This chapter focuses on a powerful context for learning: community. Community catalyzes deep learning and should be a critical consideration when planning physical and virtual learning spaces. In higher education, however, specialization has a long and comfortable history—in the way our disciplines are partitioned and also in the way our institutions are organized. Tradition encouraged specialists to attend to their individual areas: faculty developed pedagogy and curriculum; information technologists made decisions about technology; and facilities managers designed and developed classrooms and other spaces. As Boyer and Mitgang see it, “Too often, the academic and professional worlds are marked by vocationalism, the fragmentation of knowledge, and territoriality.” While such specialization has led to some innovations, we have fallen short of the full power and potential of aligning our efforts in pursuit of learning. More than a decade ago, Boyatzis, Cowen, and Kolb reflected on this less than ideal condition of higher education:

Why we conduct education as we do is a puzzling question. How to do it better is a big challenge. For us, the idea that learning should be the primary purpose of education has been a beacon—we might all agree that learning is a purpose of education—but is it the primary purpose?

The importance of community to learning is implied but rarely stated as a significant context in higher education. Were community not important for learning, colleges and universities would have little reason to exist—people could learn efficiently by reading and interacting with tutors. Research on learning theory, how the brain works, collaborative learning, and student engagement has taught us that people learn best in community. Fostering community is critical to learning, regardless of whether an institution is primarily online, commuter, or residential. We answer Boyatzis, Cowen, and Kolb’s challenge of finding ways to conduct education better by suggesting a focus on community and community building.
and by seeking ways in which community can enhance learning through three strategic levers:

- Improving the process of developing learning spaces
- Using information technology to enhance communication and collaboration
- Using community to improve pedagogical, curricular, and cocurricular environments

**Why Community?**

Although learning involves individual behavioral changes, the context in which those changes occur is a social environment involving many people. All aspects of education—including the planning of space design—should acknowledge community. Just as a learning paradigm focuses on the importance of learning, we argue for a community paradigm that emphasizes the role social interactions play in facilitating learning and improving student engagement: through community, learning can grow. Given that physical and virtual learning spaces play critical roles in enabling or deterring community,

it is essential that educators reevaluate the role of virtual and physical space as a way to improve student (as well as faculty and staff) learning and engagement in community.

**Defining Community**

The term *community* here refers to the social context of students and their environs. A community is a group of people with a common purpose, shared values, and agreement on goals. It has powerful qualities that shape learning. A community has the power to motivate its members to exceptional performance. M. Scott Peck defined community as “a group whose members have made a commitment to communicating with one another on an ever more deep and authentic level.” It can set standards of expectation for the individual and provide the climate in which great things happen. These qualities characterize what Kuh and colleagues described as conditions that matter for student success in college. Higher education is replete with descriptions of communities—research communities, learning communities, communities of practice—in fact, the entire enterprise can be viewed as a community. A real community, however, exists only when its members interact in a meaningful way that deepens their understanding of each other and leads to learning. Many equate learning with the acquisition of facts and skills by students; in a community, the learners—including faculty—are enriched by collective meaning-making, mentorship,
encouragement, and an understanding of the perspectives and unique qualities of an increasingly diverse membership.

**Why Care?**
Society should care about learning in community for two primary reasons. First, learning is a social process that works best in a community setting, thus yielding the best use of societal resources. According to Peter Ewell, evidence documenting the importance of community in learning is “overwhelmingly positive, with instances of effective practice ranging from within-class study groups to cross-curricular learning communities.” Despite multiple theories about how people learn, they agree on one point: the critical role of interaction. In particular, social cognitive learning theory argues for a rich environment in which students and faculty share meaningful experiences that go beyond the one-way information flow characteristic of typical lectures in traditional classrooms. Second, learning in community will have an important role in preparing students for their work-life to come. College graduates must succeed in professional environments that require interactions with other people. Some companies today call for graduates with different perspectives to collaborate across traditional disciplinary and business lines. Indeed, because of the volume and volatility of information today, as well as the proliferation of information-sharing mechanisms, knowledge may be seen as vested in a distributed network across communities of practice, not in individuals. In other words, community-centered education will help prepare graduates to live and work in a world that requires greater collaboration.

