

# DESIGNING FOR INTENTIONAL LEARNING<sup>1</sup>

Scott Bennett  
Library Space Planning Consultant  
Yale University Librarian Emeritus  
Senior Advisor, Council of Independent Colleges  
711 South Race  
Urbana, IL 61801-4132  
217-367-9896  
[scott@libraryspaceplanning.com](mailto:scott@libraryspaceplanning.com)

It is commonly said that most learning at colleges and universities happens outside of the classroom—in spaces, that is to say, not directly controlled by faculty. Responsibility for non-classroom space typically falls to a great variety of academic support staff and service providers, ranging from librarians and tutoring staff to food service staff and facilities managers. What responsibility do those of us who are not faculty have for creating positive learning environments? This is an imperative question for those who oversee major investments in campus space and large ongoing expenses associated with that space. One of Project Kaleidoscope’s statements of “what works” (PKAL, nd) casts our responsibility in the strongest possible terms. Facilities must be designed “for active, collaborative, inquiry-based learning (*anything else is malpractice!* [emphasis added]).”

How might we avoid such malpractice in planning and designing the campus spaces where most learning occurs, the spaces for which those who are not faculty are often most directly responsible?

One way to begin thinking about this question is to conceive of learning as involving four distinctive stages happening in a variety of spaces and realized through two quite different learning paradigms, as represented in the following table. The differences between the instructor-centered and the learner-centered paradigms are of course meant to resonate with the work of Robert Barr and

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John Tagg (1995) and the many others who have described the paradigm shift toward learner-centered pedagogy now underway in higher education.

#### FOUR STAGES IN LEARNING

	<i>Name of stage</i>	<i>Typical campus learning space</i>	<i>Instructor-centered learning paradigm</i>	<i>Learner-centered learning paradigm</i>
1.	Launch of learning	Classroom	Exposition of subject content (often in lectures); setting assignments or other specific learning tasks	Conceptual framing of subject (i.e., what problems does the discipline address; what language does it use; what methods of inquiry are employed)
2.	Ownership decision (i.e., the learner's decision to take responsibility for and control over her or her own learning)	Library, laboratories, studios, computer laboratories, other "informal" learning spaces, residence halls, etc.	Depending primarily on the nature of the task, the student may or may not seek further instruction and/or services that support task-oriented learning. The student remains in significant measure dependent on instruction/service and does not take full ownership of his or her learning.	Taking ownership is the defining characteristic of this stage. Seeking further instruction (e.g., tutoring) or services (e.g., reference assistance) may or may not happen and is motivated primarily by the ownership decision made by the learner.
3.	Product	Library, laboratories, studios, computer laboratories, other "informal" learning spaces, residence halls, etc.	Product (e.g., a paper) that gives evidence of knowledge and is created for judgment by the instructor, with the primary purpose of earning a grade/credit/credential	Product (e.g., paper) that gives evidence of learning and is created with dual purposes: to learn from instructor's judgment of the product and to make the product one of the building blocks for the learner's own construction of character, values, and way of living. Earning a grade/credit/credential remains important but is secondary to the wish to live an informed life.
4.	Outcome	N/A	A life-long learner who remains in some measure depend on instruction/services <sup>2</sup>	An autonomous learner who seeks further instruction/services as another way of learning

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<sup>2</sup> A common example of such dependency might be the highly-paid professional—such as a doctor or a lawyer—who has taken ownership of some discipline but believes it is not a productive use of his or her time to take ownership of certain writing or information seeking skills and who therefore depends on, say, technical writers and corporate librarians.

Thinking within this framework, the key question is how to design space that helps prompt the learner to take responsibility for and control over his or her own learning. Classroom design remains vitally important, not least because of its potential for encouraging the desired second stage activity. But the instructor remains in control of classroom learning, which makes the second of the four stages described here the first opportunity the learner has for taking responsibility for and control over his or her own learning.

