Chapter 11
Creativity Enhancement: Use of a Simple Creativity Tutorial in Information Systems Education

Monty McNair  
Lockheed Martin, USA

Caroline Howard  
HC Consulting, USA

Indira Guzman  
Trident University International, USA

Paul Watkin  
Trident University International, USA

ABSTRACT
Since the dawn of humanity, creativity has been critical to surmounting the challenges of life. Innovation is particularly essential to survival on every level from an individual solving his/her problems to a world dependent on adaptive approaches to cope with rapidly expanding populations and enormous international tensions. Currently, information systems programs are not fostering the creativity needed to sustain the innovation required to compete in the 21st century marketplace. Educators and researchers need to better understand the effects of creativity training on creative performance to best design programs that meet the needs of information systems personnel and their employers. The results of this study provide evidence that it would be valuable for organizations to experiment with creativity tutorials and recommend that future research be conducted using larger samples of individuals with low levels of creativity. Because the costs of informing people about creativity are low and creativity tutorials can be designed to be easily administered and completed, the authors recommend that a low-cost tutorial would be a cost effective and beneficial strategy for organizations to employ with information systems personnel, especially those who assess themselves as low in creativity.

INTRODUCTION
Since the dawn of humanity, creativity has been critical to surmounting the challenges of life. Innovation is particularly essential to survival on every level from an individual solving his/her problems to a world dependent on adaptive approaches to cope with rapidly expanding populations and enormous international tensions. The criticality of creativity to survival is highlighted by Peters, Marginson, and Murphy (2010), who warn that: “Creativity and innovation is all we have, in the

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face of the accumulating crises of our time, in which financial instability, credit crisis, staggering production, and sudden fluctuations in oil prices and in all measures of value compound the larger and longer term global problems of environment, energy, and poverty” (p. vii).

The rise of the United States (US) as a superpower has been attributed by historians to American innovativeness and creativity (Florida, 2005; Ehrlich, 2007). In America’s Looming Creativity Crisis, an article in Harvard Business Review, Richard Florida describes a society’s wealth and competition in a global economy as revolving around “a central axis: a nation’s ability to mobilize, attract and retain human creative talent.” In the competitive global marketplace of the 21st century, organizational survival increasingly depends on sustained enterprise innovation and employee creativity (Beckett, 1992; Hermann, 1993; Johnson, 1992; Kanter, 1982). Studying the demise of corporate giants like Pan American Airlines, Sears Roebuck, Westinghouse, and American Motors reveals the danger of paying insufficient attention to innovative thinking and creativity in strategies and processes (Gardner, 2006). At the same time, companies, like 3M, GE and Apple, which foster and reward creativity, have flourished (Gardner, 2006), and creativity appears key to sustainable success and competitive advantage (Everett, 1983; Kiechel, 1983; Coulson & Strickland, 1991; Amabile, 1997). Cheug, Chau, and Au (2008) explain that “no organizational innovation can be achieved without the creative performance of their individual employees” (p. 338). Employee creativity has been shown to have a positive relationship to corporate financial performance and overall business excellence (Eskildsen, Dahlgaard, & Norgaard, 1999), and creativity is indispensable to long-term success of a company (Amabile, 1997). To remain prosperous and viable, it is imperative that organizations, educational institutions, individuals, and societies maximize creative potential.

Everyone has some degree of creative potential and expresses creativity in some way (Nickerson, 1999). While a person’s innate creativity is largely biologically predetermined, reinforcement can enhance creative performance (Amabile, 1991; Cox, 1983; Torrance, 1988). Unfortunately, US K-12 school systems are not providing the education needed to maximize student creativity. In the US, a demise in pupil creativity has actually been attributed to elementary and secondary school education (Craft, 2005), and critics contend that some educational settings and teachers, both in the US, and elsewhere, may even inhibit creativity (Fleith, 2000). The situation does not bode well for continued prosperity of societies and organizations nor that of their populations.

Studies have long demonstrated the power of creativity training (Rose & Lin, 1984; Scott, Leitz, & Mumford, 2004), and this study provides preliminary evidence that a simple tutorial on creativity may be effective in the online environment (McNair, 2008). While the results are not significant, the study findings provide very preliminary indications that giving creativity information may be helpful, particularly to those who believe they are not very creative. This article describes a study utilizing a very inexpensive, easy to implement tutorial for enhancing individual creativity. It expands and updates the previously published chapter description by McNair, Howard, Guzman, and Watkins (2009) and highlights some areas that may be particularly fruitful for further research.

BACKGROUND

Since information systems (IS) have become essential to the business strategies and organizational infrastructure of many organizations (Kalakota & Robinson, 2001; Orlikowski & Barley, 2001), creative and cutting edge approaches are needed to develop and effectively utilize information systems (Drucker, 1988, 1991; Orlikowski,