimulated by discussions of complex problems as themes for courses; who will dig deeply into both their disciplinary

expertise and also the scholarship of teaching and learning as they design integrative assignments; and who will value opportunities to reflect together on the outcome of innovations in curriculum and teaching approaches once the semester has ended.

Positive impacts of faculty participation in learning communities

Randall Jedele, chair of Humanities at Des Moines Community College, summarizes the impact of his mid-career decision to participate in learning community teaching as a "sea change" of Cs: "camaraderie, cooperation, collegiality, collaboration, curriculum integration, creative teaching techniques, and community building" (Jedele, 2010, p. 107). The idea that learning communities offer faculty an opportunity for "radical transformations" (Jedele,2010, p. 107) not just in pedagogies but in professional identities has been explored in detail by several studies.

In research conducted at two community colleges, Rye (1997) found that faculty teaching in coordinated studies programs (CSPs, a variation on the learning community model) "experience revitalization and empowerment in CSPs, alleviating redundancy and boredom from teaching the same courses. The CSP framework allows for self-direction, spontaneity, and freedom from the barriers and restrictions experienced in traditional courses" (Rye, 1997, ii), and concludes that "faculty value in this an opportunity to tap into a reservoir of energy for change and innovation within the institution. The CSP becomes an antidote to disaffection" (Rye, 1997, p. 146). On a similar note, a detailed study of ten mid-career faculty teaching in LCs at the U of Iowa, Ellerton (2004) concludes that the decision to take up the challenge of new personal and professional relationships within a LC framework offers experienced teachers an opportunity for revitalization and rejuvenation. Interviews revealed an emphasis on seven positive outcomes: A greater pride and satisfaction in work; opportunities to innovate and take risks; closer relationships with both students and colleagues; opportunities to deepen their familiarity with the scholarship of teaching and learning; a greater emphasis on educating for democracy and citizenship; and finally, structured opportunities for personal insights and the reaffirmation of the value of their work (Ellerton, 2004).

Ellerton notes that faculty did not shy away from identifying a number of significant negative effects associated with LC work. Teachers spoke of stress caused by several factors: Preparation of new course materials and new approaches, collaboration with new and unfamiliar faculty from different departments, negotiating over complex issues of curriculum, scheduling, and assessment, uncertainty over midstream setbacks and adaptations, scheduling time for collaborative faculty work, and a more time-intensive relationship with students. However, she concludes that "a recurring theme related to negative outcomes is that faculty in this study were willing to overlook potential negative consequences because of the overwhelmingly positive outcomes that they and students experience through the learning community" (Ellerton, 2004, p. 145).

To sum up, the research on faculty participation in LCs suggests that those who are drawn to collaborative work, to interdisciplinary approaches and to innovations in pedagogy will be excited by the prospect of teaching in LCs, and will find tangible personal and professional rewards for the time and

energy they invest. At first, these teachers are most likely to emerge from already defined groups of early adopters, change agents, community seekers, and faculty development leaders (Smith et al 2004), but a long-term vision will include measures that make LC teaching open to all, and attractive to as many as possible. This may include soliciting teachers through an open and transparent call for LC themes and course pairings, and regular communications with the larger college community about ongoing opportunities to learn more about and participate in LCs.

Institutional support for learning community faculty development

A recurring theme in the LC literature is that institutional support for LC faculty development must be substantial and consistent. Resources that permit faculty to plan, deliver and assess LCs must be allocated in a substantial and systematic manner; otherwise, the prospects are nil for long-term success. Regardless of the institutional goals of an LC, decision-makers must be cognizant that success rests predominantly on the backs of faculty, for the single most important premise for the success of LCs is faculty-driven transformation of professional practice.