This second stage can be thought of as the “magical moment” in the learner-centered paradigm. It is the transformational moment when the learner decides that a particular learning activity is intrinsically important and one way to shape personal character, values, and a way of living. “Most college students,” observes anthropologist Richard A. O’Connor (2005), “have twelve or more years of training in studying as a display activity. It’s first done to please and, perhaps unconsciously, thus manipulate others. Bit by bit it then becomes how one pleases—and manipulates—oneself. A student can feel good about studying because it’s the right thing to do. It’s not thought to be fun or easy—studying is widely seen as self-denial—but the discipline can develop into an expressive form with its own small pleasures and distinctive rituals. In the end, studying becomes a practice with a life of its own. It’s not just a response to assignments but a highly personal and often meaningful *way of being a student*” [emphasis added].

Another way of understanding this second, transformative stage in learning is to observe that in the absence of taking responsibility for and control over one’s own learning, one can be a history major, but not a historian. Even more starkly, it is simply impossible to become a musician without taking ownership of the discipline and skills needed to play the piano, oboe, or other instrument. There is no way to force this magical or transformational moment into being. It happens, if it happens, when study becomes learning. It is the product of an entire culture of learning at a given institution along with the disciplined culture of learning created by individual students.

Scholars describe this transformative moment in learning in a number of ways. Phil Race (2005) puts the individual's *wanting* to learn at the center of a set of five interacting factors that underpin successful learning (pp. 26ff). The editors of the landmark survey of *How People Learn* (2000) use the term *metacognition* to designate a set of activities through which a person becomes a self-conscious and self-regulating learner. These activities include "the ability to orchestrate one's learning: to plan, monitor success, and correct errors when appropriate—all necessary for effective intentional learning" (p. 97). The term *intentional learning*, as developed by Carl Bereiter and Marlene Scardamalia (1989), is particularly instructive. They use intentional learning to refer to "cognitive processes that have learning as [an intrinsic] goal rather than an incidental outcome" (p.363), an end rather than a means, and they describe how all too often learning degenerates into schoolwork. Speaking of primary school students, they argue:

The work that characterizes classroom life may have originally been conceived with learning goals in mind, and it may even achieve some learning objectives, but from the standpoint of students, doing schoolwork is what is school is about. It is their job, not attaining learning goals. . . . We could find nothing in [children's talk about their classrooms] . . . to suggest that the children thought of themselves as learners. . . . From the child's standpoint, learning goals are undoubtedly difficult to get hold of, and so more concrete and tangible features of school activities are likely to be sized on as indicating the point of the activities. . . . By interpreting learning activities as jobs to be done, students not only concretize them but assimilate them to the rich knowledge structure that surrounds work in industrialized societies. Even young children know something about what it means to have a job, to be a good worker, to take pride in a job well done, and so on. All this knowledge can immediately be brought to bear on schoolwork, making what might otherwise be an incomprehensible enterprise something easy to understand and adjust to. The drawback, however, is that schoolwork rather than learning becomes the object of effort (pp. 377-378).

To escape this trap of schoolwork, Bereiter and Scardamalia argue that "students need to direct mental effort to goals over and above those implicit in the school activities." These goals include building a problem-solving framework for approaching learning, taking responsibility for high-level skills normally exercised by the teacher, setting personally meaningful learning goals that subsume (and therefore satisfy) externally imposed schoolwork goals, and self-assessing their own success in learning (pp. 385-388).

Not surprisingly, these characteristic processes of intentional learning resonate strongly with the “active, collaborative, inquiry-based learning” that PKAL insists facilities design must foster.<sup>3</sup> These intentional learning processes are in play when, in the magical moment of learning, students take responsibility for and control over their own learning, when they become autonomous learners.

To escape PKAL’s charge of malpractice, those of us most directly responsible for the planning and design of non-classroom campus spaces must give high priority to creating spaces that foster intentional or autonomous learning.<sup>4</sup> We need constantly to affirm that the most important educational function of the physical campus is to foster an institutional culture of intentional or autonomous learning. We must show how the campus is—or can become—a major factor in the transformational trajectory of such learning.

