

Book Introduction

ARTICLE SELECTION

The subjects of Creativity and Innovation are wide-reaching and complex, and have been studied at great length by a number of scholars. The process of selecting only a few articles for inclusion in our book was difficult but valuable. We began by searching within the ERIC (Education Information Resource Center) database for all articles published in Educational Technology, searching by its ISSN. We then searched within this corpus for any article with the words creativity and innovation in the body. This produced a list of 175 articles. We reduced this list to 40 articles by skimming titles and abstracts to find the articles based with the greatest relevance to current practices in the field, clarity of writing and message, and uniqueness in approach. We eliminated articles that discussed outdated technologies or specific case studies that were not applicable to the field of instructional design in general. Then, using Google Scholar, we checked the number of citations for each article and narrowed our list down even further to include the most cited articles of those remaining.

Many articles from the decades of Educational Technology could certainly have been included in this book, and would have made valuable contributions. We feel, however, that these 15 articles represented particularly strong contributions to the discussion on creativity and innovation. As we were selecting the articles, we noticed that they fell into three major areas of inquiry that formed the organization for this book.

SECTION 1: WHAT ARE CREATIVITY AND INNOVATION? DEFINITIONS AND HISTORY

Creativity as an instructional issue has at various times swung in and out of designers' and researchers' focus. The selections in this first section explore some of that history, as well as introducing various definitions and ways of thinking about creativity and innovation.

Several of the selections in this section represent moments in the history of educational technologists' thoughts about creativity. For example, Epstein (1993) overviewed a now-out-of-favor behavioristic explanation for creativity, and argued that all supposed creativity is completely understandable and predictable with appropriate research. Dick (1995) and Rowland (1995) discussed the value of creativity as an instructional goal and the impact that instructional design methods may have on the creativeness of instructional designs. Caropreso and Couch (1996) expanded on some of the questions raised by that dialogue with an excellent curation of several researchers' thoughts about creativity, particularly including definitions and suggestions for inspiring creativity.

Innovation, similarly to creativity, is also frequently defined as a creative event, the introduction of a new product, idea, or process into the sphere of education that changes the capabilities, needs, or reach of teachers and students. This definition is exemplified in the work of Collis (1996) and Boocock (2012), who each described the impact of computers and the internet as innovations in the educational industry, and offered suggestions for how to best use the innovations of the future.

SECTION 2: FOSTERING INDIVIDUAL AND GROUP CREATIVITY AND INNOVATION

Next, we have selected a number of articles that provide guidelines for how to facilitate creativity and innovation for individuals and groups. The fact that creativity and innovation are inherent skills of human beings is no longer a controversial topic as before. However, the questions that have emerged are when and how to provoke one's creativity and innovation in education. Scientists have realized that the more developed the technology to which people have access, the less creative and innovative they become. Therefore, the articles we selected in this section try to address this issue.

Why is fostering creativity and innovation difficult? Shank et al. (1994) wrote because they are "associated with developing and practicing the necessary techniques" (para. 1). Oftentimes in K-12 settings, for example, teachers are found to focus too much on simply delivering course content to increase test scores. However, they have not realized that fostering creativity and innovation in class can increase learners' intrinsic motivation to learn the content. In addition, while we focus on the role of teachers to teach, we forget that the skills of being creative and innovative are difficult to teach through traditional methods. Therefore, it is essential for teachers, or perhaps they should be referred to as facilitators, to be able to adapt teaching models to cultivate creativity and innovation. Although most of the examples discussed in this section come from classroom settings, we argue that the models can be generalized to other situations.

SECTION 3: IMPLEMENTING CREATIVITY AND INNOVATION

What good are creativity and innovation if they are not implemented? The third topic we discuss in this book seeks to answer that question. Implementing creativity and innovation can take many different forms, from role-based design (Hokanson & Miller, 2009) to creating an interdisciplinary design studio (West, 2016). However, the end goal of each of these forms is the same: to enhance learning experiences and inspire all parties involved. We echo the words of Hong, Clinton, & Rieber (2014) when they wrote:

When was the last time you were inspired to learn? . . . When this happens, you probably don't even think about the fact that you are learning something, but instead allow yourself to be carried away by the feeling of adventure and satisfaction. The person or group who designed whatever it was that inspired you did something very special. (para. 2)

Not only does creativity inspire and open the minds of instructional designers to a broader spectrum of design possibilities, but it also helps engage students in the learning process. When students feel the freedom to be creative and innovative in their education, they gain intrinsic motivation to learn, and they can take greater ownership of the knowledge they gain. Designers create instruction that provides this freedom for students through their own creativity and innovation. Thus, we see that creativity and innovation can start with instructional designers and then be passed to the students, much like how the flame of a match can ignite the wick of a candle. According to Osguthorpe, Osguthorpe, Jacob, and Davies (2003), "releasing the imagination of learners is the primary aim of good education. We assert that for instructional designers to release the imagination of others, they must be working in ways that improve their own imagination" (p. 22).

Therefore, it is crucial that designers first learn what creativity and innovation are and how they can obtain these traits in their own lives (the first two topics of this book) so that they can better implement them and encourage learners to think creatively and innovatively for themselves. Without this knowledge, creativity and innovation cannot be implemented, and the aforementioned inspiration will be difficult, if not impossible, to achieve.

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