**Diminished Learning in Community**
Community has always been a purported cornerstone of higher education. Historically, higher education in Western civilization occurred at community-centered institutions. Early universities and colleges were private, residential, and almost exclusively connected to a religious founding organization. Civic engagement was cultivated.

As large public institutions have expanded to accommodate federal- and state-mandated support of larger enrollments, efficiency has become more important in structuring processes, leading to larger class sizes. Some describe this as production-oriented education, with colleges and universities operating like manufacturing firms with students as throughput and graduates as the products. Universities’ fixed costs from the high proportion of labor result in the cost of at-
tending college rising faster than inflation. This creates pressures for cost-cutting, for example, by increasing class sizes.

Additional factors have exacerbated the loss of community. Increasing demands on faculty for research productivity outside the classroom, increasing numbers of commuter students, and an increasingly secularized society have contributed to the erosion of the social interactivity that characterized the earlier, English system–based model of higher education. During the mid-20th century, as classrooms became larger, the level of social interaction diminished within the classroom, with the student role becoming increasingly one of a scribe. The sense of community within higher education has become increasingly obscured, with negative consequences for both faculty and students. Eugene Rice reported the negative impact on young faculty of diminishing community, and Gerald Graff pointed out that the lack of interactivity diminishes students’ expectations for their educational experience. It also contributes to a tension between a “student culture” and an “academic culture,” according to Arthur Levine. Some commentators have observed an unspoken pact—faculty don’t expect much of students so that they can concentrate on the growing demands of research, and students don’t demand rigorous instruction so that they can concentrate on their social lives.

Whether due to the absence of deep engagement between students and faculty or to their desire for peer interaction, students have begun to develop student-centered communities with their peers. While this trend satisfies the need for community, this interaction often lacks academic learning as the focal point. With the rise of information technologies, including cell phones and instant messaging, students communicate with each other to an unprecedented degree, but this networked generation is only part of a community.

Today an increasingly connected student body devotes less and less time to structured, instruction-driven learning. It is therefore appropriate to reevaluate the role of community as a way to improve student, faculty, and staff engagement and learning. We believe we can rebuild community, thereby strengthening learning through

- learning space design,
- information technology, and
- pedagogical, curricular, and cocurricular design for learning.
Community as a Context for Learning

For several decades we have been creating spaces that promote mass production of classroom instruction predicated on a model in which education involves transferring information. Using the same model to develop learning spaces perpetuates that outcome. As Albert Einstein once suggested, the definition of insanity is doing the same thing over and over again and expecting a different result. We need to explore how building community enables the creation of spaces for learning (and conversely, how creating learning-centered spaces can enhance our ability to build community); how technology can foster community and information exchange; and how community in pedagogical, curricular, and cocurricular design fosters learning.

Spaces for Learning in Community

It is a new era; we need new “places that foster connections rather than compartmentalization.” For several reasons, we need a community of faculty, administrators, facilities managers, architects, students, student development professionals, technologists, and other stakeholders to participate in a process of dialogue and discovery, creating spaces to reengage faculty and students in the pursuit of learning. The complexity of projects defies the ability of one perspective to capture the necessary requirements and contingencies involved. No one group has enough information to make informed decisions—team learning is needed. Renovating current infrastructure and building anew happen infrequently, and the results are expected to endure for a very long time, so it is important to increase the chances of getting it right. In addition, the investment is substantial. More subtle reasons trump these arguments, however:

- First, organizational silos result in a lack of awareness and acceptance of the interconnectedness of roles on campus. We cannot design effective spaces for learning unless we recognize that many stakeholders hold a valuable piece of the puzzle—their input is essential.
- Second, given how infrequent and expensive projects can be, we need to learn from each successive project, even though the players will likely change. Community learning can foster organizational learning and the ability to continually improve, based on input and assessment from past projects.
- Finally, and perhaps most strongly, major paradigmatic change in higher education alters our needs in far-ranging ways. Standard operating procedures
are no longer effective—we need to learn anew and from each other. Barr and Tagg’s influential 1995 *Change* article\textsuperscript{25} suggested the impact of paradigm shift on all dimensions of campus life:

Roles under the learning paradigm, then, begin to blur. Architects of campus buildings and payroll clerks alike will contribute to and shape the environments that empower student learning.

