The Benefits of Equalizing Standards and Creativity: Discovering a Balance in Instruction

Angela Burke-Adams

How can standards-based education and creativity coexist? This question addresses the dilemma regarding the current state of education. In a world where standards and high-stakes testing define the success of the school, teacher, and individual child, how are instructional practices affected? In particular, is there a conflict regarding the needs of gifted students with the sequential, skill-based system presently in place? How might one prevent standards from overshadowing creativity and yet balance a knowledge base with creative thinking skills? Can a reconstruction of linear teaching occur in order to nurture creativity in our brightest minds?

As one considers the possibility of an instructional balance, it is evident that the topic of standards and creativity offers two opposite spectrums of thinking. When determining how to equalize standards and creativity, it is essential to examine each component in relation to the needs of gifted learners. Whereas standards are a black and white concept, consisting of clearly stated objectives with aligned assessments, creativity is a difficult term to define. Narrow definitions of creativity result in a restricted vision of the concept. Creativity is often scrutinized as an intangible component. Conflict regarding whether or not creativity can be taught or is innate is greatly debated (Murdock, 2003). Likewise, creativity is often undervalued as a non-productive characteristic and is looked upon as too subjective to validate (Plucker, Beghetto, & Dow, 2004).

When evaluating standards and creativity, it is evident that both concepts guide students in different ways and offer a variety of tools for learning. Creative thinking is distinctively separate from sequential, analytical thinking associated with standards and traditional education (Sternberg, 2003). If only one of these learning components is utilized, a balance in thinking styles may be affected.

Learning Needs of Gifted Students

When determining how to integrate creativity in a standards-based system, it is essential to consider the learning needs of gifted students. It is evident that gifted learners need flexible parameters in their learning environment to explore and take risks, and opportunities to expand beyond the boundaries that confine their curiosity (Mulhern, 2003). Similarly, gifted children thrive when they are offered choices and freedom in their learning, along with complexity and opportunities for breadth and depth in the content (Betts, 2004). Gifted students need opportunities to dream and express their creative abilities (Mulhern).

Unfortunately, a prescribed curriculum that teaches basic skills often lacks advanced and challenging curriculum for gifted learners (Betts, 2004). Standards focus on basic skill levels and are rapidly changing the instructional styles of teachers, who are moving away from innovative methods, to more traditional ones of drill and recitation to ensure high-stakes test scores are raised (Moon, Brighton, & Callahan, 2002). This results in the creation of one-size-fits-all models of classrooms. Due to the pressure to incorporate standards, the curriculum is narrowed as nontest items are eliminated. Teachers are opting to implement teaching strategies that will prepare students for tests, which tend to depress the talents and potential of gifted students (Moon et al.). Furthermore, standardized tests may not measure the content gifted programs wish to focus upon, including extensions beyond the objectives required by the state (Feng, VanTassel-Baska, Quek, Bai, & O'Neill, 2005). Creativity is as important as mastery of skills and deserves recognition (Kay, 1998).

Benefits of Balancing Standards and Creativity

Those in favor of high-stakes accountability believe standards will provide incentives for educators and provide objective data in which to base educational decisions (Diamond & Spillane, 2004). Proponents believe the purpose of standards-based curriculum is to provide a sequence of objectives that will create greater equality and equity in student performance (Sandholtz, Ogawa, & Scribner, 2004). Many educators associate creative characteristics with nonconformity, impulsivity, and disorganization (Ugur, 2004).

In order to change attitudes regarding creativity, it is critical to look at the benefits a balance will provide. Creativity is necessary for an individual to effectively problem solve. Society benefits from creative individuals in the areas of science, technology, and art, which lead to an interactive world (Ugur, 2004). Creativity also contributes to workplace leadership, vocational professions, healthy psychological well-being, coping, and emotional growth (Plucker et al., 2004). Although standards-based education fulfills the need for a knowledge base, there are numerous benefits to incorporating creativity in the curriculum, which includes providing students with opportunities to practice nonconventional modes of thinking that enhance motivation.

Instructional Styles

When focusing on instruction in the classroom, it is evident that balancing standards and creativity not only equalizes classroom methodology, but also allows for individuality in learning to occur. When teaching standards, educators tend to focus on sequential teaching strategies (Harlen & Crick, 2003). Schools are valuing only a single way of demonstrating intelligence by acknowledging memory and analytical skills, even though creative skills are equally important (Sternberg, 2003). A common belief, however, is that if educational programs focus entirely on creativity, important knowledge and tradition in specific domains will be lost (Erez, 2004).

