

Sharpening Intellectual Tools

*The Educated Mind:
How Cognitive Tools Shape
Our Understanding*
Kieran Egan
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reviewed by Robert Fisher

‘I know a lot of things,’ said an eight year old recently in discussion ‘but I don’t always understand them.’ What does it mean to understand something? Is there only one kind of understanding or are there many kinds? And how do we teach for understanding? These are some of the questions Kieran Egan seeks to answer in a book which offers a refreshingly clear read and the best introduction to his ideas.

Egan argues that the supposed ills of education, which include underachievement by a majority of students and inadequately trained teachers, stems from an incoherent view of education. The whole of educational theory can, according to Egan, be summed up in three ideas which are fundamentally incompatible - education as socialization, education as a knowledge-based curriculum and education as personal fulfillment. We are therefore presented with a dilemma: Is the purpose of education to make good citizens with socially relevant skills and attitudes? Or is it to master certain bodies of knowledge? Or is it the fulfillment of each student’s unique potential?

Egan argues that these conflicting aims bring about clashes at every level of the educational process from curriculum decisions to teaching methods. He believes that the homogenising effects of socialisation are at odds with Socratic inquiry which offers a challenge to any social consensus by asking: ‘Is this really the way to live?’ But are these aims and approaches to teaching really incompatible? Surely we want to socialise students into agreed norms and values of the community, and also help them to fulfill their potential as critical and creative thinkers. Are we not aiming to develop socio-moral maturity at two levels, firstly the immature level where young students learn to follow the rules and authority of their group or community (as one child put it: ‘We learn to take turns and listen to one another because we’re told we should’). The second level of socialisation is at the mature level when students learn to act through reasoned choice, principles of fairness and care for others (‘We do it because we believe it is the right thing to do’). We want social harmony and cohesion, but we also want students who are critical thinkers and morally resilient. This may be a dilemma, but not an incompatibility. In the richly textured world of the classroom most of us teach with a range of aims in mind.

Plato and Rousseau would, as Egan says, have found their ideas incompatible. Their views on education represent in Egan’s sense binary opposites, lying at the extremes of traditionalist and progressive wings which are at odds in almost every media account of educational issues. Modern conservative critics like Bloom and Hirsch blame Rousseau and Dewey for a perceived decline in educational standards, while liberal progressives like Lipman blame educational failings on the traditionalist inheritance of rote learning.

Egan is right to point out the incompatibility of extreme views such as the rigid academic and the liberal ‘self discovery’ views of education, but these views are not descriptive of the philosophy of most teachers, they are too simple to capture the rich complexity of educational ideas and practices. As Nietzsche pointed out language is the source of oppositions whereas reality has only continua and infinite gradations of difference.

Language and the language of opposites falsifies the world when it renders simple what is complex. In the messy world of the classroom our challenges are complex, and only to outsiders do they appear simple. As practicing teachers we are ever caught between the needs of order and adventure, between creating a stable rule-bound environment in which inquiry can take place and ensuring the freedom necessary for students to make their own explorations and discoveries. Community of Inquiry methods, not mentioned by Egan, show how adventures in ideas can be pursued within a prepared social order which embodies democratic principles. Socialisation can co-exist within a process which extends knowledge and offers the prospect of personal fulfillment, and for me the practice of philosophy for children provides proof of this.

Egan presents us with his own alternative to these philosophies, conceiving education as the ability to use particular 'intellectual tools', principally language, to shape how we make sense of the world. These mediating tools create five successive layers of understanding identified

as: somatic, mythic, romantic, philosophical and iconic. These levels of understanding develop through the evolution of cultural and intellectual history and through individual lives in a sequence culminating in the composite and therefore sometimes muddled modern mind.

Egan sees education as the process of developing these different kinds of understanding in a way that mirrors cultural history. As a species we developed bodies before language and the human body is our primary tool for mediating understanding, what Egan calls Somatic understanding. Our intelligence is always embodied, but develops through language (the body remaining a primary metaphor in speech). The patterning of understanding through oral language in early societies (and in young children) leads to the development of Mythic understanding, and as particular forms of literacy develop so does Romantic understanding. As the ability of communities and individuals to create abstract theories develops so does Philosophic understanding, and finally as we become self-conscious about language, culture and the relativity of knowledge our journey towards wisdom culminates in a kind of post-modern understanding which Egan calls Ironic.

Egan's analysis of different forms of understanding is richly textured, drawing on sources from psychology, anthropology, philosophy and literature. His style is academic but conversational, richly steeped in Western culture. He freely admits that his frequent references to the ancient Greeks will dismay more radical spirits. And it is a pity that he does not draw on more cross-cultural sources to support his thesis.