In their investigation of professional development support for faculty teaching in LCs, Graziano and Kahn (2013) identify three broad principles to guide consistent LC faculty development efforts: 1) focus resources and planning on support for collaboration among faculty; 2) engender habits of reflection that support the design of integrative learning and assessments; and 3) respect the agency of faculty to make final decisions on curriculum and pedagogy, and to evaluate the results. Clarity on a set of guiding principles for faculty development is particularly important given the uniqueness and difficulty of the challenges, problems and setbacks that teachers are likely to encounter as LC projects get underway. These challenges may include

- incomplete grasp of LC goals and core practices
- weak integration of skills and knowledge in learning activities and assessments
- disagreement over approaches to feedback, evaluation of student work
- lack of instructional coordination / collaboration across linked classes
- lack of LC leadership and unclear lines of accountability & responsibility

For colleges that have embarked on an LC initiative, there is a need for a structured and systematic approach to supporting faculty before, during and after the semester. Graziano and Kahn (2013) outline a framework developed and implemented at Kingsborough CC for an ongoing faculty community of practice, in which preliminary planning, ongoing consultation, and post-course evaluation are linked in a developmental cycle:
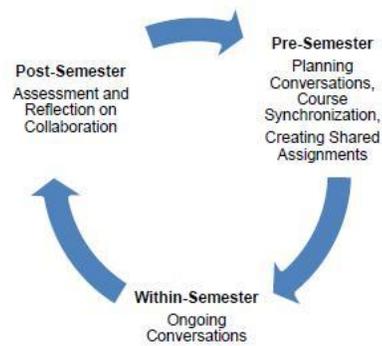
Figure 1. Cyclical faculty development

Developed with an awareness that communication is critical to the success of learning communities, this simple framework facilitates continuous sharing and collaboration among LC faculty:

A) Pre-semester meetings
- permit faculty to get acquainted
- compare syllabi and elaborate themes for paired courses
- agree on and synchronized course schedule of readings, course work, activities
- develop at least one shared integrative assignment, reinforcing as they do the definition and goals of integrative learning
- structured scaffolding for these assignments across courses
- address common and separate feedback and evaluation approaches
- clarify course policies

B) Mid-semester consultations
- assess students' strengths and weaknesses
- address curricular adjustments if necessary
- address and respond to logistical issues in course schedules, resources, activity planning

C) Post-term evaluation
- assess examples of student work for integrative learning goals (see decision tree for assignments
- evaluation of what worked, what didn't at curricular level
- faculty reflection on their learning, best practices
- work on / develop scholarly LC projects
- identify priorities for next planning phase

To sum up, learning community faculty need institutional support in the form of time and targeted resources. Collaborating with colleagues, developing a truly integrative curriculum, implementing active learning pedagogies, designing innovative assessments, and rolling all into a professional reflective

practice are intensive challenges that cannot be met by teachers acting on their own. Graziano and Kahn (2013) conclude that "through administrative efforts to provide the conditions for collaboration to develop, faculty become equipped to undertake this transformational work" (Graziano and Khan, 2013, p. 7). Faculty thereby become active members of a broader community of practice, that in turn can enrich a college's culture of teaching and learning.

G. Institutional Implementation and Evaluation of Learning Communities

Setting objectives

Of the many factors that bear on the development and implementation of learning communities, foremost, note Lenning et al. (2013), is a consensus on what the purposes of the initiative are. As a non-traditional curricular innovation, the learning community is an unknown entity for many within traditional higher education environments. Thus its end purposes must be discussed, elaborated, interrogated and refined in a public and transparent process. If a broad spectrum of administrators, faculty, support professional have input into discussing the needs of the community, and the potential objectives of an LC initiative, then the stage is set for collaboration and success.

If a college or university is invested most in the status quo separation and autonomy of its various parts, and if there is a lack of willingness to bridge institutional boundaries, either between academic departments or between administrative units, then this represents a serious obstacle to the progress of an initiative that requires cooperation, consensus and collaboration across traditional organizational lines. Those leading LCs projects, regardless of what sectors they represent, must be prepared for a certain amount of turbulence and uncertainty. Geri et al. (1999) note that reform efforts in higher education are often painted by those resistant to change as little more than imposed "structural" changes or mere political gamesmanship. And real change can indeed generate "discomfort and disarray" along the way, they acknowledge, which is why leaders must be realistically prepared to directly address concerns and resistance as those change occurs.

