

**Kieran Egan, Annabella Cant and Gillian Judson (eds):
*Wonder-full Education: The Centrality of Wonder
in Teaching and Learning Across the Curriculum***

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The book '*Wonder-full Education. The Centrality of Wonder in Teaching and Learning Across the Curriculum*', edited by K. Egan, A. Cant and G. Judson, is a series of documents about the concept of wonder and its relation to the curriculum. The main reference in almost every one of these documents is the innovational work of Kieran Egan (1997, 2005), which guides or inspires them and/or appears as a 'theoretical umbrella'. The concept of wonder is polysemous and some of the documents in the book are dedicated to the clarification of this term. For example, the paper of Y. Hadzigeorgiou (*Reclaiming the Value of Wonder in Science Education*) is very enlightening, as the writer dedicates a part of his work to the discrimination between wonder having to do with scientific curiosity, which mainly leads to a conceptual approach of reality, and wonder related to elements as mystery and awe, in other words, an emotional response which may be considered as a pre-requisite for engaging with the object of the study. The reader may look for interesting clues regarding the various meanings of the concept of wonder and especially its relation to other similar concepts, such as admiration, awe and surprise, in two more articles: D. Trotman's, entitled *Wow! What if? So what? Education and the Imagination of Wonder: Fascination, Possibilities and Opportunities Missed*, and K. Egan's *Wonder, Awe and Teaching Techniques*.

The book is structured in three parts. The first section, *The Nature of Wonder and its Educational Uses*, is as much explanatory as it is practical when it comes to the concept of wonder. On the one hand, it attempts to make explicit the philosophical and educational extensions of wonder and, on the other hand, it provides the reader with specific examples regarding science and mathematics. The following two parts, *Engaging Wonder in Everyday Classrooms* and *Dimensions of Educational Wonder*, in my belief, are separated rather artificially, than essentially; they both offer functional ways to introduce and apply wonder-full education to instruction.

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In my opinion, the papers of most interest are those that describe specific suggestions for introduction of programs, strategies and teaching techniques into the curriculum. Several of these texts refer to early childhood education, for example, those of F. Griffiths, *The Talking Table: Sharing Wonder in Early Childhood Education*, A. Cant, *Wonder for Sale*, and P. Hakkarainen and B. Felholt, *Creative Imagination in Play-Worlds: Wonder-Full Early Childhood in Finland and the United States*. However, an education that seeks for the sense of wonder, according to K. Takaya (*Renewing the Sense of Wonder in the Minds of Students*), ought to include educational degrees such as upper high school and university. He claims that a shift of emphasis away from early childhood is required, mentioning that ‘if feeling wonder is so natural in childhood and not so natural in later years, it is much more urgent to focus in the later years’ (p. 101).

The papers presenting educational strategies, regardless of educational field, are interesting as well. A typical example is D. Flemings’ paper, *An Educational Leadership Perspective: Managing and Revealing the DNA of Wonder in Teaching and Learning*. In my view, the author brings forward one of the two greatest issues that constitute serious obstacles to a wider dissemination of the various versions of wonder-full education and the partial displacement of traditional educational and didactical forms: ‘the missing of a strategy approach to “wonder-led learning” that is consistent across the whole school or school system’ (p. 179). The other obstacle, I believe, is the lack of a broader epistemological and methodological research framework, which would have the ability to illustrate that wonder-full education really is a reliable alternative solution to the problems and deadlocks of traditional educational and didactical environments.

Wonder as a pedagogical tool and/or an educational strategy and didactical method may be linked with a variety of teaching subjects. The arts, the natural sciences, mathematics, literature and foreign languages are the privileged fields that could make use of a wonder-full education. These subjects (and potentially others as well) could be approached through the use of didactical techniques, such as narration of stories (e.g., K. Egan, *Wonder, Awe and Teaching Techniques*), play, mostly for younger ages (e.g., L. Fels, *The Upside Down Picnic Table: The Wonder of Learning through Improvisational Play*), various techniques involving questions, such as ‘unknown questions’, to which K. Miyazaki refers (*From “Unknown Questions” Begins a Wonderful Education: Kyozei-Kaishaku and the Dialogic Classroom*) or through even broader didactical models, such as the one described by L. Bianchi (*The Keys to Wonder-Rich Science Learning*). Allow me to felicitate the outstanding paper of K. Miyazaki, who, referring to a dialogical didactical technique that was developed in Japan from 1930 to 1980 (Saitou pedagogy), links the concept of wonder with this particular dialogical technique as much as with the theoretical approach of the semiotician Mikhail Bakhtin. As Miyazaki mentions ‘the lesson in which the unknown question is discovered shared and explored collaboratively in a classroom is an “achievement that makes the familiar seem strange”’. That is why the unknown question is the key to a wonder-full education’ (p. 115).

In conclusion, the book criticizes traditional education and teaching, while it provides the readers with historical, philosophical, pedagogical and educational arguments for the recognition of the importance of wonder as part of the educational significance of emotion and imagination. It is full of ideas for innovation with wonder-full education playing a key role. Still, the related educational community has a long way to go in order to show that it has powerful methodological tools in order to systematically investigate all those factors that lead to an insured emotional and cognitive progress of the children and pupils who take part in activities related to the context of ‘wonder’ framework. And of course the way is even longer in order to convince the traditional educational systems and curricula to give

wonder-full education some space. Above all, the societies that support them must be convinced.

References

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