The learning paradigm invites us to realize that all space is learning space, and community involvement is essential to its creation. How, then, do we engage community in co-creating the built environment? We offer five steps to harness the full potential of community:

- Invite stakeholders to participate.
- Select and empower a talented leader.
- Understand and appreciate differences in perspective.
- Eliminate roadblocks to community learning.
- Balance patience and performance.

**Stakeholders**

Inviting people with different perspectives to contribute to collective decision making can be time-consuming in the development phase but ultimately is less time-consuming than leaving them out. As Margaret J. Wheatley\textsuperscript{26} pointed out, “It doesn’t work to just ask people to sign on when they haven’t been involved in the design process, when they haven’t experienced the plan as a living, breathing thing.” Involvement, and rewarding involvement (especially cross-unit collaboration), are essential to having people bring their full selves to the task of making change.

**The Leader**

To tap into the potential of community, the leader must be someone who can build community and create a safe environment for participation and team learning. The leader should have vision, empathy, and an ability to listen and appreciate different perspectives. The leader should empower others. These are but a few of the essential qualities for leadership. Once selected, the leader should be empowered to carry out the necessary tasks.

**Different Perspectives**

Cultural differences between stakeholder groups, combined with power differentials and hierarchy, could limit certain members from sharing perspectives
needed for breakthrough thinking. Insights on appropriate space use often come to those closest to the “action”—in this case, students and faculty. Students and even faculty are often overlooked when seeking input on space design. Even if brought up in the discussions, student ideas can be ignored in favor of ideas coming from people in positions of power. Communities reach full potential with participants who understand differences in perspective and encourage sensitivity to those differences. Every voice needs to be heard and respected.

Roadblocks

Several potential roadblocks exist. Differences in the values and communication styles of college and university subcultures (for instance, faculty, student development, enrollment management, facilities managers, students, and so on) can inhibit collaboration. Personality and group dynamics, as well as differences in knowledge and expertise, can also present roadblocks. How can the group weight expertise appropriately to leave room for new perspectives while honoring expertise that has worked in the past? Other roadblocks can come from processes and systems that can prevent people from finding common ground. Take, for instance, the challenges of developing an integrated living-learning center within the structure of traditional budgets that call for money to flow through either academics or residential areas. If the “living units” are physically located above the “learning spaces” and the funding for maintenance of spaces follows traditional silos, whose budget pays for a shower leak that drips from the living space into the learning space? Creating one budget for the hybrid project prior to construction could go a long way toward encouraging cooperative behavior and a sharing of risk on the part of stakeholders.

Patience and Performance

Creativity cannot be scheduled or commanded. Often, patience is needed to allow new ideas to flourish. On the other hand, extensive discussion and debate in the name of patience, while edifying, can be time-consuming and costly, eroding construction budgets. Replicating what has been done in the past is not the most effective approach when charting a new paradigm; it can lead to designing spaces for yesterday’s needs—ultimately, a very costly mistake. The community needs to find the delicate balance between patience and performance.

In short, we need meaningful community to create new learning spaces that can enhance community. This team approach, directed by a talented architect who
understands the importance of putting learning in the center on campus, “can transform a building from one that discourages community to one that dramatically promotes it.” The sidebar demonstrates how spaces designed to enhance community can appear, using the example of new construction that created a suite of academic spaces within a residence hall—Marianist Hall at the University of Dayton in Ohio.