To sum up, any decision to undertake a LC initiative must be preceded by self-questioning grounded in realism about human capital and organizational potential: Does our college have the vision, resources, skills and determination collectively to undertake this kind of project? Ultimately, conclude Lenning et al., LCs are about collective growth: "the guiding principle for any type of LC should be community growth: the power of the many versus the power of the one. Intentional growth occurs through the assembling of professionals with differing strengths and knowledge bases. Combining individual knowledge leads to expansion of skills, general knowledge and growth in perspective" (Lenning et al., 2013, p. 45).

The range of possible outcomes to be considered as LC goals are determined is addressed in detail by Smith et al., (2004). Because a LC project will enlist the skills and energies of people from diverse sectors of any college, time spent in discussing and elaborating goals is time well spent, increasing

dramatically the prospect of shared understanding and support for LCs. The authors represent the layering of possible goals in Figure 1, Appendix A. In each of the three domains, goal setting naturally focuses first on lower steps, where gathering evidence and articulating outcomes is relatively straightforward; however, the movement upwards toward more intangible, aspiration goals is equally critical to motivating a higher education community.

Planning, implementation and assessment

Approaches to planning, implementation and assessment of learning communities are well documented in the literature. At American colleges, LC initiatives have often been conceived as responses to new accreditation requirements and to national initiatives to enhance the quality of undergraduate education, and thus there exists a common interest in sharing knowledge. Over more than two decades, numerous teams of faculty and administrators have documented the character and results of their specific efforts. For example, in "A Primer for Learning Community Program Coordinators," Ana Torres-Bower (2013) of Cerritos College lays out a set of institutional conditions that are premises for the success of LCs:

> 1. **Institutional mission**: The learning community program should align with and support the institutional culture and the campus mission.
> 2. **Funding**: For sustainability after initial start-up, the budget should not depend exclusively on grant funds.
> 3. **Program and student learning outcomes**: The learning communities program should develop clear and specific outcomes for the program and for students enrolled in learning communities.
> 4. **Strategic planning**: The program should develop a strategic plan or course of action that extends for two or more years and is in accordance with the needs of the institution.
> 5. **Program review**: The learning communities program should be included in the institutional program review practices. In addition to assessing and addressing the strengths and challenges of the program, this formal program review provides an opportunity for other campus stakeholders to learn, understand, and appreciate the learning community program's services and benefits to the institution.
> 6. **Staff and administrative support**: The learning communities program should have strong support from all functional groups, including key administrators and support professionals.
> (Torres-Bower 2013)

At a more specific level, the process by which an LC program is launched has also been documented widely; see for example Gabelnick et al., (1990); Shapiro and Levine (1999, 2004); Lenning and Ebbers (1999); Fogarty and Dunlap (2003); Lardner and Malnarich (2008); Visher et al., (2010); Lenning et al. (2013); Soven et al. (2013). From these different accounts, a formula for planning and implementation can be synthesized:

> 1. **Define goals**: Scan institutional needs and priorities where student learning is concerned; discuss needs in relation to current curricular structures and institutional resources; identify

general purposes and specific objectives. Undertaken by a collaborative LC steering team: self-identifying faculty, administrators, professionals, support staff

2. **Clarify lines of responsibility and funding**: Identify a LC coordinator, situate the LC steering team in relation to existing academic administration and faculty advisory bodies, verify expenses and budgetary resources

3. **Choose a curricular structure:** identify the LC format best matched with purposes and objectives, and the scale appropriate to student numbers, faculty staffing and course scheduling

4. **Organize, coordinate and support a set of linked, semi-autonomous collaborative teams**:
i) a faculty team to work on curricular design: familiarize with core LC practices, develop new LC course themes and pairings, pilot and assess; collaborate with the support of existing faculty development/teaching and learning programs
ii) a team or teams of administrators/professionals from advising, the registrar's office, PR: share information and resources internally, and consult externally with experienced resource people from LC programs elsewhere; address logistics of staffing, scheduling; to formulate an approach to advising prospective LC students, and to determine effective ways to publicize LC internally and externally.