Of course, expressions of conviction are not enough. One might paraphrase Bereiter and Scardamalia to say that while we may begin our planning with learning goals in mind, and may even achieve some learning objectives, the accommodation and delivery of services is what the design of most non-classroom spaces is about. Space for learning degenerates into space for service. Intentional or autonomous learning has rarely been or at best has been unreliably evident as a planning goal. This is exemplified by most library renovation and construction, which has typically been driven by a systematic knowledge of library operations and their needs, with little attention paid to either student learning behaviors or faculty modes of teaching (Bennett, 2003, pp. 20-22). The predictable result is design decisions that most strongly support an instructor/service-centered paradigm of learning, most clearly evident in the inclusion of classrooms (usually electronic classrooms) in new library

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<sup>3</sup> They also resonate with a set of specific learning behaviors, largely drawn from the National Survey of Student Engagement benchmarks for effective education practice, that figure in a pair of survey instruments designed to map the learning geography of a campus. For more information, see under the current projects tab of the author’s Web site, <http://www.libraryspaceplanning.com> (29 November 2007).

<sup>4</sup> Bereiter and Scardamalia (1989) observe that other commentators used the term *autonomous learning* with much the same meaning as *intentional learning*. They prefer the latter term because “it is important to be clear . . . that the kind of learning we are talking about can occur, and indeed should occur, in both self-directed and teacher-directed learning situations” (p. 363). I use the former term here not to disagree but to underscore the concern of this essay with non-classroom learning spaces.

space. Group study spaces, cafés, computer laboratories, and information or learning commons are also common features in contemporary library design. They all offer some possibilities for intentional or autonomous learning and their design may be driven by a learner-centered paradigm. But it must be said that with the possible exception of group study spaces, none of these spaces inherently demands a learner-centered design paradigm. It is perfectly possible, for instance, to create an information commons that fosters consumerism (e.g., “one stop shopping” for assistance) and dependency on service providers rather than intentional or autonomous learning (Bennett, 2008).

Bereiter and Scardamalia (1989) conclude by saying that a list of the various factors that constitute intentional learning fails “to convey the sense of a whole educational environment geared to the pursuit of learning goals.” They turn instead to the community of scholars as a more resonant idea.

In a community of scholars, there must exist not only a body of knowledge but also a dedication to future development of that body of knowledge at both the individual and corporate level. . . . A community of scholars differs from the conventional school in important ways. The degeneration of knowledge building into schoolwork or other routines, although it inevitably occurs, is actively resisted. Knowledge keeps being reasserted as the central goal. . . . To the extent that the scholars are a community, there is mutual responsibility for each individual’s growth in knowledge (p. 388).

The question, then, is the degree to which college and university spaces will be designed to reaffirm the campus as a community of scholars, a community of intentional learners. This is a particularly pressing question for those responsible for a host of so-called academic support facilities crucial to student success—libraries, computer laboratories, writing centers and other tutoring operations, teaching and learning or faculty development centers, etc. It is also a pressing question in allocating space to commons areas for students in academic buildings. And it should be a pressing question for the design of dining halls and residence spaces.<sup>5</sup> One might even say—

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<sup>5</sup> See Dittoe (2006) for an exceptional challenge to traditional thinking about residence halls. Oblinger (2006) presents a host of essays on the principals and practices of learning space design, along with almost three dozen case studies of a variety of individual learning spaces.

pointedly—that a college administrative building that fails to assert the values of a community of scholars and of intentional learning is a building that seriously misrepresents institutional mission.

John Seely Brown (2002) makes these points about community and intentional learning when he observes that it is

through participation in communities that deep learning occurs. People don't learn to become physicists by memorizing formulas; rather it's the implicit practices that matter most. Indeed, knowing only the explicit, mouthing the formulas, is exactly what gives an outsider away. Insiders know more. By coming to inhabit the relevant community, they get to know not just the "standard" answers, but the real questions, sensibilities, and aesthetics, and why they matter.

The task of the university is to make these communities, and especially the real questions, sensibilities, and values of those communities, open and accessible to those who want to learn. It is "the learning communities that universities establish and nurture that remove them," as Brown says, "from the realm of a delivery service, or from being mere traffickers of information" (p. 69). Brown was not describing space planning in writing of campus communities. But all who are responsible for non-classroom spaces should be mindful of what he says if we want our buildings to foster intentional learning and escape the pitfalls of schoolwork, if we want ourselves to enact institutional mission rather than merely to serve it, if we want to be members of a learning community rather than mere traffickers of information.

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