**Spaces Designed to Enhance Community: Marianist Hall**

A learning space housed within an undergraduate residence building—Marianist Hall at the University of Dayton—demonstrates design principles that foster community. In the studio classroom shown in Figure 1, the presence of reconfigurable furniture and the absence of a lectern or “front of the room” allows active learning approaches that focus on student interactions and involvement. Multiple plasma screens connected to a variety of audiovisual sources and writing surfaces on contoured walls provide flexible presentation options. Portable marker boards can be carried or wheeled by students to and from adjacent team rooms. Lighting and audiovisual adjustments are made using a simple, quickly operated LCD touch-screen panel. Glass doors and windows along corridor walls create a more transparent and inviting environment such that learning and teaching do not occur “behind closed doors.”

**Figure 1. Studio Classroom**
Wide corridors or pathways connect studio classrooms and smaller meeting spaces in Marianist Hall at the University of Dayton. The pathways are wide enough to accommodate traffic as well as enable group conversations. A CopyCam (PolyVision) can digitally capture and share whiteboard images on the Web. Comfortable furniture is arranged to foster social interaction while also being conducive for studying. Wireless access points allow students to connect notebook computers to the Web. Studio classrooms, seminar rooms, and faculty offices open into this pathway to create a spacious environment that welcomes continued dialogue between class changes. (See Figure 2.)

Figure 2. Marianist Hall Pathway

Although large enough to accommodate classes, the Commons in the Marianist Hall Learning Space is used as a flexible pathway space to encourage multiple classes to meet for a joint experience such as a play, performance, or debate. The Commons can also be used for group presentations and static works associated with academic or cocurricular programs (see Figure 3). When classes are not in session, the space becomes an extension to the pathways connecting other rooms and becomes a favorite area for studying, faculty-faculty or faculty-student meetings, and impromptu gatherings. Comfortable furniture and soft lighting ensure the space more closely realizes the needs of the learners. Glass walls provide an inviting visual cue to students for interaction with faculty in their adjacent offices.
Technology, Community, and Information Exchange

Communication is key to building and sustaining a community of learners. Information technology (IT) solutions offer an outstanding platform for connecting and sharing information among community members in or outside the classroom. Technology is broadening the scope of when and where learning occurs; planning for new or renovated physical spaces must consider the role of IT. At one extreme, physical learning spaces may no longer be necessary if an academic program is delivered online, while at the other extreme, face-to-face classes can occur in a variety of physical spaces that take advantage of technology in or out of the space. At these extremes and all the hybrid possibilities in between, technology should be used to foster learning by building community as well as creating and sharing knowledge within the group while allowing interaction to take place in and outside the formal classroom setting.

IT can foster community in several ways. Most notably, communication outside the classroom can become richer and more extensive using tools such as e-mail, instant messaging, threaded discussions, blogs, and wikis. Another very important consideration is the use of IT to build student understanding outside the classroom, thereby freeing classroom time for more active pedagogical approaches. Faculty frequently struggle over wanting to spend time with active learning methods while covering a prescribed list of topics in the allotted time. By using IT solutions
to share course content outside scheduled class time, faculty can use the face-to-face time in the classroom for more active learning approaches. Therefore, classrooms need to be designed with much greater flexibility for a wide variety of pedagogical approaches.  

Many institutions are investigating or implementing mobile computing for their students. Students can research or author while networking to build community. Mobility and academic requirements for technology access are important considerations, since learning occurs in a variety of spaces. At the University of Dayton (UD), all incoming students are required to purchase a university-supplied notebook computer. The UD student computer initiative was implemented to ensure that students gain the IT skills needed for the modern workplace and to align with the needs of building and sustaining community. Students choose among several models provided by a partnering vendor, but in each case the hardware and software meet institutional requirements and ensure that students have a common computing platform. Surveys indicate that 70 percent of UD students use their notebooks in one or more classes each semester in their first year. Many UD classes require notebooks; those classrooms have been equipped with tables and wired network connections to each seat or wireless access for the entire room.

