Mary Banks Gregerson
Heather T. Snyder
James C. Kaufman *Editors*

Teaching Creatively and Teaching Creativity

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Editors
Mary Banks Gregerson
Health, Environment and
Performance Psychology
Leavenworth, KS, USA

Heather T. Snyder
Department of Psychology
Edinboro University of Pennsylvania
Edinboro, PA, USA

James C. Kaufman
Learning Research Institute
Department of Psychology
California State University
San Bernardino, CA, USA

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To my two co-editors, James and Heather, your expertise, humor, and insight infuse this book, and to my husband, Christopher, your continuing support and care makes life upbeat.

Smiles, MBJG

For my husband with much love, thank you for supporting me from the beginning in all my endeavors.

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With love, JCK

Foreword

The "Preface" to this volume cites an article in the July 10, 2010 issue of *Newsweek,* titled "The Creativity Crisis," by Po Bronson and Ashley Merryman. The subtitle of the article asserts, with typical journalistic extravagance, that research shows that American creativity is declining. What research actually shows is an apparent decline over the years in average scores on certain psychological tests that are accepted as conventional measures of creativity (mainly divergent thinking). The body of the article speculates that the "crisis" is occurring because children are spending too much time watching TV or playing video games and because schools do not foster creativity development in children. It finds no concerted effort to nurture creativity among students.

After having examined the contents of this volume, I think it is fair for me to say that none of the authors whose work appears in it would be inclined to agree with these dramatic assertions. They would probably be especially opposed to the claim that there is no concerted effort to nurture creativity in our educational system. A few of the authors of chapters in this volume admit that teachers may be anxious about including creative components in their teaching methods or curricula. Some teachers may feel that fostering creativity would interfere with teaching required curricula. Much as they might like to be creative, they fear that doing so could reduce their "effectiveness," as evaluated by their students' scores on so-called objective tests of learning, which are administered and scored by outsiders. Another source of anxiety may be concern on the part of some teachers that promoting creativity will foster students' resistance to discipline and hard work. Despite these possible reservations, all the writers who contributed to this volume seem to approach their task of describing creativity in the classroom with enthusiasm and confidence that stimulating creativity among students and creative teaching methods are more effective than older approaches that rely on memorization of facts and routinization of academic activities.

A glance at the contents of this book is enough to show clearly that it is mainly about practice, that is, about methods of teaching and techniques for stimulating creativity. Although many of the recommended techniques are evidence based, this book is not the place where a reader will find descriptions of complex research

designs: quasi-experimental studies of operationally defined variables, tables of quantitative outcomes, sophisticated statistical analyses, and conclusions about hypotheses drawn from competing theories. It is, however, the place to find descriptions of practical techniques that are known to be effective because the authors have used them and refined them, in some cases over a good many years. Therefore, is a place where a reader may pick up ideas that will stimulate his or her own curiosity and motivate him or her to become more creative in their own approaches to teaching and learning.

Being a book about contemporary practices this volume is also more about what can be done now than about what has been done or might have been done in the past, especially the distant past. Understandably, perhaps, none of the contributors says much about their early predecessors. After all, is not creativity itself usually defined in terms of newness, originality, uniqueness, independence of thought and action? Who would care much if someone came up with a new way of teaching the Pythagorean Theorem?

Today, perhaps no one would care, but, back in ancient Greece, Plato cared a lot, and what he wrote about it in the dialog referred to as Meno has served as a model for a certain kind of creative teaching (although he did not call it that) ever since. (Plato's Meno, translated by Benjamin Jowett, in 1999, is conveniently accessible on the Internet at http:www.gutenberg.org.)

In the Meno dialog, Socrates, Plato's spokesperson, makes the apparently ridiculous claim to Meno that there is no such thing as teaching. To prove his point he engages in systematic questioning of one of Meno's slaves, starting with simple questions about lines and squares and developing his interrogation step by step until eventually he draws from the boy an understanding of a special case of the Pythagorean Theorem: The relationship between the length of the diagonal of a square and the lengths of its sides. At one point in the dialog, Socrates says: "...observe, Meno that I am not teaching the boy anything, but only asking him questions."

Socrates was undertaking this task in order to prove a metaphysical idea that few would accept today, that is, that the human soul is immortal and that the boy is not being taught something new but recollecting something that he learned in an earlier life. However, the fact remains that, to the modern educator, the important point is that Socrates was demonstrating a creative method of teaching.

