

## Developments In Business Simulation & Experiential Learning, Volume 24, 1997

### SIMULATIONS AND LEARNING: CAN WE PROVE A RELATIONSHIP?

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#### SUMMARY

Assessing what students learn on a business simulation exercise has been a focus in the literature and at ABSEL conferences since simulation exercises were first introduced (Greenlaw and Wyman, 1973; Keys, 1976; Wolfe, 1985; Whiteley and Faria, 1989; Burns, Gentry, and Wolfe, 1990; Wolfe, 1990; Gosenpud, 1990; Wellington and Faria, 1991; Anderson and Lawton, 1992; Gosenpud and Washbush, 1993, 1994; Anderson and Lawton, 1995; Washbush and Gosenpud, 1995). Debate continues as to what is learned and can it be proven with hard data versus anecdotal evidence.

A seminar on this topic organized by Jim Gentry for ABSEL's 1996 conference resulted in a crowded room, much debate, but little resolution. The focus of this proposed seminar is to continue to push this debate further. As pressures to demonstrate outcomes increase, educators find themselves increasingly required to present evidence of the merits and validity of their pedagogies. Beyond external pressures, we must understand the learning outcomes of a simulation if we are to integrate it with other teaching methodologies to optimize learning.

The design of the seminar will center around 5 -10 minute presentations by four teams of researchers that have made continuing contributions to ABSEL on this topic. Their presentations will be followed by an overview and reflection of the presentations by Joe Wolfe. This will be followed by an open discussion.

The following outline identifies the four teams of researchers, and the principal points in their position on the topic.

#### OUTLINE

##### Gentry and Burns

- "Simulation gaming" and "learning" are not measurable constructs, at present.
- There is a large variation in simulation gaming experience. More precision in pedagogical assessments of simulations is needed.
- Learning is improperly operationalized.
- Learning is not performance, it is value-added.
- The relationship between simulations and learning cannot be properly assessed until the constructs are operationalized adequately.

##### Faria and Wellington

- Relationships between simulation participation and learning have been established.
- Good simulation performers score better on final examinations.
- Students learn to identify different marketing environments (e.g., push vs. pull).
- Good simulation performers are able to repeat their performance.

##### Gosenpud and Washbush

- No relationship has been established, yet.
- Due to measurement problems, a relationship has not been found, but one exists.
- There is an association between what one learns from an experience and how one behaves during that experience.
- Capturing the association between learning and performance will be very difficult with "single score" measures. Multiple measures of each are needed.

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### Anderson and Lawton

- Only a very weak link between participation in a simulation and learning has been shown.
- Valid, reliable instruments to assess “mastery” are rare, and valid measures of “higher level” learning objectives are almost non-existent.
- There is a need to understand the kinds of learning simulations are capable of producing.
- Each simulation user must identify clearly the kinds of learning he or she hopes to produce through use of a simulation.
- Valid instruments need to be developed for each kind of learning we identify.
- Instruments must be used to assess whether mastery of learning objectives exists.

### Joe Wolfe

- Overview response to presentations and reflections.

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