ORGANIC CREATIVITY IN THE CLASSROOM
Teaching to Intuition in Academics and the Arts

Build a Classroom Full of:
- intuition
- insight
- incubation
- imagination
- imagery
- inspiration
- improvisation

Copublished With the National Association for Gifted Children
### Preface: What Is Organic Creativity? 

by Jane Piirto  

Piirto introduces the book and recounts how she tried to reconcile the disconnect between the intuitive artistic process and the prevailing cognitive point of view, which led to the Five Core Attitudes, Seven I’s, and General Practices for Creativity.

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### Part I: Organic Creativity in Academic Domains

**Chapter 1:** Naïveté, Imagination, and a Glimpse of the Sublime: Organic Creativity in Teaching Literature  
by Todd Kettler and Laila Sanguras  

Kettler and Sanguras present a creative pedagogy of literature in a way that places primary emphasis on the creation of ideas and meaning through insight and imagination. The creative pedagogy of literature includes four points of emphasis: disciplined improvisation, focus on imagination, modeling and developing creative dispositions, and problem solving within the context of the literature curriculum.

**Chapter 2:** The Mess of Mathematics: Organic Creativity in Teaching Advanced Mathematics  
by Erin Daniels  

Daniels presents ideas to break the rigid structure that occurs in too many math classrooms. Suggestions for enhancing creativity focus on the inclusion of risk-taking, incubation, motivation, imagery, and imagination. The chapter addresses the common misconceptions and pitfalls found in a math classroom that is inherently positioned to think “inside the box,” while proposing ways to break out of the norm.

**Chapter 3:** Thinking Outside the Blocks: Organic Creativity in Teaching Social Studies  
by Daniel Peppercorn  

Peppercorn describes his 6 C’s for engaging students in social studies: creativity, competition, comedy, camaraderie, connections, and chinos. Incorporating these elements into activities enables students to: (a) be imaginative, (b) take part in benign competitions, (c) feed off of everyone’s use of humor, (d) display teamwork, (e) feel connected with their teacher, (f) try to win chinos (the classroom currency), and (g) connect history to current events and their own lives.

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by Keith S. Taber  

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Chapter 10: Inside the TARDIS, Outside the Box: Organic Creativity in Teaching Theatre and Improvisation
by Tarik Davis

Davis becomes his childhood hero, Doctor Who, who taught him to use compassion, intuition, and improvisation inside the classroom. As a teaching artist in New York City, he aims to unlock the confidence his students will need to be their own free thinking, artistic selves, unafraid of making mistakes even though the systems that surround them are actively discouraging experimentation and plurality of ideas.

Chapter 11: Tapping Into the Sounds of the Universe: Organic Creativity in Music-Making and Songwriting
by Sally dhruvá Stephenson

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by Maria Balotta

Balotta believes that organic creativity in her work results from heeding that “uh-oh” feeling, the intuitive messages heard from within that facilitate her access to ideas that already exist in the spiritual, unconscious world. To Balotta, the ideas feel natural, almost instantaneous, but she is convinced that they come out of a subconscious incubation process in which old experiences and knowledge combine to inspire on-the-spot decisions that lead to life-altering actions and interactions.
Chapter 22: Imagining School Communities: Organic Creativity in Elementary School Administration

by Rebecca McElfresh

McElfresh describes her journey as a school leader who worked with faculty and staff to promote a culture of organic creativity within two public elementary schools. This narrative provides a description of specific activities designed to promote a creative culture through regular and programmed experiences as well as through experiences that arise organically from the needs of the students and the teachers at any given time.

Final Thoughts by Jane Piirto

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About the Editor

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In June 2012, I received an intriguing e-mail from one of my publishers, Joel McIntosh, of Prufrock Press. He was wondering whether I might like to edit a book that would speak to

. . . creativity that emphasizes the intuitive . . . the unconscious—I’m having trouble putting my finger on it—but it’s a perspective that captures the spiritual (though, when I use that term, I do not mean supernatural) as a source of creative energy and production.

Frankly, my idea for this is a bit half-baked . . . I just feel that here is a place for talking about creativity in a way that goes beyond conscious process . . . and emphasizes intuition . . .
What McIntosh was referring to is the fact that the world of advice about practical creativity is rife with the 60-year-old terminology of J. P. Guilford, who invented the term *divergent production* in his Structure of Intellect Theory in the 1940s, 1950s, and 1960s. When I responded to indicate interest, he answered:

Let’s face the fact that the enthusiasts of a cognitive/behavioral psychology approach to creativity in schools have created a body of practical tools. I think one reason these tools are popular is that they are easy to grasp and use (whether for assessment or instruction). However, as the articles you sent me so clearly state, there “is little evidence that such training leads to MORE adult creativity.” I believe an edited book by you featuring other scholars and practitioners and offering a practical approach to nurturing organic/intuitive creativity in schools would be “just the thing.”

What the writers in this volume speak about is much older than the cognitive psychological approach that now makes up much of the writing on creativity in education and psychology, yet their advice is also new—that makes it timeless, I guess. Much of the thought on creativity and activities to enhance creativity focuses on aspects of divergent production—fluency, flexibility, elaboration, originality—on “thinking hats” and strategies for problem solving. Many people have created assessments to measure it (e.g., Torrance Tests of Creative Thinking; Creative Problem Solving process; Williams Creative Assessment Scale; Meeker Structure of Intellect Learning Abilities Test). Many have creative assessments based on divergent production that are fun and omnipresent in the literature, and have been helpful in understanding the cognitive aspect of creativity (e.g., Structure of *Intellect*; italics intended). The aisles of educational conferences for teachers are filled with glossy-covered books with reproducibles that give a lot of activities to help teachers teach creativity. But, for the most part, these books seem not to contain practices that really occur while people are creating.

**My Background**

I have been an educator since the mid-1960s, when I was getting an M.A. in English literature at Kent State University, where I taught, as a graduate assistant, men who had been in the military and who were older than I—I
was 23. In 1965, with a student husband and a baby, I needed a better paying job. I had a teacher’s certificate in high school English from Michigan, so I gave up the assistantship and took a job as an English, French, and journalism high school teacher for about $3,000 at a rural high school nearby. It was my first year of my 14 years as a teacher and then administrator in the K–12 systems. We moved back to Michigan after I finished my master’s, and I taught at Northern Michigan University as an instructor in the English department until my husband finished his master’s degree in regional planning on the G.I. Bill, and we moved to South Dakota for his first professional job. There I picked up a second master’s degree in guidance and counseling, while working as a counselor and social studies teacher for a year at a small rural high school and then for a year as a counselor at a high school in the college town of Brookings.

We moved back to Ohio, where I did my Ph.D. in educational leadership, and in 1977, I began my career as an educator of the gifted and talented as one of the first gifted coordinators in Ohio. Then I took a job as a gifted coordinator in Michigan, across the border north of Toledo from 1979 to 1983, when I moved to New York City as the principal of New York City’s oldest school for gifted children, Hunter College Elementary School, where I taught my first college creativity course for the Hunter College education department. From there, I moved back to Ohio, where I took a job as a college professor.

But simultaneously—since college and formally, from 1963 when I published my first poems in my college’s literary journal, in my inner life, my real life, I was also an artist—a published poet—and later, short story writer and novelist—and I saw the world through an artist’s eyes. I worked for a while as a Poet in the Schools in the National Endowment for the Arts “Artist in the Schools” program during the late 1970s and early 1980s. Among my proudest moments were when I won Ohio Arts Council Individual Artist Fellowships in fiction and in poetry, and when my novel won the Carpenter Press First Novel Award.

The Disconnect

When I entered the world of talent development education, I began to take workshops in Creative Problem Solving (CPS), and in other models such as lateral thinking creativity, and I began to be interested in creativity assessment. I became the first advanced trainer for the Structure of Intellect Institute, doing workshops throughout the country when Mary Meeker, its...
founder, was too booked up. I began to think about my own creative process, for I was also a literary creator, wasn’t I, and shouldn’t these workshops I was giving and taking help me learn how to be more creative? Here I was giving Guilfordian workshops on fluency, flexibility, and the like, but my own creative life contained little brainstorming, SCAMPERing, generating of alternative solutions, or creative problem solving according to the flow charts I had been given at the many workshops I attended.4

In fact, I only knew one person who had really used the CPS process in her real life, and she was a fellow coordinator of programs for the gifted and talented. She and her husband, a teacher, had had some rocky times in their marriage, and they had gone to a restaurant, jotted down the “mess,” and brainstormed and criteria-rated solutions. (As far as I know, they are still married, so it must have worked.) My artist friends were more likely to think as painter Leo Gorel said, “The present fashionable psychological talk about the left-brain, right-brain, creative-intellectual concept and the do-it-yourself art books that suggest exercises with either hand to improve your imagination, I think are a joke.”5

I began to feel a disconnect in my own life and work, as I wrote poems and stories at home at night after my family was asleep, drinking wine and smoking, at the same time as I was conducting creativity training using divergent production activities by day. I decided to explore this disconnect. I began to read interviews and memoirs and biographies about and with creators who described what happened while they create. I still do so; I saw an interview on television recently, of Charlie Musselman, a harmonica player, in which he described how he is when playing music:

> When the spirit of the music takes over it’s almost like you’re not playing anymore. The spirit is playing you. I call it following the will of the music. When that feeling shows up you just go with it. It’s almost like I’m a bystander watching this happen. It’s just spontaneous. It’s almost mystical.6

Seldom in the cognitive activities focusing on divergent production is this type of interiority mentioned. But creators throughout time have described it. My notebooks and files began to fill with quotations and my books with annotations.

As I read and reflected, I found that most adult creators who had had biographies written about them, who had written memoirs, who had been interviewed and researched, talked about their creative process in more...
organic terms. The creative process has engaged the best thinkers of the world from prehistoric times. Common mythological perspectives on the creative process have viewed it as the visitation of the Muse, a mysterious overtaking of the creator by the primal forces of love, nature, revenge, tragedy, or the like.

Historically, the creative process has been tied with erotic desires, desires for spiritual unity, and with the need for personal expression. The use of substances to enhance the creative process has been prominent in the lives of creative people. Many creative products have resulted from insight, illumination, and unconscious processing. Solitude seems to be a necessary condition during some aspects of the creative process. The creative process can be viewed in the context of a person’s life and of the historical milieu, the zeitgeist. Contemporary psychological and religious thought have emphasized that the creative process has universal implications. What is popularly called “right-brain thinking,” as well as visualization, metaphors, and imagery, seem to help people in the creative process. The creative process is a concern of scientists as well as those in the humanities. Scientific experimentation has resulted in the demystifying of many popular creative process beliefs. I concluded that the repertoires of school people, who often use only the cognitive in enhancing creativity, should be expanded.