As one reads the chapters in this book, one finds it easy to see that creativity in modern teaching often resembles this Socratic approach. Many techniques recommended in the following chapters come down to a matter of asking the right questions (or making the right assignments) and letting students come up with their own answers. Almost everyone who works in the field of creativity today accepts the assumption that, although individual differences in level and type of ability are expected, all persons have at least some potential to be creative. Thus, most such educators would also expect be able to draw out at least some kind of creative responses from Meno's slave. To explain their assumed universality of creativity, modern scientists and educators are likely to point to similarities among

people in brain structure and function rather than to immortal souls and past lives, but the implications for teaching are pretty much the same.

Somewhat further along in Plato's dialog Socrates says, "Mark now the farther development. I shall only ask him, and not teach him, and he shall share the enquiry with me." Socrates' admonition shows clearly that he saw the enterprise not as an one-sided effort but as a joint project of questioner and responder. Obviously, Socrates was an early advocate of the modern idea that learning occurs best when the student is an active participant in the process.

Socrates anticipated modern educational thinking in at least one more way. At one point in the question and answer session, the boy says he does not know the answer to a question. Socrates then makes the observation that it is also an important accomplishment when one realizes that one does not know something, especially something that one previously thought he knew. This is an important assumption in the modern approach to experiential learning.

A significant contrast between Socrates' approach and some of those offered in this volume is that, despite his insistence that he was not giving the boy answers, Socrates was looking for definite replies, and he pursued his questioning systematically until he got them. So, even from the ancient Greeks we can perhaps learn that what has come to be called the "Socratic Method" probably works best when it involves convergent thinking. That is, it is most effective when there are specific, correct answers, and the teacher knows exactly what is wanted from the pupil. But it applies to some types of divergent thinking as well because even in those situations the questioner has at least some idea of what type of answer is wanted from the respondent. A response like "crack nuts with it" would be acceptable as a reply to a request for a novel use of a brick, but "boil it and eat it for dinner" would scarcely qualify.

What happens when a creative project is even more open ended? For instance, when a person is given a piece of paper and a pencil and told to draw something, anything at all? How much teaching is involved in that? In the extreme case, the answer may be "none," but the implications would not be the same as in the case of Socrates and the boy. On this point, another important, though too often neglected, person who had something to contribute to the discussion should be brought into the picture. A search of the manuscripts revealed that he is not mentioned by any of the contributors to this book. In fact, though, Sir Herbert Read (1893–1968), an English poet, critic of art and literature, and an anarchist had a good deal to say about it. Read advocated freedom to pursue creativity almost without bounds. He was highly critical of the education system of his day, and although he was English, his criticisms applied to the American educational system as well as to that of his native country.

Indeed, Read claimed that the educational system's rejection of creativity was so damaging that it made every child in it a potential neurotic and thereby endangered the mental health of society as a whole. He based his thinking on his own observations and on intensive studies of spontaneous art produced by young children. His investigations convinced him that children are naturally creative and that unfettered creativity throughout life is essential to mental health.

Though not a developer of curricula or a designer of specific teaching techniques, Read contributed ideas and proposals that distinguished his approach from conventional educational practices in many ways. He published a large number of works during his lifetime, but his seminal volume was *Education through Art*, published in 1943.

Along with others, Read succeeded in establishing the International Society for Education through Art (INSEA) as an executive arm of UNESCO in 1954. Since 2005, this organization has published a journal and has fostered research and collaboration among educators. For those who read this book and have not heard of the organization and would like to extend their learning by thinking creatively about the process and philosophy of education, it is probably well worth looking into.

Lawrence, KS, USA Franklin C. Shontz
August 17, 2012

Preface

Creativity sparks the flames of imagination and enjoyment for both teachers and their students. Authors have long argued that teachers should seek to enhance creativity in their students and take care to not stifle it (e.g., Torrance, 1977). In this era of standardized testing and No Child Left Behind, it is easy for creativity in the classroom to get lost. Teachers can have conscious or unconscious biases against creative students (Aljughaiman & Mowrer-Reynolds, 2005; Westby & Dawson, 1995) or a poor understanding of creativity itself (Schacter, Thum, & Zifkin, 2006; Seo, Lee, & Kim, 2005). How can we help those teachers who do value creativity? What tools can we provide them?

