

Creativity Theory and Action in Education 1

Ronald A. Beghetto
Bharath Sriraman *Editors*

Creative Contradictions in Education

Cross Disciplinary Paradoxes
and Perspectives

 Springer

Creativity Theory and Action in Education

Volume 1

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*For Dr. Edward Varra, old friend and fellow
traveler in the paradoxes of learning and
life.*

– Ronald A. Beghetto

To Claire

– Bharath Sriraman

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Introduction: Creative Contradictions in Education

Creativity is a paradoxical construct. One reason it's paradoxical is because numerous contradictions are present in characterizations of creativity. For instance, most people tend to equate creativity with originality and “thinking outside of the box”; however, creativity researchers note that it often requires constraints (Beghetto 2016; Sternberg and Kaufman 2010). Some people view creativity as being associated with more clear-cut and legendary contributions, yet creativity researchers have long recognized more everyday and subjective forms of creativity (Beghetto and Kaufman 2007; Stein 1953). People also tend to associate creativity with artistic endeavors (Runco and Pagnani 2011), yet scientific insights and innovation are some of the clearest examples of creative expression. Although there is general consensus among creativity researchers on the defining criteria of creativity (i.e., some combination of originality and meeting task constraints), differing perspectives persist from some domains (e.g., the arts), which view any definition as being too constrictive.

These paradoxes carry over into educational contexts. Consider, for example, mathematics. A sizeable body of literature suggests that learners do not typically experience mathematics as a creative subject (Burton 2004), yet research mathematicians often describe their field as a highly creative endeavor (Sriraman 2009). Similarly, educators may feel that content standards stifle their students and their own creativity, yet creativity researchers have argued that such standards serve as the basis for classroom creativity (Beghetto et al. 2015). These contradictions place educators in a difficult situation. Consequently, many find themselves feeling caught between the push to promote students' creative thinking skills and the pull to meet external curricular mandates, increased performance monitoring, and various other curricular constraints (Beghetto 2013). The tensions experienced from these contradictions raise several nontrivial questions for educators, including:

- *What role can (and should) creativity play in education?*
- *Why are creative contradictions more likely in some subject areas as opposed to others? Why, for example, do learners often experience mathematics as an*

exercise in rote memorization, yet mathematicians describe their field as highly creative?

- *Is creativity best thought of as an educational goal or a means to attaining some other educational ends?*
- *Is it possible to reconcile the pressure to have students' reproduce existing knowledge with efforts aimed at helping students develop their ability to produce new knowledge (i.e., moving from consuming to creating content)?*
- *Is creativity always a good thing? What are the costs to incorporating creativity in the classroom? Do the benefits outweigh these risks?*
- *What, if any, link is there between the creative imagination and the memorization of factual knowledge?*
- *Does creative teaching and learning require a radically new pedagogical approach?*
- *When might conformity be appropriate and when is divergence needed?*
- *When and how might teachers move from asking known-answer questions to embracing the unexpected?*
- *What are some of the most promising approaches for supporting creativity and are these approaches compatible with academic learning?*

These questions lack clear answers and mirror the types of questions other researchers have raised (e.g., Mayer 1999). Indeed, although the formal field of creativity studies is more than 60 years old, many of the same creative contradictions in education faced by researchers today were faced by the first wave of creativity researchers in the 1950s and 1960s (e.g., Barron 1969). What is different now is that there has been a great proliferation in the field of creativity studies – it is comprised of experts representing multiple disciplines, countries, and methodological approaches.

At present, the field of creativity studies is perhaps best thought of as a transdiscipline. This means that the study of creativity does not belong to any one discipline and that the study of creativity can inform and be informed by multiple disciplines. The transdisciplinary nature of creativity presents an opportunity to examine the paradoxes facing creativity in education with fresh, multidisciplinary eyes. This is the purpose of the proposed volume. More specifically, the purpose of this volume is to bring together leading international and cross-disciplinary experts to weigh in on the creative contradictions in education. Not only will these experts identify and describe key creative contradictions in education, but they will also provide fresh insights into how these paradoxes might be resolved or better addressed.

The chapters in this book are arranged into two sections. The first section focuses on uncovering conceptual issues and barriers. This includes exploring how creativity is defined, the nature of creativity, and the expression of creativity in educational contexts. The second section focuses on practical applications and promising directions. Chapters in this section focus on exploring exemplars of teaching for creativity, the role of play in creativity and learning, teacher's perspectives of creativity, and how creativity can coexist in the constraints of various subject areas. Taken together, this book provides a provocative collection of essays by

international experts who tackle difficult questions about creativity in education from a cross-disciplinary perspective. The contributors to this volume will examine and provide fresh insights into the tensions and contradictions that researchers and educators face when attempting to understand and apply creativity in educational contexts. Contributors will draw from existing empirical and theoretical work but push beyond “what currently is” and comment on future possibilities. It is our hope that this book serves as a provocative jumping-off point for researchers and students of creativity interested in developing new insights about creativity in educational settings.

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