

POST EXPERIENCE TECHNIQUES TO ENHANCE LEARNING IN TOTAL ENTERPRISE SIMULATIONS

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ABSTRACT

In this paper we present justification for developing improved debriefing techniques for total enterprise simulations. We also draw on learning theory to describe the appropriate steps to follow in proper debriefing.

Recent changes in the composition of higher education enrollments indicate the need to adopt new learning methods. The National Center for Education Statistics (2015) reports that students over 25 years of age currently represent approximately 40 percent of all college students, and this percentage is expected to increase in the next few years. Employer and employee needs are changing too. A study by the Society for Human Resource Management (2008) finds that Human Resource professionals and employees both reported that adaptability/flexibility and critical thinking/problem-solving skills were growing in importance. One type of learning in particular offers high potential to meet these changing demands: experiential learning.

Experiential learning theory defines learning as "the process whereby knowledge is created through the transformation of experience (Kolb, 1984, p. 41) Experiential learning theories were originated primarily by John Dewey, Kurt Lewin, and Jean Piaget (Hickcox, 1991.) These foundations arose from a particular epistemological view: education is a process of individual perception of experiences, which means that knowledge is constructed and each person creates their own unique reality (Yardley, Teunissen, and Dornan, 2012.) Largely a reaction against the then prevailing view that "true" knowledge was to be provided by an instructor to the student, Dewey et al. provided for a student centered mode of learning. While we agree that experiential exercises should be student centered, we also argue here that an instructor can choose those techniques that best guide the student towards the most effective learning outcomes.

Following Lederman (1992), we focus on the post experience analytical process or the debriefing session. She defines debriefing as "a process in which people who have had an experience are led through a purposive discussion of that experience" (p. 146.) In addition, "Debriefing aims to use the information generated during the experimental activity to facilitate learning for those who have been through the process" (Lederman, 1992:147).

The focus on debriefing in this article is on the period after an experiential activity. The emphasis is thus on what has happened, determining what the participants have learned, and to compare this against the learning objectives of the exercise (Lederman, 1992.) Lederman (1992; p. 153) introduces a three phase stepwise process for debriefing a simulation experiential exercise as follows:

Phase 1: invitation to talk, set the group rules, and identification of what happened.

Phase 2: participants describe the experience, participants describe their feelings, and identification of the effect.

Phase 3: generalize, identify patterns, discuss implications and application, express feelings, clarify facts, concepts, or principles, assess individual performance, provide closure and evaluation, and recap achievement.

In this paper, we argue that a properly conducted debrief can enhance the benefits of a particular type of experiential exercise: educational business simulations or total enterprise simulations. Business simulation exercises have a long tradition in business and management education. Concurrently, management researchers have produced numerous studies of simulation based training. However, as Silas, Wildman and Piccolo (2009) note, most of the literature on simulations in management education is descriptive not prescriptive and does not provide guidance on how to best develop skills in management students.

The leading business management simulations used in higher education and organizational training programs provide multiple benefits. Used primarily in strategy courses and other related areas, these simulations have been found to effectively introduce business concepts, inculcate a cross-functional understanding of business, build team skills, enable better translation of data into information, and improve overall decision-making skills (Kulkarni and Sivaraman, 2013.) Other advantages of using business simulations in management education are the ability to have students practice leadership, decision-making, and effective communication (Silas et al., 2009.) Wolfe (1997) examines empirical studies and concludes simulations often lead to superior learning outcomes compared to other training methodologies.

In addition, debrief sessions can add significant value to the participant's learning experience. As Crookall (1992) notes "debriefing is perhaps the most important part of a simulation / game, and yet it tends to be the most neglected, if not in practice, at least in the literature."

An advantage of using simulations is their experiential component. However, concrete experience does not encompass all the available benefits to an experiential exercise such as a business simulation. Therefore, proper debriefing requires a relevant model including all the major components of experiential learning.

Although there are many insightful models to select from, one of the most popular and well established is Kolb's Experiential

Learning Model. Kolb's Experiential Learning Model has four primary areas from which to learn from experience: Concrete, Reflection, Abstract Conceptualization, and Active Experimentation. Simulations should be facilitated to incorporate all elements of the learning model to maximize learning. In particular, simulation debriefs should be done in such a way to

smoothly connect the various elements in Kolb's model. The presentation will propose a specific path to implement Kolb's model into business simulation debriefing to increase its effectiveness.

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