


**Paper 9 : Fostering Improved Learning About Sustainability**

Michael Mills and Andrea Quinn

**Michael K. Mills**
University of Southern Queensland
PO Box 4196
Springfield, Qld., 4300
Australia
Ph: 61-7 3470 4515
Fax: 61-7 3470 4501
Em: mmills@usq.edu.au

**Andrea J. Quinn**
University of Southern Queensland
PO Box 4196
Springfield, Qld., 4300
FOSTERING IMPROVED LEARNING ABOUT SUSTAINABILITY

Abstract

University business graduates must not only understand but also be equipped to apply a sustainable thought process to today’s business challenges. However, evidence suggests that standard approaches to teaching business courses have not advanced to reflect changing student needs, especially for NetGen students who have differing expectations than earlier cohorts. The current challenge for instructors concerns the preservation of rigor and integrity in course design, while responding to the needs of a new generation of learners. This article presents a conceptual framework incorporating experiential learning, reflective practice, and the use of metaphor, with application to the teaching of sustainability within a number of business courses.

Key Words: Sustainability, business education, experiential learning, reflective practice, metaphor

Sustainability education is gradually being introduced in business schools (Martin and Schouten, 2012, Borin and Metcalf, 2010). Sustainability imperatives, combined with shifts in society’s expectations of business, challenge marketing educators to retool curriculum content so that it (1)
fosters increased awareness of the need to add environmentally sustainable value to society as well as to the bottom line and (2) builds the knowledge base and skill sets that marketing graduates will need to develop and promote practical product and service solutions that balance the needs of people and the environment (Borin and Metcalf, 2010, Bridges and Wilhelm, 2008; Sustainability, 2008). However, as noted by a number of authors (e.g. Richardson, Irwin and Sherwin, 2005; Uhl and Anderson, 2001) the knowledge base and skill sets required to design sustainable products and services are broad. All of this makes teaching sustainability an interesting challenge.

Given the importance of the sustainability topic for today’s business curriculum, it is also particularly disappointing to note that our conventional methods are also failing to meet the expectations of ‘NetGen’ students, highlighting a need for innovation in the classroom (Lincoln 2008; Pelton and True 2004). As Matulich, Papp, and Haytko (2008, p. 1) note, “the new learning environment for the Net Generation should be active, collaborative, experiential, team-based, and as self-paced as possible”, and (2008, p. 2) “class time is most effective for these students when it involves interactions, demonstration, and social networking.” (see also Close, Dixit, and Maholtra 2005). The question is how to adapt without trading the integrity of the learning outcomes we aspire to stimulate in students. We now discuss how a combined model of experiential learning theory, reflective practice, and metaphor can be successfully applied to meet the challenges indicated above.

Experiential learning has been proposed as an effective vehicle for 1) developing cognitive skills, 2) for
supporting knowledge acquisition relevant to professional contexts, and 3) for promoting self-direction in the learning process (Brookfield 1986, 1987).

Experiential learning theory (ELT; Kolb 1984) offers a framework for understanding and addressing individual learning styles by linking experience, reflection, and application, where experience is transformed into generalisable knowledge and principles for action (Kolb 1984; Kolb and Kolb 2005). Kolb (1984) posits that learning is more appropriately viewed as a process rather than an outcome, and emphasizes the importance of a continuing cycle of self-development (Kolb 1984; Kolb and Kolb 2005), the ‘experiential learning cycle’, whereby an individual engages in a concrete experience, on which he or she reflects and then conceptualizes the experience in abstract terms as new principles on which future action experiments can be based. Central to the process is the capacity to examine and expand on one’s experience, or, to engage in reflective practice.

Proponents of reflective practice assert that it stimulates deep learning and awareness of the disparity between an individual’s existing problem-solving ability and the capacity to independently solve more complex problems, such as those found in real world business settings (Yorke 2003). Well designed, quality reflective practice has been heralded as an answer to the perceived gap between formative and summative approaches in teaching and assessment (Beach 2005; Bostrom and Lassen 2006; Fernsten and Fernsten 2005), and has been suggested as a mechanism to address inconsistencies between academic performance and transfer of
knowledge to real world settings (Brookfield 1986, 1987; James 2000; Kolb 1984). In this paper, we present an example of how to optimize learning outcomes, based on a combination of ELT and reflective practice, when the jazz metaphor is used as an analog experience.