I found much similarity in what I read from people in the various domains. For example, the poet, novelist, and screenwriter Jim Harrison described his creative process in writing poetry:

A poem seems to condense the normal evolutionary process infinitely. There is the distressed, nonadaptive state; an unconscious moving into the darkness of the problem or irritant; a gradual surfacing, then immediate righting or balancing by metaphor, as if you tipped a buoy over by force then let it snap upwards; the sense of relief, and the casting and recasting the work into its final form. The last stage “calcifies” or kills the problem and you are open to a repetition of the process, though not necessarily willing. Though this is all rather simplified, it is, I think, the essence of the process. There must be the understanding of time lapse though—the “gradual surfacing” may take months, the space between the first sketch and final form an even longer period of time.7
What I Did

In the early 1990s, I began to offer an undergraduate interdisciplinary studies course called “Creativity and the Creative Process,” and I began to try out some ideas that tapped into this “oceanic consciousness,” as Brewster Ghiselin called it. The course became popular with undergraduates majoring in the liberal arts, although not so popular among education majors. When schools asked me to do workshops, and when I spoke at conferences, I began to try my newly derived and idiosyncratic exercises out with the participants. I began to teach a similar syllabus with my graduate students, and to include some of the activities with my doctoral educational leadership students. My students in the graduate course in talent development education, called “Creativity for Teachers of the Talented,” also tried them out. I was beginning to operationalize what I had read about in the biographies, memoirs, and interviews.

Many of the creative and productive adults whose creativity I read about seemed to have creative processes that were organic—that is, they created not by writing down criteria or by brainstorming or by consciously putting together opposites, or by mashing up ideas, although the latter, at least, happened. Rather, their process of creating—their work—rose from such prosaic practices as preparedness, self-discipline, and awareness—thus the title of this book. I created themes—distilled into the *Five Core Attitudes* (openness to experience or naïveté, risk-taking, group trust, self-discipline, and tolerance for ambiguity), *Seven I's* (intuition, imagination, imagery, inspiration, insight, incubation, and improvisation), and *General Practices for Creativity* (ritual, exercise, meditation, the decision to live a creative life, a preference for introversion and solitude). All of these practices seem to be used by creators in all domains of creative expertise—although not all by any one creator. What this tells us is that there are many ways to enhance creativity, and an expanded repertoire of understandings about the creative process helps. This is probably why Joel McIntosh thought of me to write to about a different kind of creativity book.

I have assembled a full course of activities that tap into the mysterious, nebulous, dreamy, solitary quietness of the creative process as it has been written about and talked about by adult creators. As a person who is in the education department, one of my tasks is to make practical applications of complex concepts, so that those concepts are able to be taught to students young and old. A typical creativity course or workshop (time permitting) taught by me utilizes exercises in the *Five Core Attitudes*. We do a lot of (a)
group trust building by cheering each other’s creative efforts. The students also try exercises in cultivating (b) self-discipline by working daily in creativity Thoughtlogs. We practice (c) risk-taking, both personal and in a group. We try to see the world with (d) naïveté (or openness, practicing mindfulness); we note a (e) tolerance for ambiguity, that there is no one right answer, and we try to become comfortable with that.

We work with the Seven I’s: (a) Imagery, including guided imagery and film script visualizing; (b) Imagination, including storytelling; (c) Intuition, including the intuition probe, psychic intuition, and dreams; (d) Insight, including grasping the gestalt, going for the aha! moment, and Zen sketching; (e) Inspiration, including the visitation of the Muse; (f) Incubation, including a final individual creativity project; and (g) Improvisation, including drumming, acting, joke-telling, and scat singing.

We notice our own general practices for creativity, rituals such as solitude, creating ideal conditions, and using background music. We try meditation, meditating on beauty, on the dark side, on god. We cultivate all five of our senses and also blend them for a sense of synesthesia. We vigorously exercise so endorphins will kick in. We talk about how the creative life is a choice and not an accident. We focus on my notion of the thorn of fiery passion as explicated in my Piirto Pyramid of Talent Development. See Figure P.2.

We try to find our domains of passion, that which we can’t not do. We explore the joys of good conversation and have a salon. We visit a cemetery to meditate on the dark side. We visit a beautiful and silent church with stained glass windows constructed with religious symbolism to meditate on God. We hike in nearby nature parks to meditate on nature. We go to an art museum to meditate on beauty. We attend a live concert, a play, a poetry reading, or a lecture to honor the creativity of talented others. We practice Reynolds’ process of feeding back, discussed in Chapter 6 on teaching world languages in this volume. Although these are simulations with the intent of having the students experience what creators have said they do while creating, these simulations seem to have a profound effect, and many students have said in evaluations that this course is their favorite of the sequence of courses in our endorsement. I say that you can’t teach how to be creative unless you’ve experienced the joys and frustrations of the creative process.

The culmination of the course is an individual creativity project. One student in Finland wrote a poem when we visited the art museum, and it became the lyrics for the first song she composed. Other individual creativity projects have included photography exhibits from the nature walk, cycles of sonnets and other poems, quilts (designed without a preexisting pattern), a
synchronized swimming routine, an exhibit of original artworks, a reading of an original short story, an original dance, and display and demonstration of a particularly creative Thoughtlog.

In one remarkable individual creativity project, a football player, a defensive back, took all of the game tapes for his entire college career and spliced them together to show himself in the improvisatory acts of dodging, running,
and hitting. One teacher designed and built himself a podium from which to teach, in homage to his own middle school teacher, who had inspired him. One art teacher submitted his daily Thoughtlog sketches; one of his paintings is the cover of my 2011 book. We are often so moved at the projects that we weep. At the end of the course, most agree that indeed, creativity can be enhanced through direct teaching.

“But I couldn’t do these with my own students, my young ones,” some say. Not true. My students who are meeting the endorsement requirements of our state to become teachers of the gifted and talented tell me that yes, indeed, the K–12 students that they work with can begin to see the creative process as something that is, at base, an emotional journey as well as a cognitive one. Every week some of them try out the activities we have done in class, modifying them for their own use. I always ask them how they would apply the concept we are trying out in class, and I have collected these suggestions in my book, Creativity for 21st Century Skills.10

Creative Process of a Scholar/Writer

My big discovery as an artist during the past 20 years is that you don’t have to write literature—fiction, poetry, or drama—in order to be creative as a writer. In writing the three big and detailed nonfiction books (two of which went into three editions—Talented Children and Adults: Their Development and Education and Understanding Those Who Create/Understanding Creativity), and a third, “My Teeming Brain”: Understanding Creative Writers, I followed a creative process very similar to that which I use in writing literary works, except for the massive reading I had to do for these big nonfiction books. I had to laugh when a novelist was recently quoted saying that she had begun a biography of a famous person but when she went to the archives and figured out that she had to reference all these letters, books, and sources, she gave up and just wrote a novel, as the detail impending in writing nonfiction was overwhelming. John Grisham wrote a nonfiction book, The Innocent Man, and said, never again, after he experienced the perils of annotation and after he was sued for defamation. He’d stick to fiction, he thought, where you don’t have to check your facts.

I read and read, organized, thought, walked, swam, obsessed on, and dreamed these big nonfiction books. I used four of the Five Core Attitudes. The core attitude of self-discipline became necessary. I would write for about an hour or two every day, 7 days a week. The core attitude of openness to experience or naïveté helped me to see the field as new, and to explore
new theories and ideas and to come up with The Piirto Pyramid of Talent Development and the creativity theory discussed here. The core attitude of group trust was not very evident, as I worked alone and did not consult with anyone as I wrote and researched and synthesized. The core attitude of risk-taking became operant later, when I overcame my shyness (who, me? Little Janie Piirto from Ishpeming, MI, make a theory?) and dared to use my own theory of the Pyramid of Talent Development as an organizational framework for the second and third editions of Understanding Those Who Create, and Talented Children and Adults and for “My Teeming Brain.”

The core attitude of tolerance for ambiguity was operative as I tried to reconcile conflicting ideas, especially those of the trajectory of talent development from predictive behaviors in childhood to dominance of the gatekeepers who rule domains. I publicly wondered whether a high IQ is necessary for the realization of talent potential, and concluded in the negative, settling on the importance of personality attributes and environmental “suns,” noting that different domains have different IQ thresholds necessary for working in the domain.

In writing scholarship, I used the Seven I’s, also. As a conscious decision I did not use other synoptic textbooks as models, but began anew, organizing the texts improvisationally. My intuition was to create my own texts rather than be overly influenced by others. My inspirations came piecemeal, but were often intellectual, bouncing off the ideas of others—the Sun of Community and Culture. The incubation was constant; I walked around in a state of trance, thinking about that day’s writing and while I slept, the ideas for what I would write the next day were brewing. The Pyramid was an example of imagery to illustrate what I had learned. I did not use imagination as I do in thinking of plots as such, except in imagining the imagery. My insight was the importance of personality and environment rather than test scores.

In the General Practices for Creativity area, the use of ritual was constant, especially as I set myself up to write in the mornings. I have already made a conscious decision to live a creative life and my friends and lifestyle could be called an example of that. Exercise always satisfies and provides a place for meditation and for inspiration. Walking my dog in the woods or on the empty old running track at our university’s baseball field are daily opportunities for solitude and meditation.

As I mentioned above, I write not only such synoptic texts, but also literary work—I write a couple of poems a week, I suppose, early in the morning after dream images arrest me or late at night, or on my iPod, or in a Thoughtlog in my purse as I travel about in my life. The inception of these is
often a vague inner feeling, an intuition, that there is some truth here in what I am experiencing or observing, and I scratch out notes to capture its essence, and then spend days, weeks, years, revising and tweaking. I always work on several projects—such as this—often in the same day. I dream whole novels and read about two novels a week. If only I’d write these dreamt plots and characters down, I’d be rich. My writing practice by now is well-established and my only regret is that my products as a literary writer are less well-known than my products as a scholarly and educational writer. I would have wished it otherwise, but I keep plodding (pun intended) along—on both, the literary and the scholarly.

This Book

After thinking and dreaming and meditating for a few weeks that summer of 2012, I took McIntosh up on his query. Under my personal Sun of Community and Culture, I know a lot of people and I began to think of certain thinkers who could speak to the intuitive—and who live by teaching and working in this way. I began to put together a list of subject matter experts who use intuitive practices in their teaching and creating. These chapter writers have true expertise in the classic sense—most of them have practiced their teaching and work for more than 10,000 hours, the thumbnail advice given by the expertise researchers. The authors of these chapters have, in total, more than 500 years of teaching experience, both with K–12 children and with undergraduates and graduate students. They are mostly educators in arts and academic domains and not psychologists, who are asked to tell educators how to teach but who often have limited experience in the classrooms for which they are giving advice.

Those whom I queried responded with enthusiasm, saying they felt the time had come for an emphasis on the intuitive as well as the cognitive in creativity. They also expressed dismay at the way that teachers are currently being treated—and at the climate of multiple-choice assessment that prevails through the federal government’s mandates of No Child Left Behind and Race to the Top, wondering why anyone would want to go into teaching these days.

First intuitively and then consciously, the authors seem to adhere to what Pasi Sahlberg described as necessary in his recent book, *Finnish Lessons*. Sahlberg decried what he called the Global Educational Reform Movement (GERM), which calls for narrowing the curriculum and relentlessly drilling
even small children to take high-stakes tests in reading, mathematics, and science, ignoring social science, the arts, physical education, vocational subjects, and other necessary areas of study.

