

PROMOTING ENGAGED LEARNING WITH TEAMS AND GROUPS

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ABSTRACT

This session reports on a study in which an accounting professor opted to take full advantage of a technology-enhanced classroom to create a stimulating learning environment that promoted student engagement and unique collaborative opportunities. The intent was to use structured observations to infer learning by characterizing or portraying the dynamics of the team setting, e.g., the variety of roles played, techniques for organizing and distributing tasks, strategies for negotiating meaning (and remedying errors in judgment), processes for managing personal biases, and decisions about resources or references on which to rely.

THE STRUGGLE TO ENGAGE STUDENTS

In 1989, the American Accounting Association¹—the field’s academic branch—teamed with eight major public accounting firms (the Big 8)² to form the Accounting Education Change Commission (AECC); its charge, well articulated in a series of Position Statements first circulated in 1990,³ was to revolutionize accounting education [1]. Comprised of both educators and practitioners, the AECC challenged accounting faculty to rethink their curricular stance and pedagogical approach. The goal was to create stimulating instructional settings with a clear focus on real-world problem solving, active learning, communications and interpersonal skills, and meaningful technology use/integration [2].

Much has changed in the past 15 years. Many accounting educators have indeed moved away from traditional lectures to group work and real-world problem solving; as important, they expect students to be Internet savvy and readily master a variety of software applications in order to organize, process, synthesize, and display their data.

Not surprisingly, the research base associated with accounting education has changed as well. Dominating the literature since the late 1990s are both empirical and anecdotal studies focused on the ways in which the new instructional focus has impacted student performance and student reactions to course revisions. For example, Crandall and Phillips [3] empirically demonstrated that “... educational technology applications in accounting [specifically, hyperlinked text] can enhance student learning” (n.p.), while Murphy and Hoeppner [4] found that students gave high relevance and challenge ratings to

¹ See: <http://raw.rutgers.edu/raw/aaa/index.html>

² In 1989, the Big 8 firms included Arthur Anderson & Company; Arthur Young; Coopers & Lybrand; Deloitte, Haskins, & Sells; Ernest & Whinney; Peat, Marwick, Main & Company; Price Waterhouse; and Touche Ross.

³ See: <http://aaahq.org/AECC/PositionsandIssues/cover.htm>

group projects that required them to integrate or reference web-based resources (specifically, SEC filings and financial databases).

However, the AECC's vision of an instructional revolution is far from fully realized. Particularly lacking are findings that positively relate collaborative or cooperative activities to improved learning outcomes, positive student reactions to their classroom experiences, or enhanced student perceptions of the field and their readiness to perform as professionals. A comparative analysis of the research conducted since the mid-1990s—and their own fairly modest success at integrating Michaelson's [5] team-learning model (TLM) into a managerial accounting class—led Lancaster and Strand [6, p. 564] to conclude that "...although the general education literature contains hundreds of studies that document improved student performance, similar results have mostly eluded researchers in accounting."

The absence of "confirmatory" results fuels the traditionalists' belief that the AECC agenda (in particular, the focus on team learning) is ill-suited, perhaps even antithetical, to accounting education (Boyd, et al., 2000). More likely, however, is that researchers are attending to the "wrong" outcomes—favoring basic student reactions to course revisions and traditional performance indicators (grades, tests or quiz scores) while neglecting the core interpersonal attributes and skills that a team setting can foster: leadership skills, self-esteem, awareness of the diversity of settings in which accountants find themselves, data-based decision-making, deeper learning, and better retention of course content (Lancaster & Strand). Also problematic are the fairly unimaginative methods by which data tend to be collected (surveys and tests); few studies employ first-hand observations or student reflections that better capture whether or not (and in what ways) students are active engaged in learning, proactively connecting with their teammates, or handling alternative ideas or positions. Because researchers have largely ignored group dynamics, they cannot accurately determine if a grade reflects the work of one or the efforts of many, the process by which answers or solutions have been derived, and the strategies students use to present and promote their individual positions (Murphy & Hoeppner, 2002).

STUDY OVERVIEW: SUBJECTS, ENVIRONMENT, TASKS

This session reports on an pilot evaluation study in which an accounting instructor opted to take full advantage of a technology-enhanced classroom to create a stimulating learning environment that promoted student engagement and unique collaborative opportunities. This was not another attempt to tie engagement to exam or project performance; rather, the intent was to use structured observations to infer learning by characterizing or portraying the dynamics of the team setting, e.g., the variety of roles played, techniques for organizing and distributing tasks, strategies for negotiating meaning (and remedying errors in judgment), processes for managing personal biases, and decisions about resources or references on which to rely.

Subjects (n=30) were enrolled in a graduate level accounting class. The group was an interesting blend of native (17) and non-native (13) English speakers as well as men (14) and women (16). Among the foreign languages spoken were Chinese, Japanese, Korean, Russian, and Spanish; students' average age was 32.

A major component of the class was in-class collaborative group projects. For these projects, students were assigned to three-person groups at the beginning of the semester based on their academic ability,⁴ gender and ethnicity. To the extent possible, each mixed-ability group included men and women, and both native and non-native speakers.

The in-class group problems generally fell into two types. Those more intellectually demanding called for students to answer questions related to particular accounting concepts and issues based on annual corporate reports to which they had access. But some in-class problems were more skills-based. For instance, students could create an entire bond or lease amortization schedule using Microsoft® Excel—and thus see the accounting impact over a lengthy period of time. Although the in-class group accounting problems were not graded, they were directly related to the following week's homework, which was scored. Most groups would remain in class until they finished their group problem; some lingered afterwards for up to 10 or 15 minutes. The groups would upload their work to the course website, which provided them immediate access to their files whether they worked on school assignments at the university or elsewhere.

RESULTS: STUDENT PERCEPTIONS, OBSERVER ANALYSIS

Data were collected via direct observations and a near-end-of-course survey.

- The four-page *Collaboration Observation Form* allowed different facets of engagement and collaboration to be explored both independently and in unique “combinations.”
- The survey, administered to students in late Spring (Week 12), captured student perceptions of the strategies the instructor employed in and outside of class, reactions to different features of the Experimental Classroom, and views of the collaborative process as a learning experience—in essence, extending, supporting, or refuting the first-hand observations.

The results (a major focus of our presentation) clearly indicated that the students enjoyed group work. Important to note is that the challenge to do well was intrinsically motivated; high ratings on the usefulness/value of the team tasks confirmed that students were engaged by the learning itself [7]. Both survey results and open-ended comments substantiated student appreciation of the chance to deepen their conceptual and technical understanding of complex concepts without the pressure that grades engender.

Deep processing was also indicated by the variety of comments (explanatory, reasoning, instructional, agreement) students made and the range of roles they played (elaborator, summarizer, analyzer/synthesizer/evaluator). Finally, students tended to rate their teammates highly, revealing their willingness *and* ability to work through differences of opinion, language barriers, and cultural misunderstandings.

A number of implications may be drawn from this initial study—in particular, ways for instructors (whether or not affiliated with business courses) to strengthen the design and functioning of student teams. The presenters will close the session by briefly exploring issues that must be targeted in any *engagement*-focused research to emerge from this pilot investigation:

⁴ The course instructor based academic ability (designated as *strong*, *medium*, or *weak*) on GMAT and GPA scores as well as scores on accounting homework assigned during Weeks 1 and 2.