Teaching and Learning Outside the Box: Inspiring Imagination Across the Curriculum

Kieran Egan, Maureen Stout, & Keiichi Takaya, Editors Teachers College Press, 2007 \$22.95, 160 pages

Reviewed by Travis Davey

Public education agendas, in streamlining student performance outcomes, have quarantined imagination to the confines of the arts and labeled it as "frill." The emphasis on efficient and effective learning trims imagination from core curriculum instruction. Imagination, however, is what the editors of *Teaching and Learning Outside the Box* propose to be the "essential aspect of education" (p. vii) and the "most effective tool" (p. 4) educators have for improving student achievement. This energetic collection of articles tries to bring color to a profession colored gray by the confines of testing outcomes. Justified by research and illustrated with classroom examples in the basic curriculum and in areas of social concern, the contributors of this book present a case to instructors of pedagogy, curriculum designers, and legislators, as well as teachers and administrators, for reevaluating the standards of curriculum and instruction.

In Part I of the book, the editors introduce historical and research-based justifications for imagination in education. Egan begins by briefly outlining the historical justification for the value of imagination in education by tracing the perspective of imagination through the history of the Western world with illustrated stops at intellectually historical landmarks. The Bible and Greek mythology punish the idea of imagination and set a precedent of mistrust in the imagination evident in the stories of Babel and Prometheus. One of the most recognizable teachers in history, Plato, thought reason to be the most valuable intellectual function where imagination was regarded as an inferior function and in "conflict with reason" (p. 5). Egan cites Enlightenment philosophers David Hume and Immanuel Kant for suggesting a "new role" for the imagination as being "crucial to our ability to construct a coherent view of the world" but still attaching a magical essence to imagination (p. 6). Imagination becomes a "creative, generative power," says Egan, during the

Romantic Movement. Here, imagination is seen as a crux where the many capacities and features of our minds, even our emotions, "intersect and interact" (p. 8). Egan proceeds by outlining why imagination, when thought of as energy rather than as a "thing," makes mental life "more meaningful," thus heightening the capacity of all mental functions.

Egan's energy is carried on by Takaya, who succinctly brings the theoretical distinctions and definitions of imagination to the classroom for a practical perspective on imagination. As a classroom teacher, imagination is what is perceived in the student who does not necessarily achieve at the current task or by commonly accepted criteria of excellence. It is what teachers intuitively recognize as the possibility of future blossoming in these children, and thus the impetus for modifying curriculum requirements and teaching methods, and giving children the "flexible space in which to explore" (p. 40). Stout then presents educational research and introduces the relationship between critical thinking and imaginative thinking. Based on Benjamin Bloom's taxonomy of intellectual behaviors, Stout proposes that evaluation, the highest level of cognition, requires imagination to "hypothesize about what is possible" (p. 58). Imagination, Stout offers, is a fountain that spurts forth ideas. Then, one uses his or her critical thinking to "reason through" those ideas and evaluates whether the thought processes have productively moved toward conclusion. It is through our imagination, then, that the individual moves to the highest level of thinking.

After setting the context for imagination in the classroom, the authors of Part II set out to address the myths surrounding imagination, and then offer glimpses of imaginative education in the classroom. This section's chapters address the value and application of imagination in all areas of the curriculum, including math, literature, science, and fine arts. The authors also address how imagination relates to at-risk youth and multicultural education. The energy of the editors is evident in all chapters, with few dead spots in the chapters due to a consistent format of introducing the topic, presenting the research, applying concepts to the classroom, and wrapping up with concluding thoughts that highlight the responsibilities of the teacher. A concisely written and easily digestible example is Peter Liljedahl's chapter entitled "Affect and Cognition Reunited in the Mathematics Classroom: The Role of the Imagination." Liljedahl acknowledges the lack of imagination that often characterizes math lessons and classrooms, briefly presents a few conceptual distinctions, and then explains how through the teacher's structured "problem posing" the student's imagination kicks in gear to go beyond the immediate example to see "how things can be 'otherwise" (p. 67). The teacher, claims Liljedahl, must structure questioning to engage the imagination and allow for the formulation of new ideas. Liljedahl models this structured questioning to illustrate how calculating the number of gears on a bike can be brought to the most important aspect of mathematical thinking—"abstraction" (p. 72). Elementary through secondary school educators teaching math will be energized by Liljedahl's example. With diagrams and charts, the value of imagination in mathematics is brought clearly into view and into the classroom.

Justification for including imagination in the curriculum can be found throughout Teaching and Learning Outside the Box. By providing researchbased arguments for the value of imagination in education, the contributors to this book hope to transform "the entire educational experience by stimulating the imaginations of teachers and students" (p. vii). To their credit, the book is written with a consistent energy and an inspiring view of the future for all those involved in education, both public and private. For educators and administrators working within the confines of public agendas and legislation, the book provides a vision of new directions or methods that will bring variety back to a testing-based curriculum. Catholic schools can apply the book's vision to their commitment to guide students to a spiritual understanding of their role in and relationship with the world. Since the Catholic view of education operates outside the legislative confines of end-of-grade tests, there is a freedom to explore the usefulness of incorporating imagination into curriculum planning and instruction. As Thomas Groome explains in What Makes a School Catholic? (1996), the focus of a Catholic school education is to bring students beyond the tangible classroom lessons to a connection with the "Divine Truth" that grounds all knowledge. Learning is more than memorizing concepts required by a core curriculum. Instead, students should be encouraged to look through these concepts and continuously derive questions that lead them to an understanding of God as the source of all knowledge. Instructing through imagination may be the means by which educators guide their students toward this questioning and insight. Ironically, the next step for the authors of Teaching and Learning Outside the Box is to create an imagination-based curriculum to present methods that support teachers and administrators too fearful or myopic to take the next steps into imaginative education.

References

Groome, T. (1996). What makes a school Catholic? In T. McLaughlin, J. O'Keefe, & B. O'Keeffe (Eds.), *The contemporary Catholic school* (pp. 107-125). Washington, DC: Falmer.

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