Like Sahlberg and other holistically minded educators, the writers in this book call for authentic teacher-created assessment; they say that the work of childhood is play; they teach for excellence through equity and fairness. Most of them teach or have taught or been administrators in public schools—urban, rural, suburban—to students of diverse backgrounds, and they have differentiated and do differentiate by noticing and teaching to their students’ strengths. They love the subjects they teach and have over the years developed and tweaked their teaching practices for maximum benefit for the students they love and serve.

The result of my thinking, dreaming, and querying is this informative, readable, and insightful collection of sort-of creative nonfiction essays from teacher experts in their domains about how they teach their subject matter and simultaneously emphasize creativity. It differs from many edited books—at least the ones in which I’ve published chapters—in that I did not discourage the word “I.” I also discouraged extensive use of references, preferring personal stories, case examples, and tales of teaching. (Sometimes we scholars overreference, obscuring our personal, intuitive, intrinsic, and experience-gleaned knowledge with deference to sometimes questionable authority.)

The title suggests a way of thinking about creativity and doing creativity that is holistic, natural, and instinctual. The term organic means what it says; that creativity doesn’t need to be prescribed, but can emanate naturally and intrinsically from within the process of learning and educating, and that it occurs with mutuality in a congress of respect between teachers, students, and administrators. The term intuition was left to the contributors to define; some practiced the intuitive as related to the new age philosophy having to do with a spiritual cast, and some as simply “a gut feeling.”

Teaching, itself, is an intuitive practice, despite the attempts of federal and state bosses to make it concrete and accountable. The experienced teacher constantly intuits, reacts with her instincts, recognizes rapidly what the student is attempting to explain, and answers instantly with a response that is organically apt. Teaching is improvising and reacting on the spot. The more one teaches, the more intuitive one is; a deep knowledge of the techniques of pedagogical interaction is embedded into the teacher’s repertoire by the time she has been teaching for awhile. No lesson plans for how to teach will suffice; teaching well also needs gut reactions and intuition. Christopher Bache
spoke about how intuition feeds upon synchronicity while teaching is happening. He called it “a mysterious interweaving of minds,” and “the magic.”

When the magic happened, the walls of our separate minds seemed to come down temporarily, secrets were exchanged, and healing flowed. When the magic happened, my students and I tapped into levels of creativity beyond our separate capacities . . . If I cut myself off from my intuition . . . I would also be cutting myself off from a creativity that was benefiting my teaching in very tangible ways.

This book is being published by a house that began as a place where teachers, researchers, parents, and administrators of programs for gifted and talented children could find materials. This book contains essays in which the term gifted was deemphasized, and in which test scores were not important, but in which case examples were of students who, according to the authors who observed their behaviors, had high potential. The science of identifying the gifted relies mostly on IQ scores at this historical time—however, in various domains, IQ scores are not adequate. You will recognize these students by what they do, not by how they test.

The Authors and Their Essays

Because these authors are by and large so very experienced, their advice is probably solid, based on many years in their professions while they progressed from novice to expert. I thought readers would be interested in what such experienced masters of teaching had learned through study and through trial and error, rather than read what Dalton characterized as “convoluted manuscripts destined for arcane periodicals.”

I tried to include experts in each of the domains usually taught in K–12 schools. Perhaps this edited book with its authors who teach and do science, mathematics, literature, foreign language, social studies, creative writing, dance, music, visual arts, theatre, school administration, preservice education, educational psychology, gifted and talented pull-out resource rooms, and school counseling will move you, startle you, engage you as a reader, and prompt you to think in new ways, led by our award-winning, well-published, well-spoken, expert authors.

The description/abstract for each chapter is in the Table of Contents. Before each chapter is a brief biography and a photograph of the author.
Organic Creativity in the Classroom
Teaching to Intuition in Academics and the Arts

What follows are some relevant quotations from the authors about how they practice organic creativity.

**Todd Kettler and Laila Sanguras in Chapter 1:** “We teach literature creatively in hopes that our students will catch even a momentary glimpse of the sublime—a brush with truth so pure that it takes one’s breath away. The glimpse of the sublime frames meaning deep within our intellect. The sublime is pursued with reason, found in imagination, and verified by intuition.”

**Erin Daniels in Chapter 2:** “In the best of worlds, students would be given options in math class from the very beginning. Teachers would present different ways to solve problems, allow students to choose their best method, and then learn how to get to the solution in the way that best suited the individual. This path to the solution may also be something the students discover on their own, following their intuition. This should be the goal.”

**Daniel Peppercorn in Chapter 3:** “Some of the more palpable forms of creativity are new exercises that link seemingly unrelated topics, lessons that give students an opportunity to be imaginative, discussions that are conducive to an exchange of fresh ideas and humor, and hands-on assignments that foster critical thinking, problem solving, creating, and presenting.”

**Keith Taber in Chapter 4:** “Scientists often rely upon this kind of intuition or tacit knowledge in their work in science, and it no doubt operates in all areas of expertise. Scientists and teachers alike are only explicitly aware of some their knowledge, and often have to trust and follow their intuitions because they cannot rely on using logic when they are not actually aware of the basis for their judgments.”

**Kristin MacDowell and Rodney Michael in Chapter 5:** “Throughout these experiments and projects, the students must use their intuition, visualization, imagery, and creative abilities to transform ideas into plans, then build actual devices using their plans . . . The creative thought process is encouraged, exercised, and celebrated from beginning to end.”

**F. Christopher Reynolds in Chapter 6:** “Cultivating creativity through feeding back brings students’ passionate interests out into the open. Those passions provide inspiration to connect to like-minded others in the Francophone world. Intuition is the faithful guide to this path of the heart, and encouraging the students’ devotion to their intuitive inner knowing makes a world of difference.”
Barry Oreck in Chapter 7: “Clearly Artistry (A) is deeply interconnected with creativity. It is almost impossible to imagine an aspect of artistry that would not be considered creative. A encompasses ways of being and learning, artistic attitudes and curiosity, appreciation of beauty and qualities of things, a need or drive for expression, an emotional connection. Perhaps the most accurate definition of A would be access: access to one’s inner voice, to the intuitive, subconscious, connected self.”

Jessica Nicoll in Chapter 8: “Our instincts, impulses, and intuition are the most precious resources we have as artists, and our inner critic is what causes us to second-guess them and undermine ourselves. The trick is to keep ourselves from blocking them, to condition ourselves to recognize our instincts and immediately give them voice, before the critic has a chance to shut them down.”

Jeremy Dubin in Chapter 9: “Once we have given ourselves permission to follow through on our intuition, then true artistic exploration can begin. With a safe environment around us, and an open channel to our intuition within us, it’s time to dig in and start working on some scenes; and in my experience the indisputably best tool available to developing actors is Shakespeare.”

Tarik Davis in Chapter 10: “It’s about standing up against the system that keeps them mindlessly filling in the bubbles with a No. 2 pencil, being a statistic taking orders at McDonald’s, and not ever tapping into their own artistic souls. It’s about engendering a culture that champions creativity, curiosity, and intuition. I teach this culture.”

Sally dhruvá Stephenson in Chapter 11: “There is a subtle difference between leading the musical line and following it, and the direction can shift back and forth seamlessly when players are sensitive to this dynamic and have established group trust. Intuition plays a big role in learning to relax into this conversation of listening and answering musically.”

Branice McKenzie in Chapter 12: “I saw what one little song can do, and how it can transform a child’s spirit in the course of a 50-minute workshop. I literally saw children turn around and become changed, transformed . . . It’s a matter of spirit and it’s also a matter of the amazing learning and teaching potential that music has.”

Stephanie S. Tolan in Chapter 13: “I have not only engaged in a purposeful exploration of the nonrational aspects of consciousness, I
have actively worked to learn how to use my intuition more effectively not just in writing, but in the rest of my life as well. The exploration has become a spiritual journey as well as a way to increase my own creativity.”

Carl Leggo in Chapter 14: “I am always seeking to attend to my writing as an intuitive process that is full of mystery, a process that I do not consciously determine or control. Instead, I remain open to the writing that emerges, listening constantly and carefully to the heart’s rhythms, to the possibilities of intuition. Therefore, my writing and I are always in flux, always changing.”

Charles Caldemeyer in Chapter 15: “I ask students to just ‘follow their paint,’ meaning to let their intuition guide them from mark to mark, the previous step determining the next. This old abstract expressionist trick allows a student who is clearly on to something, but is not yet able to articulate it, the freedom to discover ways to express aspects of his or her life.”

George Johnson in Chapter 16: “Here is an activity I have used to develop intuition. It requires a temporary suspension of disbelief, a type of naïveté that younger students are better at than sophisticated high school students. Take an artifact, something old with a history to it, and place it in the student’s hand.”

Diane Montgomery in Chapter 17: “I place high value and importance on intuition as a mechanism to unite what sentiment and logic reveal to us. Graduate students who have studied these developmental areas separately often are relieved that their implicit theories are valuable to their practice in education or psychology—receiving the academic permission to trust intuition, insight, and imagination in practice.”

Celeste Snowber in Chapter 18: “The body is the canvas for creativity. We paint with our hands, dance with our feet, sing with our breath, and sculpt with our palms. Our very beings are creative—we are made with the glorious impossible—ears that hear, flesh that remembers, pulse that regulates, and hair that protects. As the visceral imagination is opened up, the intuition is given muscles, and we can teach on our feet, and be informed by what has great capacity to guide us.”

Jennifer Groman in Chapter 19: “I believe that organic creativity as a life practice transforms and deepens our understanding of ourselves and those around us. The creative products we generate as we
work in this way act as a mirror, reflecting our transforming identity back to us and out to the world. The work is intuitive. The work changes us. It grows us.”

Cyndi Burnett in Chapter 20: “I suddenly realized that intuition was wholly missing from the CPS process, and that I had been deliberately silencing one of the most important aspects of my natural, organic, and creative process! I immediately knew this was where I needed to focus my research.”

Maria Balotta in Chapter 21: “The incubation period for creative solutions is frequently seconds long, but as I look back at my journey as a school counselor, I cannot think of any story where intuition did not play a significant role.”

Rebecca McElfresh in Chapter 22: “Years of standardized practice lead both students and teachers to be limited in their capacity to take risks and to move into any activity that is open-ended in its possible outcomes. . . . Experiences with organic creativity open us to different ways of working in which we must, in a sense, find our own way as we begin to recognize and depend on our intuitive sensibilities. Therefore, initial guidance provides enough scaffolding for the organic nature of the work to unfold.”

Dear reader, my hope is that you open up to the insights in this book, are inspired, incubate, engage in improvisation, trust your intuition, free your imagination, and create an image.

