Journal of Hospitality, Leisure, Sport & Tourism Education 12 (2013) 59–69

Contents lists available at SciVerse ScienceDirect

Journal of Hospitality, Leisure, Sport & Tourism Education

journal homepage: www.elsevier.com/locate/jhlste

Academic Papers

The influence of prior subject knowledge, prior ability and work experience on self-efficacy

Elizabeth M. Ineson [a,*], Timothy Jung [a,1], Charles Hains [b,2], Mincheol Kim [c,3]

[a] Manchester Metropolitan University, Hollings Faculty, Old Hall Lane, Manchester M14 6HR, United Kingdom
[b] Hotel and Tourism Management Institute (HTMi), CH-6174 Söerenberg, Switzerland
[c] Department of Management Information Systems, Jeju National University, Jeju City, South Korea

ARTICLE INFO

Keywords:
Self-efficacy
Subject knowledge
Prior ability
Work experience

ABSTRACT

The factors that might enhance the learning achieved by students from a business simulation are examined to determine the extent to which prior ability, and knowledge gained through prior studies and/or work experience impact on self-efficacy. Immediately prior to their participation in a Hotel Operations Tactics and Strategy (HOTS) business simulation course, 326 international students' prior subject knowledge, prior ability and self-efficacy were measured via an on-line survey. The findings indicate that self-efficacy is influenced positively by prior knowledge and prior ability. Further, it is revealed that work experience does not have any significant moderating effect between either prior knowledge or prior ability and self-efficacy.

1. Introduction

The taxonomy of learning developed by Bloom, Engelhart, Furst, Hill, and Krathwohl (1956) presented educators with a structured plan for creating learning goals for which a strategy of instruction could be developed (Lowe & Holten, 2005). The desire of educators may be to take students in a given programme of study through a cognitive path designed to develop their ability to process information in order to achieve pre-specified educational outcomes. In vocational education, such as hospitality, it is imperative as part of the learning process that as realistic an impression of the hospitality industry as possible is created (Chen & Downing, 2006). This 'realism' can be achieved, in part, by linking it to the students' educational and work experiences. Computer technology is designed to stimulate learning and to promote a higher level of understanding in students within a particular subject area or discipline, than traditional lectures or even case studies (Tompson & Dass, 2000). The advent of new technology has therefore had a great influence on education, instructional delivery and the ways in which students learn (Lowe & Holten, 2005). As such, increasing demands are thus placed upon educators to not only to keep abreast of technological developments, but also to incorporate them within the classroom environment. Computer based business simulations are tools that bridge the gap between learned information and experiential learning and they help to achieve the desired higher level learning outcomes (application, analysis, synthesis and evaluation) identified by Bloom et al. (1956). Benefits noted in early studies using hospitality management simulations included high levels of student motivation, development of technical and interpersonal skills, experiential

* Corresponding author. Tel.: +44 161 247 2741; fax: +44 161 247 6334.
E-mail addresses: e.ineson@mmu.ac.uk (E.M. Ineson), t.jung@mmu.ac.uk (T. Jung), charles.hains@htmi.ch (C. Hains), mck1292@jejunu.ac.kr (M. Kim).
[1] Tel.: +44 161 247 2701; fax: +44 161 247 6334.
[2] Tel.: +41 41 488 11 25; fax: +41 41 488 23 44.
[3] Tel.: +82 64 754 3182; fax: +82 64 724 3138.

1473-8376/$ - see front matter © 2012 Elsevier Ltd. All rights reserved.
http://dx.doi.org/10.1016/j.jhlste.2012.11.002

motivation and leadership development (Chase, 1983). Later studies suggested that simulations have been shown to improve students' self-efficacy (Tompson & Dass, 2000). Thus, more organisations are bringing simulations into their curricula to improve both effectiveness and appeal of formal lecture programmes (Aldrich, 2006).

Apart from realism, there is a number of contributory factors that influence the learning achieved by students from a business simulation. The present paper is part of a larger study that attempts to measure the experiential learning achieved through the use of a business simulation and subsequently will determine the impacts of both self-efficacy, prior knowledge and ability, and work experience on experiential learning. Here, the focus is on determining the extent to which prior ability, and knowledge gained through prior studies and/or work experience impact on self-efficacy, which determines how people think, feel, motivate themselves and behave, all measured prior to the commencement of the business simulation.

