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Student-Centered Teaching & Learner-Centered Classrooms

Introduction

In the mid-1990s, clarion calls were sounded for a "paradigm shift" in undergraduate education from traditional methods of instruction, which have focused on the teacher's behavior and the teaching process, to a "new learning paradigm" that focuses on the *learner's* behavior and the *learning* process (American College Personnel Association, 1994; Angelo, 1997; Barr & Tagg, 1995). This shift is well illustrated by comparing the themes of two national conferences organized by the once-influential American Association of Higher Education (AAHE). In 1986, its national conference theme was, "Taking Teaching Seriously"; in 1998, it became, "Taking Learning Seriously" (1998). This teaching-versus-learning distinction is more than a matter of semantics. The new learning paradigm suggests a new starting point for improving undergraduate education that begins with a *focus on the learner* and *what the learner is doing*, rather than focusing on what the instructor is doing (and covering) in the classroom. In the learner-centered paradigm, the definition and goal of effective teaching is *facilitating student learning* and, ultimately, promoting *positive learning outcomes*.

Among the major implications of the new learning paradigm for college instructors and student support-service providers are the following "shifts" in educational philosophy and practice.

1. **Instruction becomes less teacher-centered and content-driven, and more *learner-centered* and *learning process*-driven.**
   For example, instead of having students receive information-loaded lectures devoted exclusively to the coverage course content, learner-centered instruction would involve engaging students in learning experiences that are designed not only to enable them to learn content, but also to learn *process*—the process of "learning how to learn" and developing "lifelong learning" skills.

2. **The *student's role* changes from that of being *passive* recipient or receptacle of information to that of *engaged learner* and *active agent* in the learning process.**
   Classroom teaching methods may be conceptualized as ranging along a continuum from *instructor*-centered to *learner*-centered. Extreme, instructor-centered teaching is best illustrated by the uninterrupted, formal lecture whereby the instructor does virtually all the talking and is in complete control of the class agenda. In contrast, learner-centered classroom instruction involves less instructor domination and shifts more communication, control, and responsibility to the students.

3. **The *instructor's role* expands from that of a knowledge-laden professor who professes truths and disseminates factual information, to that of being a learning *mediator or facilitator* who assumes the following roles:** (a) educational *architect— designing learning tasks* and *creating conditions* that are conducive to optimal learning; (b) educational *consultant/facilitator*—serving as an experienced *coach/guide* during the learning process; and (c) educational *assessor*—evaluating learning outcomes and using this assessment information as *feedback* to *improve* the teaching-learning process.

In the learner-centered paradigm, students would spend less time being "instructed" (lectured to or at) and more time engaging in learning activities that have them actually *do* something other than the rote recording of lecture notes. Lest we forget, the lecture method still remains the dominant pedagogical strategy used in higher education, showing remarkably little change in its frequency of use over several decades (Bligh, 2000; Bowles, 1982; Costin, 1972; Marris, 1964; Nance & Nance, 1990). Arguably the major force propelling the movement toward learner-centered pedagogy in higher education is the well-documented ineffectiveness of the lecture method for promoting higher learning outcomes.

The *Need* for Learner-Centered Alternatives to the Lecture Method

Research suggests that college instructors have a tendency to overestimate their students' level of cognitive involvement in the classroom. For example, Fassinger (1996) surveyed more than 1,000 students in over 50 classes from a wide range of disciplines that met at the same time period; she discovered that students perceive themselves as less involved in the classroom than faculty perceive them to be. While we would like to think that students are engaging in reflective thinking while taking lecture notes, research demonstrating that student note-taking during lectures is often performed in a reflexive, mindless manner. Prolonged performance on a passive, repetitive task (such as continuous note-taking) eventually results in that task being assumed by lower centers of the brain that control automatic behavior, with limited involvement of higher (cortical) areas of the brain responsible for higher-level thinking (Bligh, 2000; Mackworth, 1970). This finding is captured anecdotally in the old saying, "During lectures, information passes from the lecturer's notes to the students' notes and through the minds of neither.") Roland Christensen (1982), an originator and long-time advocate of learning through the case method (case studies), once noted that traditional lecturing is "like dropping ideas into the letter box of the subconscious. You know when they are posted, but you never know when they will be received or in what form" (p. xiv).

In studies of student behavior in undergraduate classrooms, it has been found that about half of the time during lectures, students are thinking about things unrelated to the lecture content (and up to 15% of their class time is spent "fantasizing") (Milton, Polio, & Eison, 1986). Student *attention and concentration* tend to drop off dramatically after 10-20 minutes of continuous instructor discourse (Penner, 1984; Verner and Dickinson, 1967). However, it is important to note that this attention "drift" during lectures also occurs among students in graduate and professional school (Stuart and Rutheford, 1978) and among learning-oriented (vs. grade-oriented) undergraduate students (Milton, Pollio, & Eison, 1986). Thus, attention loss during lectures cannot be dismissed as a student problem, such as lack of motivation, lack of effort, or an outbreak of attention deficit disorder among today's youth; instead, the problem seems to lie with the lecture method itself.

It may be that listening attentively to lectures for prolonged periods of time is simply not something that the human brain is particularly well equipped to do. In fact, some neurobiologists have argued that our brains may not be neurologically wired to process information for prolonged periods of time because it was more adaptive for our early ancestors to have shorter attention spans, which enabled them to quickly to a predator or prey and then shift their attention to the next life-preserving priority (LaBerge, 1995; Sylwester, 1996). This suggests that the human brain processes new information more effectively in shorter, focused sessions (lasting no longer than 15 minutes), followed by opportunities to "act" on that information via activities that involve personal engagement and reflection (Jensen, 1998).