Jane Piirto
2013
I stole my first book when I was 8. Mrs. Booth lent it to me, and I read it. The story took hold of me, wrapped itself around my mind, and whispered its siren song softly to my soul. It was the first time I fell captive to a book, the first time a story in my mind hummed the soft harmony of truth. To return it would have been like losing a part of who I was. I don’t even remember the name of the book, but I remember Mrs. Booth’s name written in ballpoint pen across the cover to remind me of my juvenile crime. I apologized 34 years later when our paths crossed at a funeral. I told her the book was still on a shelf at my mother’s house,
her name still inscribed on the cover. And I told her I had since accumulated about 1,500 others just like it, most of which I respectfully paid for.—Todd

Not to give you the impression that we are a literary version of Bonnie and Clyde, but I feel compelled to confess that I, too, was once involved with stolen books. As a child, my mom took me to two kinds of swap meets in southern California: One sold new, shabby-chic items to women looking for a good deal—furniture, clothing, and a fresh Farmer’s market. The other kind boasted flea market items—used tires, mismatched dishes, and books . . . overflowing stacks of coverless books with stamps on the front pages labeling them as stolen, warning the person holding them that neither the publishers nor the authors had received any payment for them. They were cheap, as most stolen goods are, and I couldn’t wait to see how many my allowance would buy me.—Laila

Literature is quirky. It’s art. It’s history. It’s philosophy and psychology. We learn about love through literature before we have our first date. We learn temperance and restraint. We confront injustice, mystery, and wonder. We open doors we have never seen, and we stand in landscapes of our own imaginations. Books, stories, poems, and lyrics shape us. Across our lifespan, from childhood through adulthood, literature is a source through which we continue to find meaning in our lives and our worlds.

School curriculum has reserved a place for literature study for as long as most of us can remember, and perhaps longer. But time marches on, and things change. It seems unlikely that we study the same works today as our parents did, or our grandparents did, but it turns out things have not changed much. It seems reasonable that we still read those great texts today. Perhaps the way we teach them has changed; perhaps the why and the how we teach literature has evolved as we’ve put almost half a millennium between Shakespeare and ourselves.

We find ourselves in a 21st-century world focused on the production and distribution of knowledge and information. The knowledge economy is vastly different from an industrial economy and has distinctly been considered a creative economy; yet, very few schools actually teach students how to be creators of knowledge. The task of teaching students to be creators of knowledge seems buried under the politics of 21st-century education—scripted curriculum and standardized accountability testing. Many of the current features of school seem obsolete given that they were features designed to prepare students for an industrial economy.

Although literature’s long-secured position in the standard curriculum received a contract extension with the Common Core State Standards for
English Language Arts, it’s time to ask the critical question. How do we teach literature in a way that helps students become creators of knowledge? How do teachers of literature work as creators of knowledge? In what ways does the literature curriculum remain viable as preparation for a knowledge economy driven by creativity and innovation?

Sometimes in sincere efforts to teach literature, teachers fill students with knowledge of genres, definitions of literary forms and devices, and background on authors. Although those may be well and good, they can become baggage standing in the way of the reader’s personal experience with the text. Today, when a simple Google search can turn up thousands of summaries and criticisms on any literary work in a matter of seconds, more than one of our students have asked, “Why do I need to read the book? I read several commentaries about the book.”

In our work as teachers of literature, we have been carving out a creative pedagogy of literature—a model of teaching that places priority on the reader’s personal experience with the text as a starting point for the generation of ideas. We want to make a distinction between analyzing literature and responding to literature. Responding to literature nurtures the creative self while analyzing literature appeals to the rational self. Ask any group of students to talk about their favorite song or their favorite movie, and you may have to interrupt the conversation just to bring it to closure. “Why do you like that song? What does it make you think of?” But suppose you asked students to describe the meter of the song or its harmonic function. There is a good chance silence would follow. Certainly meter and harmony are worthy of study by those pursuing music theory, but that’s a small segment of the population. The vast majority of people enjoy responding to music. It enhances their happy times, and it gets them through struggling times.

Too often, literature is studied in school as if our goal were to train the next generation of literary critics or prepare students for a TV game show of interesting but trivial details. Students are told to analyze theme, tone, and mood. They write papers on plot structure and irony. They memorize definitions of limerick, sonnet, and haiku. They Google the theme of *To Kill a Mockingbird* on their smartphones minutes before class and walk in with the persona of the well-prepared student.
A Different Approach

Jesse was a mediocre student in my ninth-grade English class for academically talented students. In his unorganized backpack he carried several spiral notebooks, well-worn and tattered around the edges. He wrote in them regularly, even if he was supposed to be doing class assignments related to daily objectives on literary elements or genre characteristics. One day, he finally agreed to let me read from the stack of notebooks he carried. After several minutes, I commented to Jesse that he’d been writing poems and stories all this time. He said, “No, those are songs.”

“What’s the difference?” I asked.

Jesse said that poems and stories are all about metaphors and allusions, or irony and imagery, boring stuff like that. “But songs,” he said, “mean something when you hear them.”

Like any well-trained English teacher I quickly replied, “Oh, but stories and poems have wonderful meanings too. Don’t you remember when we talked about theme back in September?”

“Sort of,” he frowned. “I just remembering you telling us what the theme was while we wrote it down.”—Todd

It may have been the most disappointing moment of my teaching career. I knew that Jesse was right. He called me out for teaching literature as if it were dead. I had become the enemy of intellect, the Green Knight of imagination. I blamed the standards movement, the California Achievement Test, and even Shakespeare himself. How did I get here? How did I not remember how my own eyes had frequently drifted out the window when I sat through English classes in high school? Had I really become the teacher determined to beat the theme of “The Rocking-Horse Winner” into my students whether they liked it or not? Jesse’s comment was an existential moment to this teacher of literature.

I reflected on why I loved literature. I thought about my favorite stories: Oates’s “Where Are You Going, Where Have You Been?”, Carver’s “Where I’m Calling From,” O’Brien’s “Sweetheart of the Song Tra Bong.” I recalled the marvel I sensed the first time I read Who’s Afraid of Virginia Woolf, and I remembered how as adolescent boys we loved reading The Hobbit, until the teacher ruined it by lecturing on its pseudogenre plot structure. There had to be a better way. Surely John Keating (Dead Poets Society) was right when he said, “We don’t read and write poetry because it’s cute. We read and write poetry because we are members of the human race.” Thus began the journey to a creative pedagogy of literature.
Creative Pedagogy of Literature

At its heart, a creative pedagogy of literature is one that asks students to be creators of knowledge as a result of meaningful interactions with literary texts. It is a constructivist pedagogy taking seriously the idea that learning and creating are similar processes. To learn is to generate and construct ideas and then to defend those ideas with argumentation, reason, and evidence. The creative pedagogy of literature sees creating as one of the fundamental acts of learning as opposed to a nonessential activity completed after learning.

To create is to make something new and novel. The ability to create is not limited to the mad scientist, or the genius, or the artist in his studio. Rather, creativity is developed skills that can be nurtured and taught to all students and adults—and creativity is fundamental to success in the knowledge economy. Thinking creatively and developing new ideas or improving existing ideas occurs in the kitchen, in the garage, in corporate boardrooms, and certainly in classrooms. The creative pedagogy of literature uses the literary text as the launching point for the generation of ideas. The reader is taught to respond to literature in an attempt to make meanings about life and our place in the human narrative. Responses to text are oral and written, both personal and collective, imaginative and insightful; responses make connections between the ideas of the author and the experiences of the reader.

We have identified four facets of the creative pedagogy of literature: (1) teaching as disciplined improvisation, (2) centrality of imagination, (3) modeling and developing creative dispositions, and (4) problem solving. These four facets have implications for instruction, curriculum, and feedback/assessment. They do not replace curriculum standards such as the Common Core State Standards for English Language Arts; rather, they complement standards and provide direction on how a teacher can teach students to create knowledge.

Disciplined Improvisation

Improvisation is a natural aspect of childhood play, an authentic feature of jazz music, and an emerging business practice in some of the most successful and innovative companies in the United States. Improvisation implies freedom. Children play freely without restriction or convention. Peanuts become boulders along a rugged terrain; plastic fruits become baseballs in the backyard. Rules are vague and adaptable and rarely discussed, if at all.
Jazz musicians famously make up the music as they go; they do it with such amazing skill that improvisation is a hallmark trait of jazz performance.

But what might improvisation look like in the act of teaching? When we improvise as teachers, we are sensitive to teachable moments while maintaining the overall focus on our learning goals. We enter the learning space of the classroom with a broad idea of where we are headed, but retain the flexibility to emphasize ambiguity and possibility. Do not take improvisation to represent poor preparation or lack of skill as a teacher. The jazz musician must practice his craft for years before he is ready to improvise on stage. The teacher must know the stories of the literature curriculum deeply to be able to improvise. Those who are ill-prepared try to hide it by reading from PowerPoints or lecture notes. The committed improvisational teacher creates open-ended inquiry and an environment of exploration. To the improvisational teacher, the learning is in the process, not the predetermined answers. The improvisational teacher hopes that in the middle of the learning, there is serious debate on whether Billy Budd was a hero or a scapegoat. Then in the midst of the debate, she pushes students to clarify, retell, and extend their thinking about Billy Budd to a person facing similar circumstances in real life. That’s improvisation. The opposite of improvisational teaching is ending the debate to finish the slideshow before the bell rings.

Disciplined improvisation requires the teacher to be prepared to explore the literature of study but intentionally flexible to various interpretations. The discipline qualifier is a commitment to see where learning is headed and contributes to the flow in a supporting role. The archetypal example is the piano player at the jazz club on Monday night’s improvisational session. The piano player sets the tone, then lightly fades into the background while the other players take turns leading the music. The piano player accompanies and enhances the show; likewise, the teacher practices disciplined improvisation when she keeps the goal of creative idea generation at the forefront of learning. She sets the tone, then accompanies the students on their journey to generate ideas and personalize the meanings of the literary texts.

By modeling the art of improvisation, the teacher creates an environment where students can freely explore their responses to literature. In doing so, students learn to value the process of learning and the power of creativity, oftentimes without recognizing what is happening. At the beginning, the girls may laugh about how the class discussion strayed from the initial talk of irony in Mona Gardner’s “The Dinner Party” to the discomfort of hearing boys at lunch tell sexist jokes, perhaps suggesting that their teacher is so easy to distract, but then later realize that the straying is the point. After expe-
Organic Creativity in Teaching Literature

Organic Creativity in Academic Domains

riencing the creativity of an improvisational classroom, students eventually resent the crushing of their ideas in classrooms where the teachers refuse to nurture idea generation and interpretation. Improvisation, and the creativity that is born from this purposeful teaching approach, becomes the pulse of learning.

Teachers who want to teach literary improvisation should purposefully design learning experiences to give students opportunities to improvise. An example may be to ask students to perform a dramatic reading of a poem. In order for the dramatic reading to be meaningful, students must understand the poem's mood and tone, as well as the syntax and poetic structure. This understanding may be informal or even innate, but it must be practiced. Students could be asked to interpret a poem's meaning. In an effort to make sense of the poem, students could choose to analyze significant poetic devices, examine the poet's life, or study world events during the time of the poem's publication, emphasizing how this external information contributes to the overall understanding of the poem. Improvisation requires an initial structure so that it can eventually be removed, furthering the ultimate goal: to make meaning from literature. Creativity presents itself in the disciplined improvisation, the student who is aware of the possibilities and purposefully chooses a path.