2. Theory

2.1. Experiential learning

2.1.1. Definition

A number of definitions of experiential learning has been suggested. Hoover and Whitehead (1975) state that: "Experiential learning exists when a personally responsible participant cognitively, affectively, and behaviourally processes knowledge, skills, and/or attitudes in a learning situation characterized by a high level of active involvement" (p.25). Kolb (1984) defines experiential learning as a "process whereby knowledge is created through the transformation of experience" (p.38) and Feinstein, Mann, and Corsun (2002) define it as "a participatory method of learning that involves a variety of a person's mental capability. It exists when a learner processes information in an active and immersive learning environment" (p.733). These definitions support the belief that at the centre of experiential learning theory lies the fundamental principle that learning occurs when an individual is engaged with concrete experience; thus experiential learning is a sequence of events that requires active involvement by the student at various points (Walters & Marks, 1981). This principle of learning through doing has its roots in the ancient quote attributed to Confucius "I hear and I forget, I see and I remember, I do and I understand" (cited in Specht & Sandlin, 1991, p.196). The 'hearing' and 'seeing' are typical of a more traditional classroom that is instructor and content centred whereas the 'doing' places the focus on the student and thus learning becomes student centred (Barr & Tagg, 1995).

2.1.2. Experiential learning model

Kolb (1984) created a cyclic model of learning that begins with a concrete experience (CE). In other words, when a person learns by doing, the learning is task orientated. Such learning leads to the reflective observation (RO) stage of the cycle where a person reflects on the experience and asks himself/herself the 'why' question. The abstract conceptualisation (AC) takes the CE and RO to test existing concepts or to form new ones (Saunders, 1997). The final stage of the cycle, active experimentation (AE) is putting what has been learned into practice then the cycle has gone full circle. As Kolb points out, when the cycle recommences, the learner enters at a higher level of "cognitive functioning" (1984, p.23). Thus the learning cycle follows an upward spiral during the learning process (Saunders, 1997).

Kolb's experiential learning model supports Bloom's (1956) taxonomy of educational objectives at the higher levels of the cognitive domain. Bloom's hierarchy begins with the basic level of knowledge (remembering previously learned material) then progresses through comprehension (understand the meaning of material), application (using the material in a new situation), analysis (break down the material into component parts), synthesis (put parts together to form a new whole) and concludes with evaluation (ability to judge the value of the new material). The CE, RO and AC stages of Kolb's (1984) cycle correspond to the analysis, synthesis and evaluation in Bloom's (1956) taxonomy with the AE being the application stage and the cycle begins again with CE/analysis but at a higher level of learning (Gopinath & Sawyer, 1999).

2.1.3. Experiential learning using business simulations

Kolb and Lewis (1986) suggested that simulations offered learners the best support for active experimentation as the experiential learning environment was far broader than that offered by cases. Current literature reveals that business simulations whether they be used in international relations (Lewis, 2005; Shellman & Turan, 2006), management (Adobor & Daneshfar, 2006), accountancy (Chen & Downing, 2006), entrepreneurship (Marriott, 2004), strategy (Doyle & Brown, 2000; Gopinath & Sawyer, 1999; Kendall & Harrington, 2003 Washbush & Gosen, 1998), or hospitality management (Edelheim & Ueda, 2007; Martin & McEvoy, 2003) are seen as a pedagogical benefit to student learning. Kolb's (1984) experiential learning cycle has been used by some authors (see, for example, Chen & Downing, 2006; Edelheim & Ueda, 2007; Gopinath & Sawyer, 1999; Marriott, 2004; Saunders, 1997; Tompson & Dass, 2000) as the model to explain the cyclic process students go through when using a business simulation built on an iterative (repetitive with incremental refinements or adjustments) framework, which is typically computer based.

2.1.4. The simulation package

The simulation package used for the present research is the "Hotel Operations Tactics and Strategy" (HOTS) computer based business simulation. Developed by the Orange Simulation Company (1998–2005), a British based company focused