The National Teaching & Learning FORUM

Volume 15 Number 6

RESEARCH WATCH: *A Rose by Any Other Name? Learning in Intensive Course Formats*

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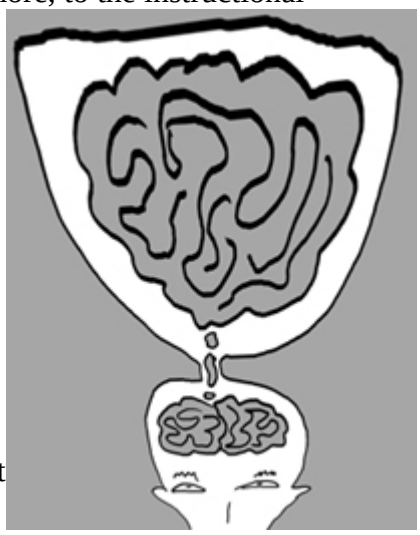
Intensive learning experiences are life altering, transformational, challenging, emotionally charged, immersive, sensory rich, right? Well, maybe. Normally, intensive learning refers to instructional formats that are more compressed than the conventional fifteen-week semester: summer sessions, inter-terms, block schedules, language immersion experiences, accelerated degree programs, and the like. In other words, by "intensive" we refer as much, if not more, to the instructional package than to the learning that occurs within it. If the instructional package is shorter, we assume, somehow, that the learning will be more compressed, too. But is learning in so-called intensive formats really any different from plain old semester learning?



Background

In fact, the existence of a discrete literature on teaching and learning in intensive course formats may speak most directly to our anxiety about time and its relationship to learning and the resulting perils of deviating from conventional instructional formats. In their seminal article Barr and Tagg (1995) note that under the Instruction Paradigm, still the dominant paradigm in higher education today, ". . . colleges have created complex structures to provide the activity of teaching conceived primarily as delivering 50-minute lectures" (p. 1). They go on to observe that "[i]n the Instruction Paradigm, the teaching and learning process is governed by the further rule that time will be held constant while learning varies" (p. 8). Studying the same phenomenon in elementary and secondary schools, the National Commission on Time and Learning writes: "But we have put the cart before the horse: our schools . . . are captives of clock and calendar. The boundaries of student growth are defined by schedules . . . instead of

standards for students and learning . . . ” (National Commission on Time and Learning quoted in Barr & Tagg, 1995). Is there really anything so sacred about the traditional fifteen-week semester?

In their review of the intensive course literature, Scott and Conrad (1992) summarize four strands of research. In short, studies of student and faculty attitudes towards intensive courses find that students are positive about them by and large, while the feelings of faculty are mixed. Comparisons of course requirements and practices in traditional versus intensive formats acknowledge more experimental teaching practices in the latter group. And in terms of educational outcomes, the majority of studies find no or very modest statistical differences in favor of intensive courses.

The fourth and largest strand relates to time and learning, one of the earliest areas of study in education research. Scott and Conrad examine four contributing sub-literatures, none of which offers clear directives for teaching and learning in intensive courses, although some point to interesting possibilities. Briefly they find that shorter periods of practice spaced out over time are more effective than a single cram session (massed versus spaced practice); prior learning can interfere with current learning and vice versa (interference theory); time is a necessary, but not sufficient, condition for learning (allocated time and learning); and tasks with an appropriate balance of challenge and skill performed with single-minded attention can lead to highly satisfying flow experiences (concentrated study). Together the latter two minimize the importance of time and learning and point to exciting possibilities for short, concentrated study, a potential boon for teaching and learning in intensive courses.

Intensive Attributes

Still, practitioners looking for guidance on how they should teach differently in intensive courses will need to dig a little deeper. In a comparative study of matched sets of British literature and marketing courses taught in traditional and intensive formats, Scott (2003) noted these attributes of high quality intensive courses identified by students, grouped into four categories:

Instructor characteristics: enthusiasm; knowledge, experience, and good communication; willingness to learn and consult with students; showing personal interest in students.

Teaching methods: active learning; classroom interaction and discussion; experiential and applied learning; emphasis on course organization and depth over breadth of coverage.

Classroom environment: forming of collegial relationships in the classroom; relaxed classroom atmosphere.

Evaluation: smaller assignments; meaningful assignments related to course objectives; choices; in-class group assignments; essay and/or take-home exams and frequent quizzes.

However, all of these attributes apply equally well to traditional courses and echo the counsel of summaries of effective classroom practice such as Chickering and Gamson's (1987) seven research-based principles of undergraduate education: encourages contact between students and faculty; develops reciprocity and cooperation among students; uses active learning techniques; provides prompt feedback; emphasizes time on task; communicates high expectations; and respects diverse talents and ways of learning.

Once again, is there such a thing as intensive learning per se? Or does it merely underscore the pitfalls of characterizing learning by the instructional package in which it occurs? Further, if there is such a thing as intensive learning, why would we ever want anything less?