Centrality of Imagination

A few years ago I had the opportunity to hear Tim O'Brien deliver a keynote address to a regional conference for English teachers. O'Brien has long been among my favorite authors. I sat at the front of the ballroom, overcome with excitement to hear him speak. He began with a story about himself and his wife and child. He talked about how they experience life with tails. The story went on for an extended period; I kept thinking that he would soon get to the heart of serious fiction writing. After I was thoroughly confused whether he meant tail or tale, the award-winning writer of fiction finally revealed the secret: imagination. He said the fiction writer employs imagination when using the extraordinary to illuminate the ordinary. He told a room full of teachers that if we want to make a difference for our students, nurturing and fostering the imagination would be at the heart of our enterprise.—Todd

It is possible that had I heard this message from anyone other than my iconic favorite author, the genius behind *Going After Cacciato* and *The Things They Carried*, I would not have even taken note. But on that morning with
a little awe and disbelief, I did take note, and the new pedagogy began to emerge. I found Kieran Egan’s *An Imaginative Approach to Teaching* and saw O’Brien’s idea through the eyes of an educator. Egan pointed out that imagination was too often seen as a secondary concern in classroom, as peripheral to learning—at best a reason to allow kids an opportunity to express themselves. Furthermore, while imagination may be peripheral to elementary education, it may have been completely antithetical to the curriculum and instruction of high school education. Instead, Egan argued, “imagination is at the center of education; it is crucial to any subject, mathematics and science no less than history and literature.”

Readers of fantasy are typically comfortable stretching their imaginations for the sake of an afternoon lost in an unknown world, but it takes more effort to convince realistic fiction lovers to suspend disbelief—not because we lack imagination, but because we prefer the comfort of realism. Stephanie Meyer, Suzanne Collins, and Marie Lu recognized this, spinning supernatural and dystopic tales that, while they demand a belief in the surreal, are rooted in the complexities of realism. They navigate their readers through complicated familial and romantic relationships, sacrifice for family and community, and expose the dangers of intolerant power. Although these contemporary authors may be seen as “fantasy-lite” writers by the strictest of fantasy fans, they have created a portal from the classroom to an imaginative world.

In his wordless graphic novel, *The Arrival*, Shaun Tan demands imagination from readers of all ages. Readers of this story become archaeologists, using the author’s carefully created artifacts to build the story: the protagonist’s angst at leaving his family, his discomfort at adapting to a strange new world, and his discovery of what it means to belong. It’s a collage of unique images that mean little without imagination. By assigning “reading” such as this, teachers guide their students through the portal, allowing them to wield the great power granted by imagination.

Perhaps it is our interest in psychology, but we often ponder the motives of the people in our lives and of the characters in our books. This curiosity is one that can be fostered in our students, if only we take the time to imagine the possibilities. Students in an eighth-grade English class may agree that Gene from *A Separate Peace* is selfish, insecure, and generally messed up; however, they may disagree when asked to dissect his character, divining what life events could have possibly led him to that fateful jounce of the tree limb. Depending on their personal experiences and worldviews, perhaps they envision an absentee father, or a series of academic failures, or even a chemical imbalance. The product students create (i.e., an essay, a scrapbook, a series
of Facebook posts) is secondary to the true purpose: melding life experiences and imagination to create deep, personal meaning of literature.

This idea is not a new one—just read Geoffrey Maguire’s *Wicked: The Life and Times of the Wicked Witch of the West*—but this use of imagination to build empathy and understanding is often superseded by multiple-choice questions that, at most, may require simple inference. Teachers who value creativity in the classroom use imagination as a force to push students beyond the simple and the basic to the sublime.

**Modeling and Developing Creative Dispositions**

*My ninth grade teacher was one who understood what it meant to creatively interact with literature. I don’t remember his name or the novel we were studying, probably because I was too intent on trying to be invisible to my classmates, but I do recall the assignment: present the internal struggle of two characters in a creative way. We could work individually or with partners; but, as is often the case, the invisible ones work alone. This was fine, because I was a girl with a plan. I set to work on my idea—sewing, gluing, pinning into the night. The final product was me—small, timid me—revealing my left profile to the class, describing one character’s angst and then rotating to show my right profile, a different character wearing different clothes speaking with a different voice, revealing her lamentations. I think my peers were shocked, probably wondering where I had come from and if I had just moved here. But my teacher, my wonderfully supportive teacher, applauded and praised my performance, specifically noting my creative interpretation. I spent the remainder of the year contentedly unnoticed, with the firm understanding that my originality (and persona as a wallflower with a closeted dramatic flair) was welcomed and encouraged.—Laila*

The literature on creative individuals includes a number of personality dispositions associated with creative thinking or production. In our approach to developing a creative pedagogy of literature, we have focused on three particular dispositions to nurture and develop in our students: (a) a tolerance for ambiguity, (b) naïveté or openness to experience, and (c) risk-taking. We model these regularly as teachers, and we create situations in which students can practice these dispositions in a safe and supportive environment.

**Tolerance for ambiguity.** Creative people have been known to tolerate ambiguity in ways that less creative people do not. Creative people prefer complexity and asymmetry. Tolerance for ambiguity is both an acceptance and preference for situations without frameworks, rules, and known proce-
dures. Getzels referred to this as “openness to the world.” If the teacher assigns a project that is open-ended with few rules and guidelines, no model exemplar, and no specific requirements for length or format, student reactions will range from terrified and anxious to pleased and excited. Ambiguous situations lend themselves to creative responses, and creative people find pleasant challenge in bringing order to disorder.

Because tolerance builds with increased exposure, it is important to provide students with multiple opportunities to confront ambiguity in literature. Remember the frustration when reading Frank Stockton’s “The Lady or the Tiger?” especially upon realizing the intentionality of the ambiguous conclusion and that “the answer” didn’t exist in the teacher’s edition? Pleasure can be derived from arguing over Robert Browning’s choice of diction in “My Last Duchess”—is the speaker referring to his previous or final duchess? The distinction is significant, and absolutely worth debating, highlighting the nuances of language that make the study of literature so timeless and beautiful. In fact, one could argue that the critical and creative thinking that results from tolerance for ambiguity is what a literature teacher should emphasize.

Naïveté. Piirto described naïveté as a core attitude for creativity, clarifying naïveté as openness to experience, one of the Big Five personality attributes. Perhaps naïveté is not perceived as a positive or desirable trait by public perception—we don’t want to go to a naïve doctor or a naïve accountant. However, naïveté, openness to the new, is a disposition that supports creative responses. Creative persons may be more open to experience and accepting of new information. Naïveté is the willingness to see things in a new way—to embrace the perhaps, the what if. We demonstrate naïveté when we approach literature with openness to interpretation, a hope that the text will present an idea or a description in a new way. Through the interpretive process, the naïve disposition absorbs the new with hope and wonder—expectation that my view of the world may well change or expand because of this interaction with text. Creative people read seeking the possible, not the definite.

In *Looking for Alaska*, John Green creates quirky and lovable Miles Halter, a young man in search of the “Great Perhaps.” He is naïve and unwavering in his quest, determined to live a life full of rich experiences. Teachers should perhaps encourage students to approach literature with an innocent yearning for understanding, becoming a modern-day Socrates, asking challenging questions and playing devil’s advocate, reveling in the discomfort of evolving beliefs. They could dare third graders to suggest that India Opal from *Because of Winn-Dixie* would have been better off had she not been abandoned by her mother. They could ask their high school students to wonder at the sig-
nificance of the hand washing motions in Tim O’Brien’s “Church,” visibly curious about this striking allusion. They practice the art of questioning in order to foster creativity, modeling their quest for understanding after Miles’ quest—after all, there is never disappointment in the what if or what could be, only in the what might have been.

**Risk-taking.** Risk-taking is the third disposition of focus in the creative pedagogy of literature. Generating and sharing new ideas is risky. Developing new products, posing new interpretations, and asking new questions all involve taking a risk of rejection. Risk-taking is a courageous activity and necessary for creative response. The most creative responses are unique and novel, and inherently involve the students taking risks that their ideas will be rejected or ridiculed by their peers. In a creative pedagogy of literature, not only are those types of assignments typical, but the disposition of risk-taking is nurtured and rewarded.

Students’ willingness to take risks often varies depending on their confidence in their ability to generate new and interesting ideas. When examined conceptually, students of all ages and abilities can articulate what a specific story or poem can teach them about life, friendship, or truth. We recently designed a yearlong ninth-grade English curriculum addressing the essential question “Who Am I?” The purpose of literature became for students to define themselves in terms of relationships, politics, and their responses to personal failure. Our high school students no longer saw *Romeo and Juliet* as required “because every freshman has to read it,” but as a vehicle to further their understanding of relationships and what it means to love. Similarly, middle school students use *The Giver* to help define themselves politically, solidifying their beliefs about the role of government. Elementary students discuss Wilbur’s challenges in *Charlotte’s Web* as a way to consider how they respond to failure in their lives. At every level, students take risks when they choose a stance, but now when they argue that love is, indeed, worth fighting for, they have their own experiences coupled with the wisdom of Shakespeare’s characters to support their beliefs. Students become philosophers, gleaning wisdom from literature about life's great profundities.

**Problem Finding and Problem Solving**

If you were to ask my mom to describe me as a teenager, she would probably characterize me as a good girl: an honors student, cheerleader, and student council officer. I didn’t do drugs, go to wild parties, or run away from home. However, this good girl’s favorite novel was *Go Ask Alice*, an edgy book published in 1971.
that remains popular today with teenage girls. While tucked safely under the covers of my bed, I tried LSD, learned to survive on the streets, and waded through the muddy waters of complicated family dynamics. Literature has always been my avenue for experimentation, and as I have gotten older, has provided answers to some of life’s toughest problems.—Laila

We have both been teachers of literature for years, and have seen our share of teacher training and professional learning on teaching English. Almost never has problem solving been discussed as the methodology of teaching literature. Problem solving is frequently lauded and recommended as a methodology in math and science but not often, if at all, in literature. However, we find ourselves in a new era of education with new emphases and radical changes in knowledge and information. Thinking differently is perhaps necessary, including thinking differently about teaching literature.

It is difficult to make the case that stories and poems are the materials best designed to solve problems. We are not saying never, but we are claiming that literature was not intended for nor should it be seen as a solutions tool. It seems unlikely that a business looking to expand into a new market would turn to the works of Twain or Conrad for guidance. It seems similarly unlikely that a medical researcher would look to the works of Fitzgerald or Orwell for elusive cures to pediatric cancer. Literature has not, and will not, solve the most complex problems of the day. In fact, some of us may recount situations in which our problems actually grew while we fed our insatiable appetite for reading.