There are many ways teachers can encourage student creativity. One way to do so is for teachers to enhance their own creativity. Another way is for teachers to teach creatively, whether in the classroom, designing assignments, or via curriculum development. Still another is for teachers to teach with the goal of nurturing creativity in their students, whether by responding openly to creative questions and answers in the classroom, enhancing intrinsic motivation, or using various techniques demonstrated to enhance creativity in students (see Beghetto & Kaufman, 2010). As Dean Keith Simonton notes in his concluding chapter, teachers model creativity by being creative themselves, which, in turn, fosters the creativity of their students.

In the Introduction section on "Teaching Teachers," three exemplary chapters illustrate the range of creativity in teaching and teaching creativity and provide conceptual and theoretical background for the topics covered in this book. First, Susan Daniels presents her course (based on the 4C model and creative personality research) to help teachers enhance their own creativity (as well as their K-12 students' creativity), especially via their conceptions of creativity and their self-perceptions of their own creativity. While teaching gifted students is the purpose of the program, the course is broader than just teaching gifted students. The author offers several suggestions for ways teachers can implement the ideas suggested by the 4C model and creative personality research. Second, an international perspective on teaching creativity is presented in the chapter of Magdalena G. Grohman and Krzysztof J. Szmidt. They define creativity, teaching creatively and teaching for creativity, attitudes, and creative attitudes by describing attributes of creative

attitudes, the role of the teacher in developing these, and two programs, one for K-12 and the other for teachers to develop these attributes in themselves and their students. This international view using the arts has intriguing parallels to the Art in Action project which follows this chapter. The integration of Polish literature places discipline knowledge in international context. These program examples lead to the interesting consideration of cultural norms that value creativity and the extent that teachers are able to adopt these ideas pedagogically. Third, Melinda Meyer and her colleagues describe the innovative Art in Action project, which uses various arts (music, visual arts, theater, dance) to teach reading and math to children in grades K-6. The program pairs teaching artists with classroom teachers to develop creative lesson plans. The rationale for the program and its training are provided, as are examples of the work and feedback provided as part of the program evaluation. This exciting program addresses both creative teaching and teaching creativity!

Two main sections follow in this book: Teaching Creatively and Teaching Creativity. While many chapters are written as age or domain specific, the ideas described in these chapters can be applied across the educational lifespan and across disciplines.

In the first section on Teaching Creatively, authors describe various ways educators are teaching creatively at different points in the educational lifespan. Leonard Annetta and his colleagues describe the serious educational games program they developed for high school students. They briefly mention outcomes, including that students' creativity spurs the development of the games. The purpose of "cultivating creativity" is explicitly noted in the chapter. This is an excellent example of how working with technology and student interests increases engagement and learning, as well as enhances creativity.

Sheldon Solomon discusses the development of his nontraditional approach to teaching undergraduate psychology courses that he calls, "*sequential hierarchy of multimodal interdisciplinary recursive experiences*." This approach addresses the limitations of the courses as typically taught where they include disjointed topics and are disconnected from other disciplines. He suggests that courses should be progressive/recursive and multimodal (he uses arts examples). He uses this creative approach to teach introduction to psychology and plans to study its effects on learning and creativity.

Mary Banks Gregerson discusses examples of teaching techniques that are online, on-film, and on-stage and provides some discussion of the influence of standards and ethics, as well as global reach, on the use of these techniques. This chapter is timely in its call to attention of the importance of repurposing popular culture media in teaching and introduces a discussion of standards and ethics that is not clearly evident elsewhere.

Suzanne Court identifies the limitations of traditional methods for teaching music theory, then provides a rationale for her different approach based on cognitive load theory and the multimedia effect, and concludes with an example of a different approach using narrative. This chapter is intriguing in its use of "Big C" creativity as a means to teach creatively with the implication that students' creativity may be facilitated in this domain as well.

David Shapiro and Lenore Walker describe a graduate Forensic Psychology program within a Doctoral Program in Clinical Psychology, including its practicum sites and courses. The authors provide examples of creative teaching and creative work completed by students, and mention future directions, such as their new online program. Their creative approach appears to offer students essential entrée credentials for working in this area while inculcating flexibility, competence, and resourcefulness.

In the second section, authors describe various techniques teachers can use to enhance the creativity of their students, as well as ways to enhance teacher creativity. Apara Ranjan and Liane Gabora discuss how teachers can enhance creativity, outlining key ideas, and using a course project assignment for illustration, as well as other practical examples. The chapter summarizes some key issues in teaching creatively and for creativity that teachers may express concern with (such as evaluation, classroom management, and time) and gives additional suggestions to address these concerns.