Communication tools such as enterprise-level e-mail and calendaring as well as learning management systems are important tools, but there is a surprising lag in the widespread development and adoption of applications that allow the spontaneous and ad hoc teaming that characterize an active community. The potential of peer-to-peer tools such as Virtual Office from Groove Networks (http://www.groove.net) show promise for teaming, as does powerful, inexpensive, mobile computing hardware that is always connected to the Internet.

Despite the fact that technology is always changing (and that presumably additional teaming and collaborative applications will be developed), physical space planning should embrace the idea that face-to-face classroom meetings will become less didactic and more active, allowing for student participation and engagement in authentic learning approaches. With more powerful communication outside the classroom, space planning will ask how best to serve community needs as opposed to delivery needs.

**Pedagogical, Curricular, and Cocurricular Design**

Students can participate in many activities to create the social interactions necessary to establish and build community (see the sidebar). Community can and
does form in the absence of significant faculty participation. However, faculty can have a tremendous positive impact on shaping, contributing to, and expanding the environment in which students learn. It therefore makes sense to coordinate and improve pedagogical approaches, the curriculum, and the cocurricular experiences of students with the goal of creating a more learning-friendly community characterized by engagement.

### Examples of Activities That Foster an Engaged Academic Community

<table>
<thead>
<tr>
<th>Pedagogical approaches that foster community</th>
<th>Implications for Learning Environment Design</th>
</tr>
</thead>
<tbody>
<tr>
<td>Students experience a community-friendly learning environment from the beginning of the first class.</td>
<td>Community-centric ambience of physical and virtual spaces should be readily discerned by faculty and students, from room lighting and decoration to learning management system usability.</td>
</tr>
<tr>
<td>Faculty and students learn about each other and from each other.</td>
<td>Mechanism for learning each other’s names available in and out of the classroom. Students and instructor(s) post interests, photos, and backgrounds on course Web site.</td>
</tr>
<tr>
<td>Students participate in discussion in class.</td>
<td>Classroom “front” is deemphasized (removing the lectern, for example) to create open, discussion-friendly space. Choice and placement of furniture allows students to see and hear each other.</td>
</tr>
<tr>
<td>Active learning activities in class use cooperative techniques.</td>
<td>Students are seated in proximity to each other but with flexibility for movement and space between chairs for instructor mobility.</td>
</tr>
<tr>
<td>Team-based projects are conducted outside class and culminate in student-led presentations.</td>
<td>Room technology enhancements and lighting controls should be immediately intuitive to student presenters.</td>
</tr>
<tr>
<td>In-class activities are augmented by completing a significant fraction of course expectations online.</td>
<td>Courses use a learning management system that provides delivery of course materials online and enables exchange of messages, threaded discussions, announcements, homework assignments, quizzes, and grades.</td>
</tr>
<tr>
<td>---</td>
<td>---</td>
</tr>
<tr>
<td>Classroom visitors, such as civic leaders or alumni, can broaden classroom community and enrich discussion.</td>
<td>Rooms are easy for visitors to find and have extra seating and tables of adequate quality so as to send a positive image of the institution. Time in class can be used to make meaning out of the material rather than conduct “housekeeping” tasks.</td>
</tr>
<tr>
<td>Video or telephone conference-based technologies enable discussion with experts in the field from inaccessible locations, such as overseas.</td>
<td>Conferencing equipment is placed in room, with remote or on-site technical management and setup.</td>
</tr>
<tr>
<td>In-class integration of study skills and best practices nurture collaboration and improve student learning.</td>
<td>Space redesign should be connected to faculty development efforts that focus on learning-centered pedagogies.</td>
</tr>
<tr>
<td>Student-faculty interactions can occur immediately before and after a class.</td>
<td>Broad pathways (not corridors) connect classrooms, with ample room for discussion and whiteboard use during class changes without impeding traffic flow.</td>
</tr>
<tr>
<td>Students meet with faculty in office spaces that are easy to find and conducive to dialogue.</td>
<td>Building signage is clear and in keeping with universal design principles, to be accessible to all. Faculty office suites are large enough for meetings, with sufficient seating and board space.</td>
</tr>
</tbody>
</table>
## Curriculum that fosters community