However, literature, like other art forms, may be fertile ground for problem finding. Literary texts illuminate life’s problems. In some stories, like To Kill a Mockingbird or Romeo and Juliet, the problems are illuminated with a bright spotlight. In other stories, like The Absolutely True Diary of a Part-Time Indian or The Stranger, the problems are lightly hinted at. The potential of problem finding is not limited to prose, but includes poetry as well. Surely, Frost’s “The Road Not Taken” can be seen as an illumination of problems. When Poe’s “The Raven” ceases to be seen as a Halloween poem and is seen instead as a lament of love lost, students approach it completely differently. At that point, they begin to make personal connections about love and remembrance. Ask them to talk about the complex problems that Poe describes, and creativity begins to bridge the text to their lives.

Middle school students may never have considered the issues that can arise when one person in a relationship is deeply religious while the other publicly challenges the gospel, yet the division rises to the surface in class discus-
sions of the relationship between the main characters in Heiligman’s Charles and Emma: The Darwins’ Leap of Faith. Students use Charles and Emma to voice and problem solve potential issues related to giftedness, religious conflict, and the illogical nature of love. Hemphill’s Your Own, Sylvia: A Verse Portrait of Sylvia Plath can also address problems that arise with giftedness, in addition to issues related to gender inequality, mental illness, and fidelity. Literature provides a safe environment for students to employ problem-solving and problem-finding skills, not only strengthening their ability to define problems but also to creatively respond to them. The self-awareness that students gain from literature studies centered on the principles of creativity is unparalleled in classrooms that do not foster creative thinking.

**A Glimpse of the Sublime**

The ancient Greek writer Longinus wrote about the effects of good writing in his epistolary essay, On the Sublime. For Longinus, the sublime was a momentary evasion of reality—the power of the text to arouse emotions of awe and wonder in the mind of the reader. That which is sublime is beautiful, mysterious, and boundless. The sublime is pursued with reason, yet found in imagination. Immanuel Kant argued that which is sublime is so revered that by comparison all else is small. Wordsworth romanticized the concept of the sublime in his “Lines Composed a Few Miles Above Tintern Abby”:

Of aspect more sublime; that blessed mood,
In which the burden of the mystery
In which the heavy and weary weight
Of all this unintelligible world,
Is lightened.

The concept of the sublime weaves its way through the history of literature, and its mysterious fascination with imagination, beauty, and truth provide a hopeful aesthetic for our creative pedagogy of literature. We make it a habit to ask, to what end? Why are we doing this? Why teach literature at all? Moreover, why teach literature within this framework of creativity? We teach literature creatively in hopes that our students will catch even a momentary glimpse of the sublime—a brush with truth so pure that it takes one’s breath away. The glimpse of the sublime frames meaning deep within our intellect. The sublime is pursued with reason, found in imagination, and verified by
intuition. Longinus even claimed it touched our soul. It’s intoxicating and addictive. Once one catches a glimpse of the sublime, he will long for more.

What does it feel like to glimpse the sublime? It’s the feeling an 8-year-old has when he reads the book that he can never return to the teacher. It’s the fantasy that if I keep the book and read this story over and over, I’ll continue to find that feeling. But glimpsing the sublime is not that predictable. The sublime sneaks up on the reader even as he collects and reads hundreds of books in hopes of the occasional glimpse.

As an adult a few years ago, I sat in the Denver airport awaiting a flight back home. I was reading Sherman Alexie’s The Absolutely True Diary of a Part-Time Indian. I was near the end of the book, reading the part where (spoiler alert) Arnold’s sister died. There was something about the way Arnold waited in the snow for his father, pleading with God not to let his daddy die too. It’s hard to describe exactly what the glimpse of the sublime feels like. My breathing grew rapid; I could feel the droning of my own heartbeat. I could only imagine the love and fear of loss that all families must feel, even drunken, dysfunctional families deep on Alexie’s made-up Indian reservation. I thought of the potential loss of my own father. Tears welled up in me, I sensed my embarrassment as a supposedly serious adult—a business traveler—weeping in the Denver airport as I read a book written for young people.—Todd

That’s why we position ourselves within a creative pedagogy of literature. We seek meaning, beauty, and truth. We seek them for ourselves, and we seek them for our students. Not so we can tuck them safely within the pockets of our minds, but in order to rearrange our world in some way. Meaning, beauty, and truth don’t rest well inside us; they are meant to flow through us, joining hands with our imagination, emerging as new ideas.
“George!” My fifth-grade teacher called out my name, probably because I looked like I was not paying attention. Perhaps I was thinking about something she had said earlier. Perhaps I was staring off into space. Perhaps I really wasn’t paying attention; after all, she marked it on my report card every 6 weeks.

“George, please tell the class what the largest island continent in the world is.”

It was 1957, and I had a surprise for her; not only had I been paying attention to her lectures on world geography, I had also thought of a startling revelation that would now make all geography books obsolete.

My moment of epiphany had come as I stared at the 10’ by 6’ map we had wallpapered on our living room wall. Now, I knew the answer to the question of the largest island continent was supposed to be Australia. I knew the seven continents, and I knew an island was a piece of land completely surrounded by water. “North America,” I confidently replied, waiting for the “Oh, my God! He’s right!” moment. But, it never came.

“Class, tell Georgie what the largest island continent is.”

About half the class dutifully replied with, “Australia”; I’m sure if there were still conical dunce hats and stools in the corner, I would have been instantly placed there.
She had no time or interest in listening to my logic that North America was much larger than Australia and surrounded on four sides by water—the Atlantic, Pacific, and Arctic Oceans and, what she had forgotten about, the Panama Canal. This was the discovery I was ready to share. Unfortunately, the question “Why” was never asked. Such was my first brush with creativity in the classroom.

Six years later, I was in what passed for the 1960s differentiated classes for the gifted and talented track, and I encountered a teacher who had a different perspective on education. For her junior English class, she threw out the textbooks, and we read, discussed, and debated real issues of the day. There was no rote memorization of lines of poetry, no writing of book reports that merely regurgitated the text, and no multiple-choice tests. She encouraged real thinking. With every answer she received she asked, “Why?” She challenged us to think, analyze, synthesize, and evaluate our thoughts and beliefs. Not only was creativity encouraged, it was required and rewarded. Many “all A” students did not like this class, but I loved it.

The most important element for encouraging or killing creativity in the classroom is the teacher. How can educators reward creativity if they cannot recognize it and do not value it because it is an inconvenience to teaching the standard answer?

Always Ask “Why?”

After 40 years in education, 30 in talented and gifted (G/T) education, teaching everyone from second graders to graduate students, I have found that the easiest and most consistent way to encourage creativity in the classroom is to ask the question “Why?” Even if the answer is the standard, correct, textbook answer, always ask “Why?” That question must be delivered in the same tone of voice as the original question. “Why” makes students think, synthesize, evaluate, articulate, and logically defend the answer they have given. Asking “Why” is also the easiest way to separate a truly creative answer from a nonsensical one.

The Paradox of Standardized Education and Creativity

Politicians, business people, and the media call for more creativity and innovation to keep the United States “on top.” Often, creators are the stub-
born survivors of a social and educational system that labeled them as nerds or geeks. Creativity is not nurtured in the current educational system. Teachers are not required to study creativity in a formal manner, even though they are required to emphasize it with the current emphasis on 21st-century skills.

A teacher next door to me posted two pictures outside her door and invited students to guess what they were. Now the standard, the correct answers, were that they were the Washington Monument and the White House. However, there were no identifying elements in the picture that specifically identified them as those two landmarks—I checked. I put into her answer folder these two answers:

- For the first picture: “This is a picture of the famous obelisk known as Cleopatra’s Needle which is located in Central Park, New York City. It is one of three known by the same name, the other two being located in Paris and London.”
- For the second picture I wrote: “This is a model of the White House created by the special effects team of Vogel, Smith, Pinney, and Viskocil, for the movie Independence Day. During one of the highlights of the movie, it was destroyed by 40 explosive charges and earned the team an Academy Award for Special Effects.”

My peer educator responded: “Oh, it’s just Dr. Johnson being weird again.”

In the age of standardized education is there a place for creativity? The politicians and business people say yes—but you’d be hard pressed to find the same answer in the general classroom. Where do we find the time for creativity? Public school programs in art, music, and drama have disappeared at an alarming rate across the country in order to make more time to prepare for standardized tests. At the same time, many schools spend 4–5 hours a week preparing students for state graduation or achievement tests. Our programs that require and encourage creativity have disappeared because of a lack of time, lack of funds, and a lack of interest on the part of administrators and communities. These classes and their teachers do not fit into the concept of standardized education and “core subjects.”

The Box

On one hand, we want people who can “think outside the box,” a hackneyed phrase. The Box is normal behavior, normal actions, normal thoughts,
normal standard answers, the expected answer, the regurgitated one-true-answer. The Box is made of the walls that confine us and that many children are afraid to even try to scale. The Box is the coffin from which creative people struggle to escape.

Creativity is the gray answer, the humorous smart aleck answer that is unexpected, perhaps unappreciated, but nevertheless correct. Creativity is the ephemeral answer. Creativity is what teachers get when they allow ambiguity. Standard answers conserve the past and pretend that we know all there is to know. Standard answers never develop new alternatives, never think futuristically, and never ask “What if?” Only within certain environments is creative thought rewarded and rarely is that environment the regular classroom. We must encourage creativity, learn to recognize it, value it, and reward it from the preschool classroom to the boardroom.

The element of creativity is part of several recognized definitions of giftedness. Renzulli defined giftedness as the intersection of above average ability, creativity, and task commitment. Sternberg said that the gifted person has creativity as well as executive ability and practical ability. The federal definition has creative thinking as a type of giftedness.156

**Standardized Education and the Creative Child**

Standardization is the antithesis of creativity. In standardized education, creativity is not rewarded; indeed, it is often punished. On multiple-choice tests there is no opportunity for students to be asked “Why?” and no opportunity to explain their reasoning. When students score low on standardized tests, it reflects on their teachers’ evaluations. Thus, teachers have no interest in developing creative answers, only correct ones. Standardized education and its tests are killing creativity. Unfortunately, teachers of creative children must teach them how to game the system and not outthink themselves. Such tests don’t allow educators to distinguish among the guesser, the thinker, and the creative. Most rubrics for grading standardized writing exercises do not give points for creative elements. I’ve had several G/T students whose creative writings did not match the state’s standardized rubric and thus they failed the writing section of a graduation test.

Creative answers to exams abound on the Internet—so do the big red Xs beside them. Here are some examples.

> Question: Can you name the capital of Outer Mongolia? Answer: No. This was not the expected answer, but nevertheless must be
counted as a correct one because of the way the question was worded. If you want a better answer, then ask a better question, don’t penalize creativity.

Question: The Hocking River flows in what state? Answer: Liquid

Question: How can you drop a raw egg onto a concrete floor without it breaking? Answer: Anyway you want. Concrete floors are hard to break.

Creativity and the G/T Classroom

In recent years, programs for gifted and talented students have increasingly embraced acceleration or enrichment, and of the two, acceleration appears to be the more predominant model. Acceleration has the advantage of being well-structured with regard to state or national standards, and schools can often show significant growth on standardized tests in the students’ strength area(s). However, acceleration seems to deal with only a facet of the child and not necessarily the whole person.

