Enhancing Student Learning Outcomes with Simulation-based Pedagogies

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This poster reports on an Australian Government Office for Learning and Teaching (OLT) project to assist business educators to embed simulations into the curriculum. The purpose of this project was to gather and disseminate good practice in the design of pedagogy and assessment in simulation-based units in business. Data collection included interviews with educators and decision makers, student focus groups and surveys. The project included the development of an online toolkit consisting of case studies, a good practice guide and a simulation learning barometer. A ‘framework for simulation-based pedagogy’ is presented as a key outcome of the project.

Keywords: business, simulation, pedagogy, assessment, learning outcomes.

Introduction

Enrolments in business fields such as management, marketing, accounting, finance, tourism and hospitality have expanded dramatically over the last decade. However, this popularity has resulted in large class sizes, which create challenges for developing graduate capabilities. It has been suggested that technology enhanced learning may overcome some of these challenges in business education (Karakaya, Ainscough, & Choooorian, 2001). In particular, ‘gamification’ and the use of simulations have received attention in a number of fields. Online business simulations provide experiential learning environments that replicate workplace tasks or processes to allow students to apply knowledge and skills. Simulations are especially useful as a learning tool because they model aspects of reality in a safe environment, allowing learners to make errors that do not have real repercussions (Adobor & Daneshfar, 2006).

Description

The poster (see next page) reports on an Australian Government Office for Learning and Teaching (OLT) project to assist business educators to embed simulations into the curriculum. The purpose of this project was to gather and disseminate good practice in the design of pedagogy and assessment in simulation-based units in business. The project makes several key contributions regarding the learning outcomes, adoption, pedagogy, assessment and evaluation of online business simulations. These five areas form the basis for the ‘Framework for Simulation-based Pedagogy’ included on the poster:

1. **Learning outcomes:** The adoption of a simulation starts with a consideration of learning outcomes. Simulations are particularly effective in helping learners to integrate and apply business knowledge as well as providing opportunities to practise analysis, evaluation, creation and collaboration skills.

2. **Simulation adoption:** Simulation-based pedagogies require tactful management of the institutional constraints and challenges that have been identified. A champion is needed to promote and sustain the use of a simulation. Active engagement with supportive program directors, senior managers and decisions makers is a necessity. The background and needs of students should also be considered.

3. **Pedagogy:** Key suggestions for pedagogy include the use of non-traditional pedagogy that incorporates authentic learning tasks and activities, providing learners with opportunities to experience multiple perspectives, supporting collaboration, and coaching and scaffolding learning.

4. **Assessment:** The development of higher order graduate capabilities can be encouraged by designing authentic assessment tasks that require students to practice these capabilities. Common methods included assessing team interaction; using reports and presentations to
communicate proposals, plans, company performance and competitor analyses; student reflections; and vivas.

5. **Evaluation:** The project has developed a *Simulation Learning Barometer* for benchmarking and evaluating student engagement, learning activities and assessment, team dynamics, learning outcomes, and satisfaction.

**References**


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