<table>
<thead>
<tr>
<th>Example</th>
<th>Implications for Learning Environment Design</th>
</tr>
</thead>
<tbody>
<tr>
<td>First-year academic programming introduces students to college life,</td>
<td>Innovative programming demands nontraditional spaces, such as first-year introductory seminars, that do not</td>
</tr>
<tr>
<td>rigorous academics, appropriate lifestyle choices, and high expectations.</td>
<td>fit well in rooms designed for lectures.</td>
</tr>
<tr>
<td>Connections are made between learning and living, such as creating</td>
<td>The distinction between academic (classroom) and residential buildings begins to blur, such as the integration</td>
</tr>
<tr>
<td>course sections taken by student residential cohorts.</td>
<td>of learning spaces in residential halls.</td>
</tr>
<tr>
<td>Matriculating students are prepared for an academic program by</td>
<td>Orientation activities begin before students arrive on campus using a sophisticated Web site and managed</td>
</tr>
<tr>
<td>collaborating online using a virtual orientation Web site.</td>
<td>programming, such as common readings and discussion postings.</td>
</tr>
<tr>
<td>Academic advising involves extensive personal interactions to form</td>
<td>Students and faculty interact and share information from a pool of Web-based resources such as course listings</td>
</tr>
<tr>
<td>deeper mentoring relationships.</td>
<td>and audit reports, allowing face-to-face meetings to be more substantial.</td>
</tr>
<tr>
<td>Tutoring programs are offered for at-risk students and students with</td>
<td>Learning support centers and associated rooms for tutoring, supplemental instruction, and testing services are</td>
</tr>
<tr>
<td>learning support needs.</td>
<td>inviting, roomy, and equipped with whiteboards and computer access.</td>
</tr>
<tr>
<td>Students participate in faculty-sponsored research projects.</td>
<td>Research laboratories, libraries, and faculty work spaces become learning spaces and should include physical</td>
</tr>
<tr>
<td></td>
<td>provision for interpersonal interactions and brainstorming meetings.</td>
</tr>
<tr>
<td>Student research projects culminate in presentations on campus and may</td>
<td>Large atriums or presentation halls are available for on-campus conferences and workshops.</td>
</tr>
<tr>
<td>be offered for credit.</td>
<td></td>
</tr>
<tr>
<td>Programs include extensive civic engagement such as service-learning</td>
<td>From classroom to college towns and beyond, the physical environment can enable interactions between on- and</td>
</tr>
<tr>
<td>projects that integrate with the curriculum.</td>
<td>off-campus visitors.</td>
</tr>
</tbody>
</table>

