

• Sparking •

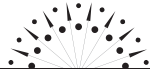
Student Creativity

PRACTICAL WAYS TO PROMOTE INNOVATIVE
THINKING AND PROBLEM SOLVING

Patti Drapeau



ASCD | Alexandria, Virginia USA



• Sparking •
**Student
Creativity**

PRACTICAL WAYS TO PROMOTE INNOVATIVE
THINKING AND PROBLEM SOLVING

Acknowledgments	v
Preface	vii
Chapter 1 Intentional Creativity: Fostering Student Creativity from Potential to Performance	1
Chapter 2 Practical Creativity: Making It Work in the Classroom	14
Chapter 3 Creativity and the Common Core: Matching the “What” to the “How”	42
Chapter 4 Creativity and Imagination: Unlocking the Power of Imagination	59
Chapter 5 Creativity and Innovation: Cultivating Innovative Ideas and Action	94
Chapter 6 Creativity and Problem Solving: Working It Out Creatively	117
Chapter 7 Creativity and Assessment: Realizing What Counts	143
Epilogue	174
References	176
Index	184
About the Author	187



Preface

I wrote this book for three very specific reasons: to help teachers reach more students, especially those who are disengaged in school and do not find what we teach interesting; to suggest strategies and tools that encourage creative thinking and creative products; and to show teachers how to intentionally use creativity in their classrooms. Some students have interesting ideas but are unable to express them because many of our instructional activities do not lend themselves to such ways of thinking. It is my hope that the tools and strategies presented in this book provide teachers with tangible ways to promote creativity—resulting in an increase in student achievement and love of learning.

Through creativity, we can reach more of the learners more of the time. Creative thinking can be integrated into any content area. This book brings together research, theory, practical applications, and current thoughts about the role of creativity in education. In writing this book, I reflected on all that I have read

and learned, combined this with my own practical experiences, and translated the result into practice. This book also includes what I have learned about creativity from other educators who have shared their thoughts and ideas with me.

Consider a teacher who, as part of her master's program in gifted education, learns about the four creative thinking skill areas: fluency, flexibility, originality, and elaboration (Torrance, 1987a). She does not think of herself as particularly creative, so she is happy to learn some concrete ways to use creativity in her lessons. The more creative thinking skill lessons she presents, the more she grows to believe in her own creative ability. A year later, she takes the Torrance Tests of Creative Thinking (Torrance, 1987b). She realizes that the test assesses all four areas of creativity, so she makes sure her responses reflect fluency, flexibility, originality, and elaboration. Her score comes back in the 99th percentile.

Would the teacher have done as well on the test if she never learned about creative thinking skills and never practiced them with her students? This teacher doubts it; she feels quite certain the information she received and the practice she did with her students made a difference. I can state this definitively, because I am that teacher. This is my story, and it was the beginning of my pursuit of knowledge in the field of creativity. This experience taught me that if I can learn to be more creative, so can my students.

I encourage you to conduct creative thinking lessons even if you think you are not creative. Actually, it is really not about whether you are creative or not but whether you want to teach more creatively and are willing to try new ideas. *Sparking Student Creativity* will provide you with a rationale as to why creativity in education is important and with tools and strategies to help you make creativity intentional in your classroom. This book includes a "road map to creativity" that begins with the classroom environment and moves along four roads: one focusing on thinking-skill

verbs and phrases, another on strategies, a third on innovation and creative problem solving, and a fourth on products. The book includes 40 “grab and go” strategies, aligns creativity lessons with standards, suggests different ways to design creative lessons, and shows how you can redirect lessons to promote creative thinking. This book is a practical resource that will guide you in your efforts to promote creativity in your classroom. I hope the ideas presented in this book will help you unlock your students’ creativity, will serve to motivate your students, and will result in an increase in their performance and achievement.

© Hawker Brownlow Education



Intentional Creativity

Fostering Student Creativity
from Potential to Performance

Teachers and administrators throughout this country are focused on ensuring that both students and schools make adequate yearly progress and show growth. We order new textbooks, address curricula, concentrate professional development efforts on ways to increase student achievement, investigate new strategies to enhance students' academic progress and improve their behavior, and meet throughout the year in our professional learning communities to discuss what is and is not working. We do everything right.

However, at the end of many an academic year, schools see negligible improvements in achievement scores. Many students still act out and do not care about school. Teachers become disillusioned. Administrators face both low-performing, unmotivated students and disheartened staff. Do we need a miracle?

Perhaps it is simply that the scripted lessons teachers use are not motivating students. Veering from the scripted lesson—asking questions that promote critical and creative thinking,

encouraging students to use divergent thinking to generate ideas to analyze and evaluate—might just be the key to changing students’ attitudes and enhancing achievement. What many classrooms seem to be missing is *creativity*: creatively questioning to spark student inquiry and “hooking” student interest by using unusual images; asking students to connect content to unrelated ideas; and fostering hands-on, small-group, problem-based learning. What would happen if all teachers encouraged students to think creatively and produce creative products? Could this be the “miracle” we seek?

The idea that our educational system could use an infusion of creativity is one that has garnered much attention in recent years (e.g., Bronson & Merryman, 2010). Sir Ken Robinson’s YouTube video *Do Schools Kill Creativity?* (2007) has had over 5 million video hits. Teachers are reading up on the basics of creativity (e.g., Beghetto & Kaufman, 2013) and watching videos that compare traditional lessons to those that require creative thinking (e.g., Ali, 2011; Maine Department of Education, 2013). Still, many educators feel that a piece is missing: precisely how to “teach” creativity and incorporate creative thinking in their classrooms. What does creativity look like, and how can schools foster it?