5. **Launch, document and assess LC pilots**: Create and build in assessment tools that will provide information on impacts and effectiveness: CSSE, faculty surveys, tracking of progress and success of LC participants, so that results can be communicated and used to build understanding of and support for LC program.

6. **Merge information and results on LCs with long term institutional strategic planning:** Working in close collaboration with institutional researchers.

H. Links to College and University Learning Community Programs

Holyoke Community College – Holyoke, MA
http://www.hcc.edu/courses-and-programs/integrative-learning/learning-communities

Baruch College-CUNY – New York, NY
http://www.baruch.cuny.edu/wsas/academics/learning-communities/index.htm

Bunker Hill Community College – Boston, MA
http://www.bhcc.mass.edu/learning-communities/learningcommunityclusters/#d.en.9365

Kingsborough Community College-CUNY – Brooklyn, NY
http://www.kbcc.cuny.edu/LC/Pages/LearningCommunities.aspx

Skagit Valley College – Mount Vernon, WA
https://www.skagit.edu/directory.asp_Q_pagenumber_E_363

SUNY Potsdam – Potsdam, NY
http://www.potsdam.edu/academics/specialprograms/learningcommunities/

Wagner College – Staten Island, NY
https://wagner.edu/academics/undergraduate/fyp/

Arts One and Freshman Science Seminar at University of British Columbia – Vancouver BC
http://artsone.arts.ubc.ca/
http://science.ubc.ca/students/new/first/113

University of Saskatchewan – Saskatoon, SK
http://artsandscience.usask.ca/students/learningcommunities/

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Appendix A: Figure 1

STUDENT LEVEL

New or reaffirmed values, aspirations, commitment
Enhanced leadership skills
Increased intellectual development, cognitive complexity
Academic maturity, self-confidence and motivation
Deepened diversity and citizenship understandings and skills
Demonstration of learning outcomes (related to courses, LC program, gen ed, study in   major/minor)
Achievement (grades, overall GPA, entry into majors, pass-rates for proficiency tests, licensing exams)
Retention, progress to degree, grad rates (course completion, persistence, completion of requirements)
Increased interaction with other students, faculty, student affairs professionals
General response: level of satisfaction, perceived benefits and/or challenges
Participation and enrollment

FACULTY, STUDENT AFFAIRS, AND STUDENT FACILITATOR LEVEL

New or reaffirmed values, aspirations, commitment
Enhanced leadership skills
Increased self-confidence and motivation
Widened scholarly interests and efforts
New understandings of other disciplines, and the nature of interdisciplinarity
New understandings of discipline or professional specialty
Deepened understandings about diversity and citizenship, and multicultural teaching skills
Enlarged pedagogical repertoire
Sense of community and shared educational mission with other faculty and staff
Deepened understanding of students, student development, and student needs
Increased interaction with students
General response: level of satisfaction, perceived benefits and/or challenges
Participation

INSTITUTIONAL LEVEL

Enhanced institutional reputation
Strengthened institutional culture (focus on learning, and community)
Hiring, tenure, promotion and other reward systems supportive of LC goals
Increased cost efficiencies
Achievement of diversity- and citizenship-related goals
Strengthened curricular offerings
Fit with and movement toward institutional mission and goals
Positive interdepartmental or inter-unit collaboration (academic affairs/student affairs)
General response: Level of satisfaction, perceived benefits and/or challenges
Understanding (degree to which institution is aware of, understands program)

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[1] Smith,B.L., MacGregor,J., Matthews R.S., and Gabelnick,F. *Learning Communities: Re-forming Undergraduate Education.* San Francisco: Jossey-Bass, 2004, p. 70.