Community: The Hidden Context for Learning
<table>
<thead>
<tr>
<th>Integration of multicultural and inclusive awareness helps increase participation by all community members and ensures diverse perspectives.</th>
<th>Public spaces contain artifacts of a wide range of cultures and tell the story of community from the perspective of different societies.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Interdisciplinary courses are taught across traditional academic units, for example, connecting liberal education to professional preparation.</td>
<td>Learning spaces should be designed to foster faculty and student interactions from multiple backgrounds, such as new interdisciplinary buildings.</td>
</tr>
<tr>
<td>Faculty team-taught courses stimulate in-class discussion across disciplines.</td>
<td>Don’t assume a classroom will contain only one teacher or perspective.</td>
</tr>
<tr>
<td>Faculty learning communities collaborate to design innovative curricula, sequenced courses, and new learning-living activities.</td>
<td>Learning and teaching centers should be large enough to accommodate collaborative discussions and foster professional development for leadership and learning/teaching improvements.</td>
</tr>
<tr>
<td>Common readings create links between courses students deem unconnected and integrate with extracurricular events such as artistic performances.</td>
<td>Physical and virtual learning environments must create the times and places for interaction that create student engagement in common readings or other events such as artistic performances.</td>
</tr>
<tr>
<td>Group tours and field trips are encouraged to introduce students to a wider world of learning.</td>
<td>Academic and residential areas are well served with public transport, parking, walkways, and accessibility friendly traffic flow on and off campus, and campus culture supports value of out-of-classroom experiences to learning.</td>
</tr>
<tr>
<td>Design, law, consulting, and manufacturing clinics connect student projects with area business and individual needs.</td>
<td>Large and flexible suites of spaces permit collaboration with regional partnering clients and for students to conduct and present project work.</td>
</tr>
<tr>
<td>Internships and cooperatives are linked to courses.</td>
<td>Physical or virtual mechanisms exist for students to interact with academic programs during off-campus experiences.</td>
</tr>
<tr>
<td>Academic departments offer regular open seminars and socials to connect scholars and students.</td>
<td>Large seminar rooms are available for departmental and cross-departmental events, with adequate facilities for receptions.</td>
</tr>
<tr>
<td><strong>Example</strong></td>
<td><strong>Implications for Learning Environment Design</strong></td>
</tr>
<tr>
<td>----------------------------------------------------------------------------</td>
<td>----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Orientation and preorientation events introduce students to the campus culture and help define standards of behavior and norms of civility.</td>
<td>Campus-wide architecture, landscaping, interior design, and even Web presence provide an ambience that immediately conveys openness, community, sociability, and safety.</td>
</tr>
<tr>
<td>Students live in residential housing closely associated, physically and culturally, with the campus. They can live together in thematic or curricular cohorts.</td>
<td>From campus master planning to student residential programming, housing should be integrated into a campus culture that sees the “living” part of a college education as linked to the academic experience.</td>
</tr>
<tr>
<td>Social and cultural activities explore and build on the institution’s heritage, mission, and connection with alumni as well as the community.</td>
<td>A wide variety of physical spaces create places for campus involvement, including recreational and intramural sport facilities, religious and cultural gathering spaces, and a wide variety of formal and informal avenues for artistic representation.</td>
</tr>
<tr>
<td>Students participate in volunteer work to expand their understanding of social responsibilities and to develop leadership skills.</td>
<td>Meeting spaces and administrative centers house programs that develop student leadership and connect student clubs and organizations to service-learning opportunities.</td>
</tr>
<tr>
<td>Cocurricular activities involve students, faculty, and staff in shared dialogue.</td>
<td>Inviting, comfortable, and flexible spaces should be available for clubs and organizations so that more involved participation occurs with connections to academics, such as reading clubs to discuss popular books or hot topics.</td>
</tr>
<tr>
<td>Studying occurs anywhere and at any time.</td>
<td>Public and residential spaces, from the library to laundromats, can be made amenable to studying, including wireless network installation. Many factors such as safety, lighting, and noise control play into suitability for studying.</td>
</tr>
</tbody>
</table>
Students collaborate on team projects outside the classroom and participate in group study sessions.

Public areas such as dining and foyer spaces are considered social spaces. They are spacious, inviting, and accessible at times when students need to meet.

Students participate in experiential learning opportunities while on campus.

On-campus employment and student-run businesses should be created to expose students to a variety of relevant real-world business and administration learning experiences.

Students participate in campus management decisions to create a sense of ownership and responsibility.

Broaden student involvement in campus planning and administrative decision making and respect their unique and critical viewpoint.

Perhaps the most effective way faculty can appreciate the possibilities of a learning community is to experience professional development opportunities that give them the opportunity to experience being a student again. Learning communities are increasingly common in faculty development programs, providing a valuable learning process for knowledge workers. These learning communities allow open dialogue and sharing among faculty—and other contributors to the educational enterprise—to help frame questions such as “Who are our students?” and “How can we help them learn?” Learning communities help make teaching community property.