Egan assumes that understanding is shaped through the development of linguistic intelligence. But the educated mind is surely one in which all modes of intelligence are fully developed. In Gardner's theory of multiple intelligences these would include not only linguistic but logico-mathematical, musical, spatial, interpersonal and other kinds of intelligence. Egan's theory is not so much a comprehensive theory of education, but a theory of linguistic intelligence conceived in evolutionary terms. It is a reworking of Piaget's stage theory, and suffers the drawbacks of that kind of biologically determined approach. The problem with age-and-stage theories is that it results in a hardening of the categories. Romantic understanding he says appears at around the age of eight, and philosophical understanding develops around the age of fifteen when students become capable of formal reasoning and develop a sense of self. Those of us who engage in philosophical discussion with young children believe that aspects of philosophic understanding can begin much earlier. Egan shows how abstract thinking in children becomes possible through the binary structuring of concepts which are developed through their attempts to understand stories. Egan points out that using language involves the use of abstractions, and that young children are capable of using abstracting words like 'hate', 'anger', 'love', 'human' and 'animal'. He stresses the importance of story forms that are affectively engaging, that dramatise binary opposites and points out the need to help children mediate the meanings of the central, common and contestable concepts involved in any good story. What Egan lacks is a methodology to translate this process into classroom practice. What community of inquiry does is provide a means of making thinking about concepts more reflective and refined. What does 'hate', 'anger' or 'love' mean? What is the difference between 'human' and 'animal'? What is 'time'? Such abstractions become conscious, become concepts better understood as a result of the mind's reflecting on them. The absence of awareness of abstractions in young children is, as Egan says, not a sign that they are not part of their language and thinking, but just that they are not discovered, developed and understood through the mental operations of reflection, discussion and translation of meaning. This takes a long process to develop but we who practice philosophical inquiry

with children believe we have a method through which the understanding of concepts can be accelerated. The trouble with Egan's 'teaching as story telling' is that although it may develop mythic or romantic understanding the nature of words and ideas involved in the story can remain largely unproblematic. If stories are 'given' what need is there to think about them?

Egan reminds us that 'inquiry' first meant history, and as exemplified by the 'father of history/inquiry' Herodotus (and today's equivalents such as the 'X-files') it was characterised by stories of exotic, romantic, and amazing persons and events. We should try to capitalise in our teaching on the Romantic (what might be called the Guinness Book of Records approach to teaching). It is true that much of teaching in maths, science and the humanities can be enriched by a story's ability to humanise knowledge and develop a sense of wonder. But stories need to be interrogated if their meaning and relevance are to be revealed, and students need to be helped to move on from the literal or Romantic level of understanding to the conceptual or Philosophic.

This distinction between Romantic and Philosophic understanding, between stories and theories, has been explored before (cf. Bruner's distinction between 'narrative' and 'paradigmatic' forms of thought). What is special about Egan's analysis is that gains in understanding are also accompanied by losses, and he warns us that the Romantic can alienate us from the Mythic, and the Philosophic alienate us from the Romantic, the Mythic and the Somatic. It is easy to see how educated people can become alienated from each other, and from ways of knowing such as the imaginative and the physical, by becoming locked into one form of understanding such as the philosophic or scientific. In espousing theory and realism we are in danger in Wordsworth's phrase of 'giving our hearts away'. Not everything needs to be analysed. Egan reminds us we need to retain the capacity for awe and wonder, for example by observing natural phenomena in silence and at length. Such experience develops Romantic understanding, necessary at all levels of education, and can lead to a spiritual awareness that is just as important in educating the mind or expanding consciousness as the Philosophic or Egan's ultimate category of understanding - the Ironic.

Ironic understanding is best summed up for Egan in Socrates' claim that he knew nothing. In the postmodern age we have come to doubt the canonical narratives, we no longer believe in the unveiling of Truth. All philosophical systems are open to doubt. Objective truth is seen to be unattainable, knowledge has been usurped by belief, a single truth by a variety of viewpoints, every story has become contingent, all meanings provisional. Against this alienating 'irony' which rejects all epistemological truths Egan posits what he calls a 'sophisticated irony' which enables us to accept and appreciate the value of all perspectives and all metanarratives and gives recognition to all beliefs. Egan's liberal ironist celebrates and values difference of view. His problem is that in a world of competing claims he has no criteria for judgement. If all are valid, how can he prefer one viewpoint over another? In a world of sophisticated ironists, who can lay claims to any truths, any over-riding values, any set of consistent beliefs whether moral, social, spiritual or cultural? For a sophisticated ironist can there be any right or wrong?