When evaluating the traditional classroom, it is evident that the majority of time is spent on verbal skills or expressing oneself using words. Imagistic thinking or the manipulation of images in the mind is often disregarded (Mann, 2005). Looking at the strengths of standards and creativity, one may determine that standards emphasize sequential learning, while creativity focuses on imagistic or spatial learning. Two types of learners can emerge from school systems. Linear thinkers hesitate to venture beyond the parameters of the lesson and prefer structure, whereas creative or free thinkers have imaginative intelligence and are curious to discover what lies beyond the given boundaries (Ugur, 2004). Each type of learner is valuable, but both need to be given equal merit.

When exploring the potential of spatial thinkers, strengths such as grasping complex systems, discovering relationships, and demonstrating high levels of creativity may be observed. These learning attributes are critical for producing innovative ideas and finding unique problem-solving techniques; however, they appear to be the opposite skills valued in standards-based education (Mann, 2005). Standards emphasize answering questions correctly, instead of conceptually understanding a topic (Sandholtz

et al., 2004). Due to this mismatch in instruction and thinking styles, gifted students who think differently from the linear educational approach are at risk for underachievement and eventually underemployment (Mann).

Identification of Gifted Students

Considering how instructional strategies are currently being narrowed, how might identification procedures become minimized? When identifying students with gifted abilities, it is common for teachers to initially look at standards-based assessments, particularly as a screening tool for the nomination process. Unfortunately, spatial strengths are rarely demonstrated on achievement tests that fail to include nonverbal components (Mann, 2005). Without a balance in creativity and standards, how can special populations of students demonstrate their abilities? When teachers alter their instructional focus towards knowledge and skill levels, they may inevitably be assisting in the underrepresentation of gifted minority students (Moon et al., 2002). Minority students tend to suffer when instruction is based on state testing and daily routines of fact and skill practice (Moon et al.).

Similarly, students who are twice-exceptional, or gifted and learning disabled, often possess creative talents that are rarely detectable in sequential classrooms that focus on standards (Baum, 1990). When schools only award strong verbal abilities, students who are twice-exceptional with spatial strengths are often forgotten (Baum). Strategies critical to special populations of students, such as hands-on learning and thematic units, are being exchanged for a limited instructional collection (Sandholtz et al., 2004).

Solutions for Achieving a Balance

Based on current teaching trends, how do we prevent standards from consuming teaching goals, objectives, and time? How can teachers keep their students' creativity and their own individual creativity intact? Three components, including teacher behavior, learning environment, and instructional strategies, may be used to achieve this equilibrium.

To begin, one of the greatest controversies regarding creativity in education is whether or not it is teachable. According to Murdock (2003), creativity is teachable. Creativity does, however, require specific instruction (Kay, 1998). Knowledge of creativity affects how it is taught, even though teachers who have a strong understanding of the concept rarely implement such practices (Ugur, 2004). Teacher behaviors that influence creativity include how the teacher acts as a role model in demonstrating creativity and whether or not the trait is acknowledged and rewarded (Ugur). Teachers who realize creativity is multidimensional, not an ability or personality trait, will nurture the concept within their classrooms (Ugur).

As teacher behavior contributes to student creativity, the environment the teacher creates is equally critical. The common themes of freedom and reflection are evident throughout research associated with creativity. Freedom is vital for creativity to evolve and to establish an environment conducive for the flow of thought (Erez, 2004). Freedom is essential in the making of students who are revolutionists. The predetermined agenda of the traditional education system creates evolutionists (Erez). Similarly, when assessment and exams control the learning environment, freedom becomes limited. Because of the time spent in preparation for tests, creativity is compromised, along with student choice to explore topics in-depth (Erez). Freedom of thought and the generation of unique ideas are critical aspects within the learning environment, although these areas are rarely observed in traditional classrooms (Ugur, 2004).

To continue, reflection time that allows ideas to incubate and formulate is crucial in order for students to creatively develop innovative products (Sternberg, 2003). Students need time to analyze and critique their own ideas in order to redefine problems (Sternberg, 2003). Extraordinary ideas may take years to evolve and think-time is critical for creative thoughts to emerge (Kay, 1998). Unfortunately, time for reflection is minimal in fast-paced classrooms oriented towards standards (Loveless, 2003).