Learning and teaching centers such as the Ryan C. Harris Learning Teaching Center at the University of Dayton offer powerful mechanisms for stimulating institutional change that encompasses pedagogical, curricular, and cocurricular approaches (see the sidebar on example activities). The diverse range of activities includes experimental classrooms, faculty learning communities, grant support and consultation, support of student learning, and measurement of student learning outcomes. These centers foster partnerships between student development and faculty. They can prepare faculty to facilitate learning in community and prompt them to consider the value of cocurriculum in student learning. Guided by leaders that articulate and implement a community-centric mission, learning and teaching centers serve as valuable change agents for the pedagogical, curricular, and cocurricular innovations that foster community and transform colleges and universities into learning-centered organizations.
Conclusion

In this chapter we focused on the role community plays in learning. We explored three sets of strategic levers that can enhance learning through community processes: the design of spaces that support learning; the use of information technologies; and the design of structures for learning that encompass pedagogy, curriculum, and cocurricular programming.

Alignment with mission is key to success. A community-centered mission signals to the entire campus that actions for the greater good supercede parochial actions. A community-centered mission speaks to the importance of working through conflict rather than avoiding it. At the University of Dayton, the heart of our mission is a dedication to integrating learning and living in community. As a Catholic and Marianist institution, we are committed to educating through community. Even so, embracing community and its inherent messiness can be challenging.

No one group can move a campus to recognize the value and importance of community as a medium for learning. Leadership at all levels must invite people with different perspectives to the table when formulating new approaches and making decisions. A community-centered mission helps stress the importance of the issue.

Promoting community approaches could imply that there is no role for individual effort or learning. Nothing could be further from the truth. As Peter Senge put it, “There is commonality of purpose, a shared vision, and understanding of how to complement one another’s efforts… Alignment is the necessary condition before empowering the individual will empower the whole team.” Emphasizing the value of creating communities of practice does not obviate the need for the excellent educative efforts of individual faculty and staff, just as encouraging students to develop skills in teamwork does not imply that they no longer have to prove individual capability. Not all activities benefit from community approaches, but overall, higher education underestimates their value. Community can and does make a difference when we learn to channel interests and focus people’s efforts so that the shared vision becomes an extension of the personal visions of the diverse groups of people involved.

Of great significance is the question of how to integrate learning in community into an institutional assessment plan. If we view community as a context for learning, it should be carefully monitored and improved. With less-than-obvious metrics, community is not a single entity but the sum of many factors. As we become
Learning Spaces

purposeful and conscious of what makes spaces more supportive of learning, we need to analyze new and existing spaces and ask how community contributes to the learning that occurs.40

Endnotes


7. Kuh et al., op. cit.


39. Ibid.

40. To further explore this concept, see chapter 13 in this book, “Assessing Learning Spaces,” by Sawyer Hunley and Molly Schaller.
**About the Authors**

**Deborah J. Bickford** is the associate provost for academic affairs and learning initiatives at the University of Dayton. As director of the Ryan C. Harris Learning Teaching Center, she collaborates with colleagues to create a laboratory for innovation in learning and teaching. She is a professor of strategic management in the School of Business Administration and has taught various courses in the areas of strategy and leadership. Her current research interests focus on the impact of physical space on learning and on connected and active learning. With Nancy Van Note Chism, she coedited *The Importance of Physical Space in Creating Supportive Learning Environments* for Jossey-Bass (2003).

**David J. Wright** is the director of curriculum innovation and e-learning at the University of Dayton. In this capacity he directs a number of technology units including the eLearning, eMedia, and IT training labs in the Ryan C. Harris Learning Teaching Center. Wright oversees many of the faculty development programs and e-learning initiatives at the University of Dayton. He is chair of the Southwestern Ohio Council for Higher Education, Faculty Development Committee. Wright has worked on numerous grant and contract funded research projects, including work for the National Aeronautics and Space Administration (NASA), National Science Foundation (NSF), and National Institutes of Health (NIH). He also has taught extensively with technology in biology courses. Wright earned his doctorate from the University of Iowa.