Creative instruction can be used to promote achievement across content areas, establish long-term learning (Woolfolk, 2007, as cited in Beghetto & Kaufman, 2010), encourage creative thinking and problem solving (Treffinger, 2008), and foster motivation and engagement. Creative thinking lessons build on critical thinking and go beyond simple recall to consider “what if” possibilities and incorporate real-life problem solving; they require students to use both divergent and convergent thinking. As Robinson has noted, “Creativity is not only about generating ideas; it involves making judgments about them. The creative process includes elaborating on the initial ideas, testing and refining them and even rejecting them” (2011, Chapter 6).

In a classroom that promotes creativity, students are grouped for specific purposes, rather than randomly, and are offered controlled product choices that make sense in the content area. Creative lesson components are not just feel-good activities. They are activities that directly address critical content, target specific standards, and require thoughtful products that allow students to show what they know. In the creative classroom, teachers encourage students to become independent learners by using strategies such as the gradual release of responsibility model (Fisher & Frey, 2008).

Creativity is not just for low-performing schools; using creative strategies and techniques helps all students think deeply and improve achievement. Creativity is not only for disengaged learners; it is motivating for all learners. Creativity is not just for students in the arts; it is for students in all classrooms in all content areas. Creativity is not just for high-achieving students; it supports struggling students and those with special needs as well. Creative thinking is not just for those students who are good at creative thinking; it is for all students. Promoting creativity in the classroom is not just for some teachers but for all teachers.

Exploring the Creativity Concept

Just what is creativity? Although creativity is often synonymous with having original ideas, definitions of the word differ. Whereas Robinson defined *creativity* as “a process of having original ideas that have value” (Azzam, 2009, p. 22), Gardner felt that creativity as a human endeavor does not have to be novel or of value (1989). Amabile (1989) defined a view of creativity as having expertise in a field along with a high level of divergent skills. And although some researchers hypothesize that creativity is separate from intelligence, others claim a relationship between creativity scores and IQ scores (Kim, 2005).

In addition, perceptions of creativity reflect cultural differences. Westerners generally think of creativity as novelty and emphasize unconventionality, inquisitiveness, imagination, humor, and freedom (Murdock & Ganim, 1993; Sternberg, 1985). Easterners, on the other hand, think of creativity as rediscovery and emphasize moral goodness, societal contributions, and connections between old and new knowledge (Niu & Sternberg, 2002; Rudowicz & Hui, 1997; Rudowicz & Yue, 2000). Both cultures value product creativity (Kaufman & Lan, 2012).

From a practitioner's point of view, although creative thinking is not defined solely by divergent thinking, it is associated with divergent thinking—and divergent thinking can be taught. *Divergent thinking* requires students to think of many different ideas, as opposed to *convergent thinking*, when there is only one right idea. Both are necessary for creativity: a student uses divergent thinking to generate different solutions to a problem or challenge and then uses convergent thinking to decide which one will provide the best results.

Students need to know and understand what creativity is so that they target their responses appropriately. Creativity is not just about elaborate products; it is also a way of thinking. When students hear the teacher say, “I want you to use creative thinking when you...,” they should know that the teacher is looking for many ideas, different kinds of ideas, detailed ideas, or possibly a one-of-a-kind idea. Shared vocabulary and meanings are important if teachers want creativity to work.

Understanding Characteristics of Creative Students

Csikszentmihalyi (1996) described two types of creative people: “big C” creative people, those who are eminent in their field or domain and whose work often leads to change, and “little c” people, who use their creativity to affect their everyday lives. Many students do not think of themselves as creative; they believe that

creativity is beyond their reach and think creativity is something that very few people engage in. They think creativity is only about big C people or students who excel in the arts. When students realize they don't have to be a big C person to be creative, then creativity becomes accessible to them. As a result of this newfound realization, students feel less pressure to come up with a one-of-a-kind idea and become willing to engage in day-to-day creative thinking activities and undertake creative products. They create realistic expectations about themselves regarding their ability to produce creatively. The more students are willing to use creative thinking, the more engaged they become.

Creative lessons instill excitement and interest, and as students become more engaged, they put out more effort. Dweck (2006) noted that students who have a *fixed mindset* do not believe effort and engagement make a difference; they believe they are born with a certain potential and it does not change, so they “are always in danger of being measured by failure” (p. 29). Students with a *growth mindset*, on the other hand, believe their skills and abilities can be developed. These students engage in hard work and demonstrate effort. When they make mistakes, they learn and grow from them. Students with a growth mindset are much more likely to use creativity as a source of engagement.

Creativity can be viewed as a cognitive style or preference: just as some students prefer to think critically, using analytical or evaluative thinking, and others prefer to use factual knowledge, certain students are inclined cognitively toward creative thinking and problem solving. In addition to differentiating instruction on the basis of student ability, interest, or learning profile (see Tomlinson, 1999), teachers also can differentiate lessons based on students' preferred cognitive style. Teachers might assign creativity activities to students who prefer to think creatively or, better yet, may group together some students who prefer creative thinking with those who prefer critical thinking.