The enrichment model may be more oriented to the development of the whole child. This curriculum often focuses on thinking and problem-solving skills, project-based learning, overall above grade-level instruction, and creativity. For exceptionally bright children can’t there be 6 hours out of their standards-driven week in which they can do something that is different? A place where the “why” question will always be asked and creativity will be honored? Creativity in the classroom takes place when the teacher, student, and curriculum interact with each other.

The Teacher

The single most important factor in the creative classroom is the teacher who has certain personal traits that foster creativity. Teachers must be able to appreciate and admire ideas and answers that are not standard, should not be overly judgmental, should be receptive to new ideas, should be holistic in their approach to education, and need to be willing to take a risk. They should be playful, sharing appropriate humor. Teachers of the creative should be well-educated, perhaps generalists. They must have some basic knowledge of the domain in which the child seeks to be creative. They must be willing to help students find outside opportunities, tutors, and mentors. Teachers must enjoy gifted and talented children and have an extended repertoire of
instructional methods or techniques in order to meet the learning styles of a
diverse group of students.

Piirto recommended that teachers set a creative tone in the classroom
and value the creative work of others. Elementary programs that focus on
enrichment can do these things. Acceleration alone does not introduce the
child to Mozart, Beethoven, Shakespeare, Einstein, da Vinci, or Picasso.

Teachers should let students see their own creativity. When students write
a story, write one yourself; when they do an art project, do one too. Analyze
how you create, research how others create, and apply this knowledge in your
classroom, keeping in mind that the process is very individualistic—what
works for others may not work for your students. Teachers must establish the
creative environment.

The Environment for Creativity

There is no one environment that is conducive to creativity. Different
people have different preferences for their physical environment—bright or
dim lights, fluorescent or natural, warm or cool temperatures, music/sound
or quiet; these are just some of the considerations. The more students there
are in a room, the less likely all of their needs will be met for a creative
environment. One of the hardest elements to implement in the classroom
is the quiet and solitude that leads to the creative state often called “oceanic
consciousness,” or “flow,” in which ideas, images, words, or sensations flow
in a steady stream from the subconscious and the individual often loses all
sense of time.

Class bells, public address announcements, noise in the hallways, and
disruptions as students call out, “How do you spell . . .”, “I need . . .”, “I’m
on page 3, where are you?” all interrupt flow. The group should be small, with
plenty of space between individuals. Children should raise their hands or use
some other silent signal to get the teacher’s attention; the best solution is to
use headphones that block out external distractions. Students should listen to
music that can inspire them to create. Some may prefer white noise, and still
others may need the absolute quiet that the headphones can provide.

Teachers should provide a classroom in which children can comfort-
ably find their own space. A desk, a cubicle, a corner, carpet squares, and
overstuffed chairs all help establish individual space. Students may also work
under tables, standing, pacing, etc. Children will gravitate to the spot where
they can be creative. They must have the freedom to choose, but must also
take the responsibility to produce. Production comes from practice and the
self-discipline of working every day on the product. Eminently creative people are judged on what they have produced, not what they are going to produce.

**Grouping.** Grouping highly creative and marginally creative students in the same classroom and insisting they work together is not necessarily a good idea. Creativity is often a private, solitary practice, not best done in groups. However, collaboration with other highly creative individuals is a hallmark of creative development. Left on their own, children generally want to socialize, choosing to be with friends. I often assign partners randomly. Students then begin to see with whom they can and cannot work well. The size of the group matters—the smaller the better. Four or five is too many. Avoid always having gender grouping—boys with boys and girls with girls.

**The psychological environment.** The teacher also sets the tone of the classroom. An environment that encourages creativity is playful, relaxed, and not always constrained by a schedule. Students should be encouraged to take risks—small unimportant, inconsequential ones at first. But these establish the atmosphere of trust—trust in the teacher and in classmates—that questions, answers, thoughts, and ideas will not be put down, but appreciated for what they are. Belittling is a killer of creativity. As group trust builds, so will the instances of risk-taking.

Organic creativity encourages young students’ innate sense of wonder and their need to find out “why.” Naïveté is not so hard to develop when working with young children, because their innocence and longing to know has not yet been jaded by the real world or their less talented peers. The teacher need not be, and should not be, an encyclopedic dispenser of knowledge. Elementary G/T students need to learn that teachers do not have all of the answers and they need to learn how to independently research information.

The teacher establishes a class environment where students know that in order to stay in the program they must produce both in the regular classroom and in the G/T classroom. Students must develop the self-discipline to complete assignments, projects, and other activities. There should be activities in which clear, concrete, step-by-step directions are not given. Let some directions be purposefully ambiguous. Teachers themselves must not have a preconceived idea of what they expect. Any result or product that follows the purposefully vague directions must be acceptable.

Here is a simple activity that I use with young elementary students that embraces this concept. I call it the **Go to the Door Game**. I have two doors in my room, one that leads to the hallway and one that leads into a courtyard. I ask the students to line up single file across the room from the door to the courtyard, and I tell the first student in line, “Go to the door.”
Inevitably, that student dutifully walks quietly to the door just exactly as teachers have instructed since preschool.

I ask, “Did Johnny go to the door?”

“Yes,” comes the reply.

Then I say to the next student, “Suzy, go to the door.” She too walks silently and straight to the back door. Again I ask, “Did Suzy go to the door?” As we proceed through all the students, I begin to get some strange looks as if saying, “This is kind of stupid.”

Once all students have gone to the door, we come back, reverse the line and start over with the same directions—“Go to the door.” The sideways glances increase. At the end of the second cycle, some students realize there is something going on and they begin to think, they begin to question, and the “Aha!” moment occurs—Larry skips to the door, going to it in a roundabout way.

He turns and looks for approval.

In a feigned, shocked voice (that even second graders understand), I ask, “Did Larry go to the door?” There is a pause. Some answer yes; others are more hesitant.

I ask, “Did I say he had to walk straight to the door?”

“No.”

“Did Larry follow the directions and go to the door?”

“Yes!”

Now the floodgate of creativity opens.

What do I hope that students learn from the exercise? To think, question, and analyze. The directions were purposefully ambiguous—thus there were many possible solutions. I want students to learn that this classroom is going to be different, that multiple solutions to a problem may be acceptable, and this teacher has a sense of humor. Students learn that they can take a risk in this class; it’s okay to be a little weird here. Creative solutions will be honored here.

I learn who the thinkers, questioners, and risk takers are. The elements of risk, group trust, naïveté, self-discipline, and a tolerance for ambiguity should be consciously fostered in the classroom environment and embedded into any curriculum aimed at developing creativity.

The Curriculum: The Elements of Creativity

Along with establishing the environment, the teacher sets the curriculum. Ideally, individuals who lack a strong background in talent development edu-
Organic Creativity in the G/T Resource Room

Organic Creativity in the Teacher, the Classroom, and the School

cation should never set the curriculum of a G/T classroom. The domain or curriculum in which the student is working must match his or her creative spark. A creative writer may not be creative in physics and may not excel in a pottery, music, or photography class.

The curriculum needs to be structured, even if that structure does not match the standardized classroom or is not readily evident to educators who do not have a background in talent development education. To avoid the appearance of a “fluffy” curriculum, it is important that educators know exactly the objectives they are trying to accomplish with creativity activities and why that objective is important to the overall development of a talented child.

The overall curriculum in the G/T classroom should appeal to the creative side of the student. Not all children identified as gifted and placed in a G/T classroom are creative; most are placed there solely on IQ or achievement scores. However, as noted by Renzulli, the element of creativity must be present for the person to be considered gifted and talented, and these children will embrace those activities. A considerable literature—books and Internet sites on brainstorming, as well as convergent, divergent, and lateral thinking activities/exercises—exists. Such activities can nurture and improve creative thought; however, they are just that—activities. They are not creative products in themselves, only tools for developing or enhancing creativity, just like learning how to punctuate is only a tool for creative writing. Real creativity is in production and comes from inside the individual.

Piirto discussed seven elements that can be used for developing a curriculum for creativity: incubation, improvisation, inspiration, imagery, imagination, intuition, and insight. All are important in the creative classroom, but some are easier to implement than others.

Incubation. Incubation is the time needed to think—to hear the quiet voice from inside that wells up from the subconscious. After 25 years of marriage, my wife has come to understand my need for incubation time. It may come while listening to music in a relaxed meditative state, or it may occur while performing some monotonous task.

“Honey, how’s that project coming?” she’ll ask.

“It’s coming,” I reply as I sit staring at some mindless television program. But the mind is working. The subconscious is looking for the structure, the skeleton on which to hang the ideas that have been developing. When that happens, most often in a flash, the dam breaks and the ideas flow into place.

Our classrooms do not give children the same opportunity. Classroom time is very limited; thus the time to incubate is also limited. The bell rings, a
student leaves the classroom, and his or her mind is filled with the next classroom’s demands. A student’s afterschool life is often just as hectic, filled with sports, extracurricular activities, chores, social networking, and video games. It is an unusually well-disciplined child who sets aside time for incubation at home.

It is important to interact with students as they work on their creative projects. The teacher should watch them to get an intuitive feel for what is going on. When the ideas are pouring forth and students are furiously working to get them down is not the time to interrupt with, “How’s it going?” But when a student is staring off into space and quiet, what’s happening in his or her mind is less clear. The teacher should decide whether he or she is interrupting incubation or whether he or she can help clear a roadblock with a brief discussion.

“What are you thinking, Richie?”
“I can’t figure out . . .”
“Well, have you thought about X or X?” The conversation should always give options, should not be judgmental, and the child must feel free to reject the teacher’s ideas.

In the modern classroom, instruction is expected to be direct and dynamic. There is no time for playing around. That is not always the case with developing creativity, which is often associated with play. Picture this: The principal walks into your classroom, the lights are a little dimmer, music is playing, and children are scattered around the room in corners, under tables, staring into space, doodling, eyes closed. She wants to know what’s happening.

“Creative incubation,” comes your reply.
She shakes her head and leaves, stating, “Your evaluation will be ready on Friday.”

**Improvisation.** When faced with a problem, we often have to improvise. We must ask ourselves, “How can I go around this problem? What can I do differently; what can I do instead? What else will work just as well or even better?” I work in Appalachian Ohio, and a standard joke is that hillbillies have six cars up on blocks in their yards. Although this is an exaggeration, there is a grain of truth. Out of necessity, many men are backyard mechanics. They cannibalize junk cars for parts, modifying them as needed to keep a family car running. Improvising is a fact of life among the poor. Our high school physiology class can’t afford animal specimen kits, so students bring in roadkills for anatomy and skeletal reconstructions. Teachers often try to remove roadblocks for their students, but when teaching improvisation they may want to create some.
I do an activity with upper level elementary students in which they are to imagine that they are the survivor of a small plane crash in a remote wilderness. The decision is made that the best chance for survival is to hike out, and students are given a list of items they have scavenged from the wreck. They can carry only a limited number of items and none of these are survival gear. Students must improvise and find alternative uses for the items they choose. For example, an empty Gatorade bottle may seem like trash, but because there is no canteen, the survivor might want something to carry water in. Students need to decide whether a lighter is better than a pack of matches or what to do with $1,000 in $20 bills. Although many students will leave the money behind, some cannot bring themselves to leave it in the wilderness—“But it’s money!” Still others will humorously suggest its use as toilet paper or a fire starter. A can of peaches seems to have endless possibilities in the creative mind. The peaches and syrup provide food and liquid, the empty can is used to boil/sterilize drinking water and used as a cooking pot. Rocks could be placed in it and string tied to it to scare off wandering animals in the night. It can be beaten on like a drum as a signaling device—the improvised ideas go on. There is no rubric of correct answers; students must imagine alternate uses for items, make decisions, and defend their choices. Creativity, improvisation, and higher level thinking skills all are developed in this activity.