Finally, teacher behavior and the classroom environment can be supported through a variety of instructional repertoire that nurtures creativity, and also continues to establish a strong knowledge base. Whereas standards provide a quick-fix and a direct route for teaching to tests, creativity requires a broader view that keeps the same educational goals in mind, but utilizes innovative paths to reach the destination (Ritchhart, 2004). Because proficiency of the basics is a goal in most school systems, time spent towards input/output methods directs instructional time. Gifted students need time and space to work with revolutionary ideas in an unstructured and free system born of opportunities for trial and error (Erez, 2004). Students benefit when educators surrender control and give students responsibility for their learning. With this in mind, how does one go about implementing creativity in the classroom in order to balance instruction?

The following strategies may be beneficial:

1. Foster imagination and fantasy by providing students with opportunities for creative writing (Ugur, 2004). Metaphorical thinking should be emphasized as an avenue to allow students to think deeply about diverse concepts in order to discover relationships in ideas (Kay, 1998). Providing freedom for students to develop their own style of writing, apart from the structured format of expository writing, will help them find their voice and allow for flow of thought. Likewise, including a variety of writing options such as script writing and vocabulary stories that reinforce new words and concepts can emphasize creative thought processes (Folsom, 2006). The motivation derived from creative writing may help students move beyond standards and on to an entirely new level of writing.

2. Implementing interdisciplinary work and problem solving offers a variety of perspectives from different vantage points that will promote creativity (Erez, 2004). In order to cultivate creative processes, open-ended projects and assignments that give students choices will allow them to express themselves in independent directions (Ritchhart, 2004). Integrating creativity with problem-based learning can help students connect many disciplines including art and ethics (Mahboub, Portillo, Liu, & Chandraratna, 2004). Implementation in the classroom may include creativity styles exercises where students identify and demonstrate their individual creativity. Another method includes designing new products for everyday common items, such as the paperclip, by working through creative processing techniques (Mahboub et al.). A helpful Web site for emphasizing creative problem solving is "Let's Get Real," found at http://www.LGReal.org.

3. Compacting or allowing students to spend additional time on extension and enrichment projects upon mastery of basic skills provides needed time for creative activities. In addition, contracts that outline what, how, and when a student will be learning can promote independence. Contracts provide students with opportunities to make choices and direct their course of study (Winebrenner & Berger, 1994).

4. Technology is an additional strategy that implements the use of creative thought. Creativity can be fostered through technology tools such as word processing, concept maps, graphic software, CAD/CAM applications, multimedia, Web pages, digital cameras, and image manipulation software. These tools allow students to show connections and create products that represent novel and abstract ideas (Loveless, 2003). Information and communication technologies (ICT), including concept mapping and graphic software such as Inspiration Software Inc., may be used to develop avenues that link ideas quickly and demonstrate conceptual relationships. The highly visual capability of ICT tools may be used to enhance creative development in order to improve writing achievement and help students become proficient writers based on standards (Riley & Ahlberg, 2004). Through technology, space can be provided to allow creativity to develop (Loveless, 2003).

5. The Internet is a useful resource that links the world to students by offering numerous sites to music and art galleries that can connect visual arts with all subjects. Web sites that promote creativity include http://www.kids-space.org, http://www.creativityforlife.com, and http://www.creax.net.

6. Teachers may consider using a curriculum framework such as Teaching for Intellectual and Emotional Learning (TIEL) that contains a creativity component. TIEL connects general education goals with gifted education while equalizing creativity with other intellectual domains. The framework includes the operation of divergent thinking that emphasizes creativity and promotes an appreciation of beauty through the exploration of art, culture, literature, and nature. TIEL provides a space for creativity in the curriculum as students develop fluency, flexibility, and originality of ideas (Folsom, 2006).

7. Models that utilize creativity include the WICS (Wisdom-Intelligence-Creativity-Synthesized), which provides a framework for giftedness to be nurtured through leadership. The creative component allows students to redefine and analyze problems while persuading others to value their individually developed solutions. Leadership opportunities prepare students to take creative risks as they learn through authentic experiences (Sternberg, 2005).

8. Teachers can make a conscious effort to differentiate their instruction to meet the needs of varying learning styles within their classroom. This requires assessing the learning styles of students and adjusting the structure of the classroom to meet individual needs. Both sequential and creative modes of instruction should be implemented in order to cater to students' strengths and ultimately raise test scores. This balance is a critical piece to providing equitable opportunities for all students to demonstrate proficiency on standards-based outcomes.

9. An additional strategy for promoting creativity is to broaden assess-

ments used to evaluate students (Harlen & Crick, 2003). Portfolios and other types of informal evaluation will allow a comprehensive picture of the child to appear (Ritchhart, 2004). Because a single score tells little about a child's needs and knowledge, portfolios emphasize individuality and break through the barriers of different thinking styles that standards-based testing does not address. Differentiating assessments allows for proficiency of standards to be measured while addressing individual strengths.

