# INNOVATION IN THE TEACHING OF SUSTAINABILITY IN THE BUSINESS CLASSROOM VIA A COMBINED MODEL OF EXPERIENTIAL LEARNING, REFLECTIVE PRACTICE AND METAPHOR

Michael K. Mills Andrea J. Quinn

### **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

'To educe means to draw out or evoke that which is latent: education then means drawing out the person's latent capabilities for understanding and living, not stuffing a (passive) person full of preconceived knowledge.' (Nachmanovitch, 1990, p.118)

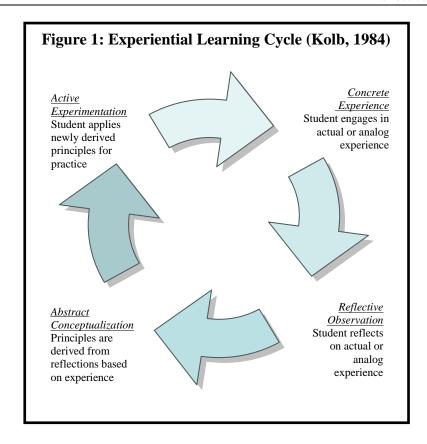
Sustainability education is gradually being introduced in business schools (Martin & Schouten 2012, Borin & Metcalf 2010). Sustainability imperatives, combined with shifts in society's expectations of business, challenge marketing educators to retool curriculum content so that it (1) fosters increased 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 & Metcalf 2010, Bridges & Wilhelm 2008; Sustainability 2008). However, as noted by a number of authors (e.g. Richardson, Irwin & Sherwin 2005; Uhl & Anderson 2001) the knowledge base and skill sets required to design sustainable products and services are broad, with Richardson et al. (2005) identifying rather daunting lists enumerating the ideas, values and facts which must be learned. 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 university teaching and assessment methods have been criticized for their reliance on assumptions that 'good' course design inevitably supports the knowledge-skills implementation link for students (Smythe 1987). Further, conventional methods are also failing to meet the expectations of 'NetGen' students, highlighting a need for innovation in the classroom (Lincoln 2008; Pelton & True 2004). This article outlines an alternative perspective on the problem, and includes two illustrations of a combined model of experiential learning, reflective practice and metaphor, as applied to the teaching of sustainability in the business classroom.

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 & Maholtra 2005). Lincoln (2008), Pelton and True (2004) and others note that if we are to effectively educate the current generation of students we must adapt our teaching tools to their needs and expectations. 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 & 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 & Kolb 2005).

Additionally, Kolb and others distinguish between traditional modes of instruction, usually assembled under the rubric of pedagogy, versus andragogy, or the type of instruction better suited to adult learners. That is, the prior and current experience of adult learners provides a foundation for emergent, transferable principles and practices. In Figure 1, Kolb's theory is presented as a cycle, 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 & Lassen 2006; Fernstein & Fernstein 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). A persistent challenge, however, concerns the design of rigorous processes that meet the challenge of authentic learning opportunities when students access to the real world setting is necessarily limited by their 'student' status. 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 & Lengnick-Hall 1999), and economics (Tinari & 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 does not 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 and ready transferability of the approach.

## 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 & Fish 2008 on the use of role play to meet the needs of NetGen students). 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.

Generally, what develops on the white board is similar to this:

**Table 1: Parallel Principles Generated During Abstract Conceptualization Phase of ELC** 

Jazz Improvisation Skills	Sustainability Skills
Good technical skills required	Good technical skills required
Being on top of the situation as it changes, being able to improvise at will	<ul> <li>Being aware of opportunities and having flexibility of methods and approaches to suit—recognition that sustainability is a process and not static</li> </ul>
Creativity	Creativity
Must consider what other players are doing and thinking, audience reactions etc.	Aware of and ability to work within contextual constraints
Good listening and cooperation	Good listening and facilitation skills with decision-makers

Students are then encouraged to actively apply the elements learned from the exercise during the rest of the course and, especially, in the completion of assessment (*Active Experimentation*). The ELT and jazz metaphor continue to be used integrally throughout the course in discussion of course topics, application exercises, and role plays.

# 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) allows 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 of what can be an otherwise challenging course topic.

The combination model offers an opportunity for maintaining rigor in one's instructional framework, based on the well-established Experiential Learning Theory. Combined with reflective practice to deepen the learning experience, and the jazz metaphor to add a fun element (in this instance at least), the innovative approach can be utilized to successfully address a number of pedagogical problems, especially those that have been identified as particular to NetGen learners. Operationally, the authors suggest that the approach to incorporating sustainability learning outlined in this paper can be usefully applied to many business courses.

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