**Inspiration.** Inspire students by surrounding them with the creative products of others, especially from the domain in which you hope to inspire creativity. If it’s writing, have books, books on tape, or Kindles. Have easy access to a library and a mini-library in the room. In art, display a wide range of visual art in pictures and posters; exhibit quality student and instructor artwork. Have a graphic art library on your computer, and art books on the shelves. In science, have models of inventions, patent drawings, and magazines such as *Scientific American* and *Popular Mechanics*. For a more playful aspect, have drawings of Rube Goldberg machines, and encourage students to create their own. The game Mousetrap is a good place to start.

Whatever the domain, allow the students to immerse themselves in the work of peers, the work of their teacher(s), and the work of others, including, but not limited to, individuals eminent in the domain. Materials and supplies appropriate to the domain should be provided. Probably the most important item for any domain is a series of computers connected to the Internet. Today, the world is only a keystroke away. But cyberspace should not be a substitute for a hands-on, real-world experience.

**Imagery and imagination.** Imagery is the ability to imagine, to see things with the mind’s eye. I tell students that the secret to writing a great
story is getting the idea, the images, and the voices out of their heads and into the mind of the reader as accurately as possible. Everything that has become reality was first imagined by someone. Science-fiction gadgets from the TV series *Star Trek* were so well-imagined that they have become modern technologies—flip cell phones, tablets, voice interaction with computers, and voice-activated translators, to name only a few. Walt Disney had a team he called “imagineers” that built his visions of Disneyland and Disney World.

How can educators develop imagery? If you want creativity in the classroom, then time must be made for creativity in the classroom. This makes it important for G/T classrooms to be organized around a *block of time*—ideally a whole school day.

In a relaxed setting, allow students to close their eyes and use their mind’s eye to see. There must be time to incubate, to allow the images to come forward. Try reading selections from appropriate literature with highly descriptive scenes. Play audio recordings of stories and allow the students to create/play the “movie” in their heads. Play music from different genres and allow it to create pictures or images. Afterward, have students draw the images they saw and discuss them.

An activity well-suited to developing imagery is to play old radio programs from the golden age of radio. In the era before television, people used their own imaginations to “see” the story. These programs are still readily available. Imagery often plays into the strengths of the visual/spatial learner. Have students map out a story, idea, or an invention in pictures. Have students describe in detail graphically, orally, or in writing some reasonably common item or sensation. Have students create a story based on an image, photo, or random item.

Teachers should stimulate students with visual images: posters, art, photos, etc. in the classroom. Sights and sounds are not the only ways to create imagery. Certain smells can bring back powerful memories or evoke vivid images. An old party game I’ve used is to put a highly tactile item, maybe something like crushed grapes, in a covered box. Allow students to feel the item and use their imagination to describe or determine what it is. There are many old-fashioned activities like this and the radio programs that will be novel to elementary children. There are also many books on guided imagery on the market. The activities just need to be organized into an objective/goal driven curriculum. In developing imagery, the teacher should bring into play as many senses as possible

**Intuition and insight.** Intuition is the ability to listen to the quiet voice inside, to trust one’s feelings, and to be willing to act on a hunch. It is the
visceral feelings, thoughts, or reactions that well up from the subconscious that may or may not have any logical basis. Intuition is sometimes referred to as instinct, gut reaction, or a funny feeling, and it is often dismissed as a lucky guess. Intuition and insight are the “Aha!” moments when inspiration comes or an idea becomes clear. This often comes as a result of thoughtful quiet solitude or incubation. Insight often refers to grasping the gestalt or wholeness of a thing or idea—the ability to look past petty details or to synthesize the details into the big picture or true essence of the idea.

Once again, intuition is best developed in a quiet, relaxed environment that is not rushed by time constraints. It is a solitary activity designed to develop a trust in one’s own intuition and in sharing it with others. Dream logs and thought logs are a good way of capturing the fleeting imagery and ideas that come from intuition. Games like Clue, Stratego, and Battleship can help develop intuition or at least a trust in it.

Here is an activity I have used to develop intuition. It requires a temporary suspension of disbelief, a type of naiveté that younger students are better at than sophisticated high school students. Take an artifact, something old with a history to it, and place it in the student’s hand. Let him or her sit quietly until the item “speaks”—tells a story. Then have the student tell, write, or draw that story. The teachers should not necessarily tell the history of the object.

Historic reenactors giving first-person presentations can give younger children insights into people, activities, attitudes, and beliefs of a bygone era better than a textbook. They are often experts on their chosen time period, and can share artifacts as well as knowledge. However, junior high and high school students do not necessarily benefit from first-person presentations. It is harder for them to suspend their disbelief and so they spend too much of their time trying to trip up presenters.

The Student

First, we must remember that not every student in the G/T classroom is highly creative. Most are placed there because of high IQ or achievement scores. There are few programs designed solely for the creatively talented. Many published checklists present traits of the creative student, and such lists are used in some states as the lone means of identification. In my opinion, that is not the best way to identify creativity, as the checklists often ignore the important element of creative production. A better way would be to look at a portfolio of work. Be that as it may, the checklists may be useful in under-
standing the traits that need to be nurtured in the G/T classroom. These behaviors include a willingness to take risks; an openness to new experiences; a sense of humor and playfulness; a challenging or nonconformist attitude; flexible thinking (the ability to produce a wide range of clever or unusual solutions to problems); the ability to manipulate and modify ideas or objects; an ability to see the big picture in spite of the details that bog others down; a tolerance and even enjoyment of ambiguity; sensitivities and overexcitabilities; and a good imagination that can fantasize alternative ideas, scenes, or worlds.

The student must be interested in the domain or area being taught, but just as importantly, must be open to new experiences in other domains. Through this process, the teacher and student may be able to work together to discover areas of passionate interest and the learning styles that will enable the student to develop that interest.

Teachers, administrators, and parents are often overly concerned with a student’s socialization and whether or not he or she is “normal.” Fortunately, creative people are not normal—unfortunately, that seems to bother parents, educators, and even the creative individuals. There must be a time and place to not only allow the child to be “weird,” but also to honor difference and idiosyncrasy. At the very least, that place must be the G/T resource room.

The Last Great Box

The last great box that teachers of the gifted and talented must think outside of is the box created by the four walls of their own classroom. How do you get out of that box? Open the door and walk out. Step outside and take your students with you. Take a risk—go on a field trip. Let the world become your classroom. Take students on trips to plays and musicals, as well as art, science, and natural history museums.

A wide background of experiences is important to be considered well educated. As a reenactor of the Middle Ages, I have shown rapier fighting to the class studying Romeo and Juliet, put seniors into historically accurate clothing and armor from the Beowulf saga, and put elementary students into clothing and armor from the 5th to 16th centuries. Such opportunities provide inspiration, insight, and imagery. After a field trip to Gettysburg, one of my students became a Civil War reenactor himself and then a career army officer.
We will never know what little things we do, or the offhanded comments we make, that will inspire or uninspire children. Students should participate in project-based learning where they can self-select projects or experiences and pursue areas of interest. Those interests may only be temporary; a casual exploration may be all that is needed to satisfy the student. But other times those experiences will become the thorn that drives them to so much more. Experiences sit in the soul and incubate, sometimes for years. One former student, now working on his Ph.D., told me his inspiration was the little chemistry set I had in the room and a field trip to a science center.

Intuition and insight are also based on a wide range of experiences that the person is able to subconsciously rearrange into the gestalt. The more experiences, the stronger improvisation, inspiration, imagery, imagination, intuition, and insight will become.

Travel broadens the mind. I have taught music history in the Rock and Roll Hall of Fame, taught *Beowulf* and Egyptian history in the British Museum, taught structural integrity at the Eiffel Tower, taught art history at the Louvre, taught about fresco painting at the Sistine Chapel, and taught the development of medieval armor at the Cleveland Museum of Art. I’ve taught about Goya at the Prado, about volcanism in the ruins of Pompeii, and about pterodactyls at the top of Mt. Pilatus in Switzerland. Each year for 30 years, I have taken rural Appalachian elementary children (as young as second grade) to New York City, Chicago, Detroit, Cleveland, Mammoth Cave, Gettysburg, Williamsburg, and Washington, DC, and high school students to Europe. Our school is 70% economically disadvantaged. If it is important enough, it can be accomplished. Yes, there’s a risk; there needs to be group trust among the teacher, administrators, and parents. But your students will see with new eyes the wonders of the world firsthand.

**Conclusion**

Developing creativity in the G/T elementary classroom is indeed a lot of work. Any job in education, done right, is a lot of work. But it is worth it.

Share the creativity of others and model it yourself. Consciously foster an environment of trust for risk-taking, for ambiguity, for the childlike wonderment of naïveté, and demand self-discipline. Create a defensible curriculum that incorporates projects, products, thinking skills, incubation, improvisation, inspiration, imagery, imagination, intuition, and insight.

Provide a wide range of experiences for students and always, always ask, “Why?”
Creativity can be taught and nurtured, and we can build classrooms in which creativity thrives. This philosophy acts as a central thesis in *Organic Creativity in the Classroom*, edited by award-winning author Jane Piirto, Ph.D.

This innovative collection of essays explores approaches to teaching creativity from the perspectives of experienced educators and artists. The 23 authors have taught for more than 500 years combined, and in this book they share teaching stories and helpful strategies that can be used to encourage students to become more creative within specific domains.

The authors include master teachers, curriculum theorists, holistic educators, and award-winning practitioners of writing, mathematics, science, social science, literature, foreign language, theater, songwriting, dance, music, arts education, educational psychology, gifted education, school counseling, and school administration, among other domains, who incorporate creativity and intuition into their classrooms. In this readable and lively book, they share their personal stories and practical advice for infusing creativity into the lives of students.

*About the Editor:* Jane Piirto, Ph.D., is Trustees’ Distinguished Professor at Ashland University in Ohio and the author of 16 books, both literary and scholarly. An award-winning poet and novelist, she is also an award-winning scholar who is the recipient of fellowships from the Ohio Arts Council, a Lifetime Achievement Award from the Mensa Education and Research Association, an honorary doctorate in humane letters, and the Distinguished Scholar Award from the National Association for Gifted Children.