Discussion

The question of whether standards-based instruction and creativity can find a balance in the current world of education guided this literature review. Upon evaluating the research, the largest obstacle lies in how creativity is valued by educators, politicians, and society. Due to the subjective nature of creativity, it is difficult to assess and observe the trait, unless products accompany the thought process. In a society where productivity is essential to success, creative thinking is often ignored. A broad definition of creativity is necessary in order to ensure stereotypical traits of creativity do not define the concept. It is evident that creativity plays significant roles in a student's ability to problem solve, think innovatively, and cope emotionally. This silent intellectual component is a critical piece that benefits all of society. Ultimately, creativity can be taught (Murdock, 2003).

At this time, our school systems are locked into a mode of input/output instruction, where a student is expected to learn and memorize basic skills and demonstrate his or her knowledge on an assessment (Erez, 2003). This in return creates linear thinkers who become followers, not leaders; evolutionists, not revolutionists. In a time where innovative thinking is critical for our world, knowledge-based learning is not enough, particularly for gifted children.

Due to their unique characteristics, gifted students have the potential to impact the world. Unfortunately, if instruction is mismatched with their needs, motivation for learning will suffer. As the research concludes, gifted students thrive when they have freedom and choices in their learning, along with open-ended assignments and interdisciplinary learning that correlates with abstract and global concepts. Standards-based education tends to focus on skill-level instruction that consumes time available for creative teaching. Due to the current trend in education, the question is no longer whether or not standards and creativity can be balanced, but whether or not our educational system will allow them to be. The overwhelming pressure on schools to reach Adequate Yearly Progress (AYP) is restructuring the entire system of education, and within these parameters, students, particularly special populations, are suffering. With this type of mandate, veering away from standards-based teaching could be detrimental to schools, as penalties are inevitable to systems that fail to meet the requirements. When punishment is associated with failure, risks that incorporate trying new ideas in teaching become nonexistent, as traditional methods matching the criteria for testing success appear to be a much safer route.

An example of the influence testing has on instruction may be observed in Summit School District in Colorado, which evaluates teachers using criteria for a standards-based classroom. Teachers must show evidence that content standards are the focus of the lesson and students are expected to connect the lessons they are taught to the standards. Although this focus benefits goal and objective writing for lessons and ensures necessary content is covered, no criteria for including creative or innovative methods that integrate high-level thinking skills are mandated. This is just one example demonstrating the lack of balance in standards and creativity throughout the United States. Due to the pressures associated with teaching, instruction becomes one-dimensional, and the freedom teachers need to develop creative teaching strategies and methods may be dissolved in the daily expectations to conform to standards.

Furthermore, as we explore thinking styles, it is disconcerting that students who possess spatial strengths are often ignored. Standards-based reform caters to sequential thinking, while creativity optimizes holistic thinking. In order to capitalize on the brain's ability to make connections, a balance in our instruction must be implemented. Special populations, including minorities and gifted/learning-disabled students, will rarely have opportunities to demonstrate their gifted potential in a linear educational system. Likewise, assessments that focus on one aspect of learning are greatly weighted in determining eligibility for gifted programs. This snapshot of what the student knows is a detriment to special populations who perform better with opportunities for creative expression. If creative activities are rarely used in the classroom, students may become nonproducers and potential will be lost.

Recommendations

Future research possibilities may include quantitative methods of comparing students' success using a balanced curriculum versus solely a standards-based curriculum. Likewise, qualitative methods including observation, surveys, and questionnaires may be useful in determining students' motivation and success when creativity is emphasized in the classroom. Teacher behavior, including enjoyment in the teaching profession and feelings regarding opportunities to express individual creativity, may be useful in determining teacher attitude and effectiveness.

Conclusion

As standards-based curriculum continues to encompass the current education system, it is essential that creativity be acknowledged as a critical aspect of instructing students. The imbalance education is experiencing is not without consequences, as students are losing opportunities to work with sophisticated concepts, problem solve, and experience freedom in learning. Standards-based reform is producing environments of bias toward minorities, gifted/learning-disabled students, and spatial processors who are required to adjust their natural abilities to the construct of standards.

If we want to develop students who are motivated to think deeply and seek knowledge, educators must create environments that allow children to think freely beyond the scripted curriculum that is dictated by high-stakes testing. Adding creativity to daily instructional practices will ensure that students are given opportunities to develop all of their potential, not just a small part as required by standards-based education. GCT

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