

## **Kieran Egan**

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Kieran Egan was born in 1942 in Clomel, Ireland. He obtained his Bachelor of Arts degree in 1966 from the University of London. After graduating he was employed at the Institute for Comparative Studies in Kingston upon Thames as a research fellow. Egan then began a Ph.D. program in philosophy of education from Stanford Graduate School of Education, but after two years he transferred to Cornell University and completed his degree in 1972. He then worked at Simon Frasier University as a professor of education.

Egan's work has focused on educational theory as it pertains to curriculum, teaching practices, and learning institutions. In the book "The Educated Mind: How Cognitive Tools Shape Our Understanding," Egan proposed a theory of cognitive tools to replace dominant learning theories used in education, such as those proposed by Jean Piaget and John Dewey. Egan identified five cognitive tools (or kinds of understanding) that are mastered during development, which are somatic, mythic, romantic, philosophical, and ironic understandings. Egan proposed that each cognitive tool can be introduced to children as they reach appropriate levels of biological maturation and have reached sufficient mastery of previous cognitive tools, with somatic understanding occur from birth to age 2; mythic understanding occurring from ages 3-7; romantic understanding occurring from 8-14; philosophic understanding occurring from 15-20; and ironic understanding occurring from age 21 and older. Egan argued that the role of teachers is to ensure that new cognitive tools are introduced at the appropriate point during development and only after sufficient practice and mastery of previous cognitive tools has been

reached. He also indicated that teachers are to engage student's emotions and imagination as they learn about the world to facilitate the development of cognitive tools.

Each cognitive tool has specific behaviors and thinking patterns that are targeted for mastery. The main goals when developing Somatic understanding are mimetic behavior, mastery of physical activities, and non-verbal appreciation of the world. Mythic understanding is aimed at the mastery of oral language, binary opposite thinking, metaphors, stereotypes, and cultural socialization. Romantic understanding includes mastery of literacy and writing, improved social navigation, and finer gradation in perception and thought.

The main goal when developing philosophical understanding is mastery of theoretic abstraction, which involves organizing facts and information, formulating theories, and supporting theories with additional information and dismissing irrelevant or inconsistent facts. Ironic understanding is aimed at mastering refined reflexiveness, skepticism regarding theories, and skepticism about features and interpretation of facts.

In contrast with other theories of cognitive development where each stage of development is entirely superseded by the following stage and development is an inevitable result of maturation, Egan's theory indicates that each cognitive tool contributes to current understanding and that the development of cognitive tools occurs through use and practice facilitated by educators rather than being an inevitable developmental process. Furthermore, Egan's theory proposed that understanding is best developed through the combination of cognitive tools.

Egan has also sought to improve educational engagement through the use of narrative and imagination for both students and teachers. Egan challenged notions that familiar ideas and experiences are most effect for instruction, instead suggesting that learning material is more

easily internalized and retained when framed in concepts that are unforgettably weird or exotic. The goal of this approach is to engage the imagination and emotions of teachers and learners, thereby enhancing the acquisition of cognitive tools and information. In 2001, Egan founded the Imaginative Education Research Group to disseminate and facilitate imaginative teaching and learning to increase educational efficacy. This program provides planning frameworks, practical examples and tips, and offers workshops throughout the world.

Other related projects include the Learning in Depth program, which has children learn about a specific topic throughout their school career along with the usual curriculum; the Whole School Project program, which has all students and classes of a school study a particular topic, usually related to local phenomenon, for three years at a time; and the Imaginative Literacy Program, which focuses on developing literacy by cognitively and emotionally engaging students through the use of narrative, feelings and images, metaphors, the exotic, hobbies and collecting, and many other strategies.

Egan's work is well recognized, and he has received many awards and grants throughout his career, including election to the Royal Society of Canada in 1993 and an appointment as Canada Research Chair in Education in 2001. Furthermore, Egan has been a prodigious writer of books, which outline his theories and practical examples for applying his theories in a classroom setting.

### **Further Reading**

Egan, K. (1997). *The educated mind: How cognitive tools shape our understanding*. Chicago, IL:

University of Chicago Press.

Egan, K. (2005). *An imaginative approach to teaching*. San Francisco, CA: Jossey-Bass.