For the moment, let's turn our attention to a more basic component of learning—experience, broadly any interaction between an individual and her environment, whether the classroom, home, or great outdoors. Interestingly, the Indo-European root of *experience* is *per*, meaning to attempt or venture, which is also the root of the words *peril* and *experiment*. With the march of civilization, everyday experience has become less and less perilous and more and more cocoon-like. But what is it that brings to experience the sense of apprehension (if not danger), focus, acuity, and, yes, intensity associated with peril and experimentation?

In a word, uncertainty: the instability and doubt created by a sense of not knowing, either through a sense of immediate danger, violation of expectation based on prior experience, or intentional questioning of experience itself. Under the proper conditions, such instability and doubt leads to a momentary suspension of accepted belief and openness to experience that leads to learning (Lee, 1998). What are these conditions and how can we optimize them in the interests of learning that is both concentrated and enduring or, in other words, intensive?

A synthesis of the work of Jean Piaget, John Dewey and Kurt Lewin on the role of experience in learning, Kolb's (1984) familiar experiential learning cycle (see diagram below) provides a nice model for thinking about (and planning) experiences that lead to intensive learning. Briefly, the cycle describes how experience intentionally linked with (1)

reflection, (2) the relating of abstract concepts to that experience, and (3) active experimentation based on the resulting fuller understanding of that experience and how to respond to it, all lead to learning. Cycling through this series of linked events/stages over and over again, we increasingly refine our understanding of particular aspects of experience and respond ever more skillfully to them.

Learning Cycle Intensive

Now let's consider each stage of the cycle and the conditions that will optimize each stage in the interests of more intensive learning:

Concrete experience. The experiences students undergo are developmentally appropriate and relevant to the learning we value, not merely amusing and varied. They should engender some uncertainty, both cognitive and emotional, throwing students into a state of mild disequilibrium that seeks resolution, the stimulus for learning. They are emotion-provoking (Zull, 2002), multi-sensory and novel, and appropriately balance challenge and support (Knefelkamp, 1974).

Reflective observation. We explicitly link reflection with experience and time it appropriately. Reflection takes place both individually and in groups through explicit assignments. It is structured using questions, heuristics (Lee, 2003), or some other form of guidance.

Abstract conceptualization. Students encounter concepts as they need them to understand and respond better to the experiences they undergo. We link concepts to experiences clearly, explicitly, and at the -appropriate level of difficulty given our particular students. Our presentation of concepts is well organized and moves from simple and -intuitive to more complex understanding.

Active experimentation. In a supportive, no-fault, even playful environment, students have multiple opportunities to practice their new understanding and appropriate responses to comparable experiences. Like coaches, we provide constructive feedback to students as they practice.

Examples In Action

Here are two examples of experiences, structured in this way for intensive learning:

In the Integrated Business Core at the University of Oklahoma's Price College of Business (http://business.ou.edu/ibc/), new business majors

spend the first seven weeks of the semester developing a business plan, which they present to a local bank for $5,000 in start-up funds. They spend the remainder of the semester implementing the plan and marketing their product. At the same time they take core courses—marketing, management, business law—that provide critical skills needed for the business. Among other things, they learn that ordering from suppliers, accounting, inventory control, marketing and interpersonal skills are essential for the success of the business.

Here's a second example: In preparation for the demands of insurgent warfare in Iraq and a new emphasis on nation-building and peacekeeping, the Army has changed radically the way it trains American troops for combat. It has created a cluster of mock Iraqi villages in the Mojave Desert 150 miles northeast of Los Angeles and populated them with Arab-Americans, many from the Iraqi expatriate community in San Diego. So effective is the simulation of battle conditions, that some soldiers have left with battle fatigue or had their deployment orders canceled (Filkins & Burns, 2006). Critical to the training's success is its affective intensity and "presence" or the evocation of the same reactions and emotions as the real experience (Tichon, et al., downloaded July 23, 2006).

Other related experiences include the growing use of virtual and simulated environments in medical education, the use of existing on-line multi-player games such as Second Life in social science courses, and John Seely Brown and others' work on "learning-in-working," a form of situated learning in communities of practice (Lave & Wenger, 1990). Others have pointed to learning-by-doing-in-situ, often mediated by technology, as a hallmark of the way today's students learn best (Brown, 2000; Oblinger & Oblinger, 2005).

More Than Time

The traditional literature on intensive learning (or teaching and learning in intensive course formats) tends to focus unduly on time as a factor in learning. Granted, the relationship between time and learning is one of the earliest areas of research. Further, institutions of higher education still organize themselves chiefly around the teaching function structured in variations on the 50-minute class session meeting multiple times over a fifteen-week semester. But in fact, intensive learning is less a product of time than a host of other factors: the kinds of experiences we provide students; the quality of their reflection on experience, both individually and in groups; the relevance and timing of the presentation of academic material; and opportunities for students to practice in a supportive - environment with feedback and coaching.

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