

The Need to Teach Reasoning Skills to Our Children

by

Roy Andersen

Some time ago, I met an educator in Australia. As we talked about education, he said to me: "You know Roy, nothing has changed. They still teach in school today much the same as when I was a kid." I had to agree, for I have found the same thing in every country I have been to. Of course, furniture has changed, rooms are brighter, and textbooks are happier to read now than when I was a child in school, but the basic way in which the teacher interacts with their students has not. Still today, the teacher gives out thoughts or directs their students to pages in a textbook. Eventually, they will question them on their understanding of this, and mark them accordingly. The students earn a mark, which eventually becomes a grade, and based on their very final grades they are sent out from school destined to be a manager or a worker in their society. This basic principle by which children are processed in school has not changed since education first became a formal institution over a hundred years ago.

When I first began to examine why education works this way, I was struck by the common thoughts of too many teachers I have met, who either told me: "The child was born that way" or "We can only work with what the parents give us." This ready acceptance to mark a child's effort as if the teacher's competence were not a critical part of the assessment they made, caused me to reflect upon why we don't teach children better. There are, of course, teachers who do not accept the situation they find themselves in and struggle very hard to help their students, I know this because I am one of them. But as I came to realize, it is the basic idea that a child's performance in school is more or less dependent upon the value of intelligence they inherited, that allows education to educate 30 or even 50 students with one teacher in the most economic way.

Yet, through my own personal experiences I found that my performance in education could not be allied to my supposed family intelligence. No relative of mine had done very well in school, and I was a failure when I left education. In fact, I failed all of the eight final examinations I was placed into at 17. I suppose I was more illiterate then, than I realized at that time. But for me, something changed. I left my factory job, joined the army, and there I learnt how to look after myself. I decided then that I wanted to go back into 'school', and when I did, I did not trust any teacher. I trusted only myself. I worked very hard, and I developed strategies with how to deal with information and most importantly how to apply this so that others could understand what I meant better. When I left 'this school', I did so as the top student in the first year and with 14 major examinations all with a 1st class distinction. I was accepted into a medical university, but instead chose a life of adventure and went to sea as an electronics engineer.

With this background, I struggled to agree with the belief that intelligence is inherited, so much so that I began a depth of academic research that would last over 20 years. Through that time, I studied

genetics, neurology, education, teaching and learning principles, psychology, political and social science, and molecular technology. The latter because I came to realize that it is the developing technology of a society that shapes the way education works, as it is required to produce citizens competent to operate the level of its technology.

As I worked outside mainframe thinking, I began, very slowly, to see how small parts did not fit to make the picture that was painted. I went back to the founding stages of psychology and in fact far beyond, and came to understand not just how it developed, but why it did so the way it did. As I did this, I came to recognize how politics played upon the way this science developed, and how this brought design into education and so the way children were prepared to be citizens. As I came to discover the misconceptions, fraud, and lies upon which intelligence was said to be inherited by early psychologists, so I came to realize how genetics has never agreed with this. After all, you can not go from the population level of what may be thought to be intelligence to the individual level, because the environmental factors are too diverse to understand. Equally, I came to understand that we were only just beginning to realize that our traditional understanding of the genetic aspect of intelligence is wrong. As I then studied how medicine developed into neurology and how our developments in the last 30 years have enabled us to understand more of what neurons are, so I came to see how the signal that passes through them is highly dependent upon the neurotransmitters it must work with. This understanding saw no fixed relationship in how the student thinks to that of their parents or their family line. As all this became clearer, I came to see how intelligence is far more modifiable than is imagined and so the real part of the mind in this. It was by understanding the influence of the mind in how information is processed, neurones directed to create networks and chemicals directing the flow of information through emotions, that I came to understand what intelligence really is and why it is not what we think it is.

However, my work is little understood by far too many educators and so despite different political agendas and cultural backgrounds, the way most children are taught in classrooms of every country of the world is little different than I described in the beginning of this article. In America, for example, teachers may teach through a sense of questioning, and in Asia 50 students may be directly instructed to, but the basic underlying means remains the same. Children are processed! How and why this is so, I explain in the first of my books "The Illusion of Education."

Because this processing is heavily reliant upon the reasoning that the child's performance is a factor of inheritance, my second book "Intelligence: The Great Lie" explains precisely why it is not. To qualify this, the third book "Brain Plasticity" offers a new understanding to what intelligence is and how it actually develops in the human being. To offer assistance and guidelines to the parent and teacher I wrote "Mediation: Crafting the Ability of the Child for School". Then, to explain why these four books are very important to be known and understood, I wrote many others that explain how our technology could dramatically alter our world and so the very real danger we are creating for our future generation, we may even say our civilization, by failing to EDUCATE THE REASONING ABILITY of our children.

The purpose of the books I have written is to explain the necessity for this. For these books explain how the 'model of a citizen' that school should be producing today, and yet fails to do so, is a design of 150 years ago. Our children in school today will grow to live and work in a world that is far, far different than we can most likely imagine. We are simply not preparing them for this.

Roy Andersen