Ronald A. Beghetto discusses the role of teachers' responses to student comments in encouraging or inhibiting creative ideas (referred to as "teaching in the micromoments"). The author discusses the techniques he uses to help prospective teachers identify their beliefs and their responses to student comments in a brief simulation.

Reva Friedman describes her creative approach to address her students' (future teachers) beliefs and biases regarding teaching diverse students. She incorporates a spiral approach to conceptualize her three steps (based on synectics, narratives, and playback theater). The first step is examining implicit values where students complete a map titled "who are my people." Then students reflect in a focused fashion by applying their personal insights to examples of situations in the lives of eminent creators. The final step uses Playback Theater techniques for their students to consider the lives of eminent creators and how these examples can apply to themselves.

Heather T. Snyder presents creative assignments she developed for her course on creativity. She discusses brief, regular creative journal assignments as ways to facilitate the learning of course concepts, and a course creative project (comparable to that discussed by Ranjan and Gabora, except with different constraints) as a way to apply course concepts to students' personal creativity. This combination of classical pedagogy with innovative conceptualization models indelibly for students how to foster creativity.

John Baer addresses two issues faced by instructors who want to enhance creativity: Whether training should be domain specific and how to encourage intrinsic motivation even when evaluation is needed. He draws upon his own research and provides practical suggestions for teachers. He argues that training should be domain specific and that teachers should provide some assignments that are ungraded so students can draw upon their intrinsic motivation and take the risks needed to develop creativity.

Dean Keith Simonton's conclusion chapter summarizes some key points from various chapters in the book and situates these notes in the author's own work, both his teaching and research. He includes his own examples of creative teaching to expand upon the examples in the book. The conclusion chapter provides at once

both historical and generalist context for the specific chapters. These broad strokes juxtapose historical and contemporary masters of creativity to anchor solidly each instance of teaching creatively and teaching creativity. Such a conceptual umbrella provides the theoretical shade necessary to contemplate and then apply the value gleaned from each chapter.

While not all teachers may perceive their teaching as creative—or even teaching as a possible domain that could lead to creativity—it most certainly can be. Factors associated with creativity in other domains, such as intrinsic motivation, openness to new ideas, passion, curiosity, play, expertise, and supportive environments are clearly associated with creative teaching, as reflected in the contributions to this book. These chapters inform and provide guidelines for increasing teachers' and students' creativity. They also may inspire, energize, and otherwise excite those aspects of us that allow us to teach creatively.

Edinboro, PA, USA — Heather T. Snyder
Leavenworth, KS, USA — Mary Banks Gregerson
San Bernardino, CA, USA — James C. Kaufman

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Part I
Introduction: Teaching Teachers

Chapter 1
Facilitating Creativity in the Classroom: Professional Development for K12 Teachers

Susan Daniels

Over the last two decades, research has found that K12 teachers tend to devalue creativity in students, to some extent because creativity is associated with nonconformity, impulsivity, and classroom disruptions (Beghetto, 2007; Cropley, 1992; Dawson, 1997; Kaufman & Beghetto, 2009; Scott, 1999; Westby & Dawson, 1995). With the twenty-first century skills framework (Trilling & Fadel, 2009), the work of the Partnership for twenty-first century skills (http://www.p21.org) and ASCDs position on Curriculum 21 (Jacobs, 2010), these perceptions are beginning to shift (Daniels, In Preparation).

These frameworks place an emphasis on creativity, collaboration, and problem solving as essential for learning and life in the twenty-first century. Yet, while more teachers report their belief that creativity is important for learners in the twenty-first century classroom, they also often state: "I do not know how best to support creativity in the classroom," and "There is no time to add creativity in the class day." They also ask "How do I know if I am creative?" and, "Do I need to be more creative to help my students develop their own creativity?" (Daniels, In Preparation).

In this chapter I will describe an 8-week professional development program that has been used with in-service teachers in K12 settings to increase their understanding of creativity, while emphasizing their own—and their students'—creative characteristics and creative potential. Strategies to foster, nurture, and support creative behavior in teachers and students are integrated throughout the chapter.

S. Daniels (✉)
California State University, 5500 University Parkway CE 379, San Bernardino, CA 92407, USA

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