Even if students miraculously managed to maintain attention and concentration throughout a typical 50-minute lecture, research strongly suggests that important educational outcomes, such as higher-level thinking and attitude change, are less likely to take place when students listen to lectures than when they engage in more active forms of learning (Pascarella & Terenzini, 1991; 2005). For instance, McKeachie et al. (1986) conducted an extensive review of the research

literature on college teaching methods and concluded: "If we want students to become more effective in meaningful learning and thinking, they need to spend more time in active, meaningful learning and thinking—not just sitting and passively receiving information" (p. 77). Bonwell and Eison (1991) reached a similar conclusion following their review of the research literature: "The evidence suggests that if an instructor's goals are not only to impart information but also to develop cognitive skills and to change attitudes, then alternative teaching strategies should be interwoven with the lecture method during classroom presentations" (p. 10). More recently, Bligh (2000) concluded his extensive research review with this recommendation: *"Use lectures to teach information. Do not rely on them to promote thought, change attitudes, or develop behavioral skills if you can help it"* (p. 20).

Implications for *First-Year* Students

   A substantial number of subscribers to this newsletter have professional responsibilities that involve the education and retention of first-year students. For these professionals, and the new students they work with, the implications of the foregoing research become even more significant when they are viewed in light of recent findings relating specifically to first-year students.

   Students are entering college today with substantially higher self-reported levels of *academic disengagement* in high school—they more frequently report "feeling bored" in class, missing class, and spending less time on their studies outside of class (Astin, et al., 1997; Sax, et al., 2005). These characteristics apparently carry over to the first year of college, as evidenced by a national survey of first-year educators who were asked to rank 18 different factors in terms of their "level of impact" on first-year students' academic performance. These educators ranked "lack of [student] motivation" as the number-one factor (Policy Center on the First Year of College, 2003).

   Admitting new students to college who report experiencing increasingly lower levels of academic engagement and higher levels of academic boredom in high school, and then immediately immersing these neophytes in lecture-driven introductory courses, appears to be the ideal formula for perpetuating their pre-existing levels of academic disengagement, passivity, and boredom. In his book, *Rejuvenating Introductory Courses*, Kenneth Spear artfully expresses the potentially dangerous consequence of subjecting new students to "disengaging" pedagogy: "In these formative experiences, [students] learn what it is to be a student, what is required to get by. If students are taught to be passive seekers and transcribers of information, that is what they become. Further, they set their sights accordingly in subsequent courses, often actively resisting our attempts in upper-division courses to get them to go beyond the information we give them" (1984, pp. 6-7).

   These results are consistent with those generated by the Policy Center on the First Year of College, based on survey data collected from more than 60 postsecondary institutions and over 30,000 students. This national survey revealed that use of "engaging pedagogy" (for example, class discussions and group work) was positively associated with student satisfaction and self-reported learning outcomes in first year seminars (Swing, 2002). Similar findings emerge from research conducted by the Higher Education Research Institute on first-year courses in general. Based on data gathered from almost 25,000 students at 110 institutions, it was found that the pedagogical practices most strongly associated with first-year students' satisfaction with the overall quality of instruction at their college were teaching practices that emphasized involvement with peers, faculty, and the course itself (Keup & Sax, 2002).

Conclusion

   The research reviewed in this article provides consistent evidence that the lecture method, which continues to be the dominant instructional strategy in college classrooms, is not the optimal vehicle for promoting student learning, particularly learning that involves higher-level thinking and attitudinal change.

   My motive for presenting this research was not to imply that lecturing (instructor-delivered information) should be totally dismissed, displaced or replaced. Higher education should still be a place where knowledgeable, learned professionals are able to share their knowledge and model thinking processes that their students can emulate. However, the research reviewed here strongly suggests that the lecture method needs to be augmented, complemented, and punctuated by learner-centered strategies that empower students to take a more active and responsible role in the learning process.

   It is beyond the scope of this article to identify and review specific, learner-centered alternatives to the lecture method. Contributors to this newsletter have already shared many inventive, practical alternatives to the lecture method. I would argue that all effective, learner-centered teaching strategies implement one or more of the following four, research-based learning principles.

1. *Active* **Involvement**—learning becomes deeper and more durable when students become actively *engaged* in the learning process, i.e., they spend more *time* "on task" and invest a higher level mental *energy* in that task (Astin, 1984, 1985a, 1985b, 1993; Kuh, 1991, 2001a, 2001b; National Institute of Education, 1984; Pace, 1984, 1990; Pascarella & Terenzini, 1991, 2005).

2. *Social* **Integration**—learning is strengthened through student-instructor and student-student (peer) *interaction and collaboration* (Astin, 1993; Bruffee, 1993; Johnson, Johnson, & Smith, 1998; Slavin, 1996; Tinto, 1987, 1993).

3. **Self-*Reflection***—learning is deepened when students "step back" and *reflect* on their learning strategies (i.e., engage in "meta-cognition"); and when students reflect on their learning experiences—*transforming* these experiences into a form that *makes sense* or has *personal meaning* to them ("elaboration")—enabling them to build *relevant conceptual connections* between what they are trying to learn and what they have *already know* (i.e., knowledge is personally "constructed") (Flavell, 1985; Joint Task Force on Student Learning, 1998; Piaget, 1972; Vygotsky, 1978; Weinstein & Meyer, 1991).

4. **Personal *Validation***—learning is enhanced when students feel personally *significant*, i.e., when they feel recognized as *individuals* and sense that they *matter* to their instructor and their classmates (Rendon, 1994; Rendon & Garza, 1996; Schlossberg, Lynch, Chickering, 1989).

When learner-centered teaching strategies effectively implement these principles, they can be expected to exert simultaneous and synergistic effects on student learning, student motivation, and student retention.

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