The jazz metaphor has an established pedigree as a tool for illustrating the complex interdependencies of the business world that call for a responsive and improvisational style of creative problem solving (Mills 2010). It has been successfully applied in a number of contexts, for example, business (c.f. Kamoche et al., 2003; Newton 2004) management education (Lengnick-Hall and Lengnick-Hall 1999), and economics (Tinari and Khandke 2002). The combination model (ELT, reflective practice, and metaphor) described here, goes beyond previous studies in the literature because it demonstrates that rigorous course design doesn’t have to be bartered in attempts to respond to the needs of NetGen learners. It therefore alleviates the problems associated with teaching and learning about sustainability, and, incidentally, adds an element of fun to students’ experience of the topic. Two example activities are shown below to briefly illustrate the application.

Example Experiential Learning Activity 1: Sustainability and Jazz Role Play

To introduce the ELT combined model approach and how students can potentially benefit from learning sustainability concepts, students are asked to imagine they are jazz band performers and to perform a role-play
(c.f. Sojka and Fish 2008). The class is divided into
groups of five, where each student is assigned an
instrument, such as guitar, bass, piano, drums etc. After a
brief ‘rehearsal’ of an easy tune provided to them, the
‘band’ is asked to ‘play’ or, in the language of jazz, to
improvise for their classmates. Students are also
encouraged to have some fun at this time. This first task
(Concrete Experience) is followed by a period of guided
reflection (Reflective Observation). That is, students in
each ‘band’ are asked to consider the characteristics and
elements they would need to include for a successful
future performance. The process of ‘unpacking’ these
elements leads students to revisit the role play in order to
observe similarities between the skills demanded of an
improvising jazz group and aspects of the strategic
sustainability process (Abstract Conceptualization).
Student observations are collated on a white board as
they emerge, and elaborated further by the instructor in
order to clarify how principles generated from jazz
improvisation can be viewed as analogous to the
application of sustainability concepts. For example, both
practicing sustainability and jazz require good technical
skills, the ability to work within contextual constraints
and so on. Students can then be encouraged to actively
apply the elements learned from the exercise during the
rest of the course (Active Experimentation).
Example Experiential Learning Activity 2: Sustainability Diary and Reflective Assignment

In this activity, students can be asked in the first week of class to create a diary of their own activities, purchases, and consumption during a typical week, and to identify items from their purchasing that may not qualify as sustainable. They then share their diary findings in a reflective discussion with the class. The diary task (Concrete Experience), and the reflective discussion (Reflective Observation) allow students to give voice, and then thought, to a number of alternative issues and imperatives relating to sustainability. In the following segment of this activity, students are asked to complete a reflective assignment that details how their new learning and understanding of sustainability may have changed their attitudes, and what principles can be generated from their new understanding (Abstract Conceptualization). Next, they are encouraged to apply their learning ‘going forward’; that is, they are asked to consider how they can apply the principles just discussed (Active Experimentation) in their consumption and other aspects of their daily lives, and to test their assumptions during further discussion of sustainability topics. The seeming simplicity of the ELT approach belies the depth of learning that can be achieved with the method, especially when reflective practice is incorporated to enhance the Reflective Observation and Abstract Conceptualization phases of the learning cycle. Inclusion of the already established jazz metaphor as a constant theme adds coherence to the fun aspects, and helps further address the needs of NetGen students. The
authors suggest that the approach outlined here can be usefully applied to many business courses.

REFERENCES


Paper 10: (Mimds) – Giving The Mobile Phone The Finger

Mustafa Ally and Michael Gardiner

Introduction
This paper presents findings on research conducted to determine factors influencing the uptake of Mobile Integrated Media Devices (MiMDs). These smart devices offer advanced computing ability and connectivity, and typically combine the functions of a personal digital assistant (PDA), mobile phone, portable media players and camera phones with high-resolution touchscreens, e-book readers, GPS navigation, Wi-Fi and mobile broadband access using third-party and proprietary applications. According to Gartner (2010), in the first quarter of 2010, 17.3 percent of all mobile phones were smartphones, compared to 13.6 percent in 2009. The changing technology and environment has given rise to a number of competing mobile operating systems that support an integrated touch-screen application environment of which the three dominant players in the marketplace are Google (Android), the Apple (IOS) and Microsoft (Windows Phone) (Gartner 2011). The common features that differentiate these platforms from past offerings have been the touch screen interface and the variety and availability of relatively low...