If like me you find issues and ideas in this fecund book which you wish to challenge or which stimulate your thinking, Egan provides a simple solution. He has boldly included his email and World Wide Web homepage addresses (on p173), and invites readers to respond, to question and to contribute to ongoing discussion. He points out that the development of Philosophical understanding needs the support of educational communities that systematically seek to develop it. In setting up his own electronic community of inquiry Egan exemplifies what he preaches. It is a model that we all might follow.

Egan has created a conceptual map marking out different kinds of understanding, ways that we have of coming to know things better. As a taxonomy it may not be complete, he sees for example science and philosophy as a single kind of theoretic understanding, ignoring historical divisions that arose between empirical and conceptual analysis. Scientific and philosophical forms of thinking (what Gardner calls 'intelligences') surely reflect different kinds of understanding. Egan's theory is explanatory in showing for example why young children find fantasy so engaging (they are at the Mythic level of understanding), why adolescents are so taken up with sports heroes and pop stars (at the Romantic level of understanding), why Philosophic understanding is difficult (its abstract nature) and Ironic understanding so rare. We need not follow Egan in viewing stages of understanding as determined by age. They can all, I believe, be stimulated in students of any age. We may not always succeed in involving young children at the Philosophic level, but we

can work towards it, and sometimes we may succeed in ways which lie beyond the expectations of this book.

Egan has surprisingly little to say about his highest form of understanding - the Ironic. The teacher he says needs to be at a higher level of understanding than that of his or her students. This is perhaps why ironic understanding is so difficult to teach, even if we should wish to. Perhaps the reason why younger children find philosophic and ironic levels of understanding difficult is that they require metacognition (thinking about thinking). What is clearly needed for teachers to teach Egan's higher forms of understanding is training in philosophical awareness. This is sadly not a feature of the reductionist view of teacher training currently holding sway in the UK where technical competence has replaced philosophical understanding in the search for higher standards of literacy and numeracy. What students need is both to develop basic competence (knowledge)

and also to develop cognitive tools that shape higher levels of understanding.

Egan's account concludes with some practical proposals on teaching for understanding. His aim is to humanise the curriculum by embedding teaching in human concerns and stories. The English curriculum can be enriched for example by the study of jokes, and the history curriculum by stories of Great Lives. An example he gives is of a study unit on Freedom and Oppression illustrated by stories of heroes like Spartacus, Gandhi and Martin Luther King. The trouble is that such stories do not 'tell vital parts of the human story' in the simple way that Egan suggests. They are not 'given' but are reports, interpretations and translations of experience. They need to be interrogated. Who is doing the telling? What does the story tell us, and not tell us? What does it mean? We need to train students not just to accept stories, even the most politically correct of stories, but to subject them to enquiry and to critical challenge.

Egan offers the following as a planning framework for developing Mythic understanding:

1. Identify importance
What is important about this topic?
2. Find the binary opposites
What binary opposites best articulate the importance of this topic?
3. Organise the content in story form
What story best embodies the concepts in the topic?
4. Conclusion
What is the best way to conclude and make explicit the binary opposites?
5. Evaluation
How can we know the topic and concepts are learned?

The principles embodied here are surely relevant at all stages of learning, namely that the cognitive conflict of thesis and antithesis (binary opposites) can lead to the synthesis of new understanding. A Community of Inquiry provides the ideal means for this purpose, even if the experience students feel after a philosophical discussion is one of still being confused but at a higher level!

To develop the awe and wonder he says is the heart of Romantic understanding Egan recommends the teacher use questions that surprise and challenge, such as 'How do birds fly?' and 'What is life?' There is value in offering random questions as a stimulus for thinking, but more value perhaps in using them as a means of systematic and sustained inquiry. What Egan does not explore is the value of students asking their own questions, nor does his method differentiate or discuss the kinds of questions asked. Egan's advice is generalised (students he says 'should study a variety of rhetorical forms', but does not say which forms, why or how). Egan is not of course dealing with detail but with strategy, with examples that illustrate his general principles. The problem remains of lack of empirical evidence to support his claims that these methods work in developing higher levels of understanding. There are some rich veins of practitioner research here for potential PhD students.

We may quibble about the detail, and question how his ideas are to be developed in the classroom but Egan's central thesis is surely right, a literate understanding requires intellectual tools that support imaginative and flexible thinking. It seems right too that in some sense we recapitulate in our intellectual development the evolution of human and cultural history. The point however is that through intervention we can accelerate

this development, and that our understanding is not biologically programmed through an age-related linear progression, but can be fostered at any age. Egan is essentially a Darwinian who in his own words has tried to bring 'educational thinking into the late 19th century'. I think he is being ironic here, or is he?

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