Something new, irritating and inexplicable happened to most of the citizens of Europe in the sixteenth century. Prices for staples like food and clothing began to rise. The average citizen blamed clothes sellers for greedily raising their prices. The clothes sellers protested that they were no more greedy than usual, and that the problem was due to the greed of the cloth merchants who were demanding more for their cloth. The merchants blamed the weavers, who blamed the wool merchants, who blamed the sheep farmers. The sheep farmers protested their blamelessness and said they had to raise their prices to be able to afford the increasingly expensive clothes.

So who was to blame? Someone was clearly ripping off the good citizenry, but no group seemed obviously richer, nor without the alibi that they were just responding to rising costs themselves. Where was the mysterious source of this irritant? Despite the polemics, finger-pointing, moral attitudinizing and even earnest inquiries, it was not until near the end of the century that Jean Bodin (1530–1596), the French political philosopher, worked out that none of the usually blamed suspects was responsible. Rather, the price-rise was caused by the use in the royal mints of Europe of the gold and silver plundered from Central and South America. An increase in the money supply caused what is now called inflation.

A somewhat analogous situation exists today with regard to schools. Since mass schooling was invented in the late nineteenth century, people have faced the new, irritating, and apparently inexplicable fact that, despite massive expenditures of public money and huge commitments of time by expensive professionals, the general educational achievement of schools is pretty derisory. The life-transforming and life-enhancing joys of education, hitherto available only to the very rich, were to be made available to everyone. But this boon has somehow been realized as a dreary, seedy and
largely boring enterprise that opens the promised riches of education to very few and leaves the majority suspicious of, alienated from, and even hostile to most forms of intellectual life. The promise that schools would at least produce a trained workforce able to adapt flexibly to the changing needs of an industrial and post-industrial economy is realized only in part and generally inadequately. Why is it so hard to educate people?

Reading about how to fix schools is disturbingly reminiscent of sixteenth-century debates about the cause of the price rise and how to stop it. Open any paper or magazine that discusses education, and a reader will find the polemics, finger-pointing, moral attitudinizing and even earnest inquiries aimed at the usual suspects: the lack of market incentives in schools, inadequately educated teachers, the genetic inability of 85% of the population to benefit from instruction in more than basic skills and literacy, drugs, the inequities of capitalist societies, the breakdown of the traditional family and its values, an irrelevant academic curriculum, a trivial curriculum filled only with the immediately ‘relevant’, and so on.

I want to suggest that the usual suspects are innocent, or at least innocent of this particular crime, and that the cause of our modern irritant lies elsewhere, in an hitherto unsuspected place.

When schools were set up in the late-nineteenth century, three ideas determined how they were organized and what their objectives were. The reason schools have never worked very well for most people is because these three ideas are mutually incompatible. Each one of them manages to find enough elbow room in educational systems mainly to undermine the effectiveness of the other two.

The three ideas

I know that locating the practical problem of education in the realm of abstract ideas does not exactly quicken the pulse. Arguments about the sixteenth-century price-rise were at least carried on against a background of tangible goods, green acres of property, and gold from El Dorado. The educational equivalents are certainly less tangible, especially to those who have been cheated of them by dysfunctional schooling. Anyway, let me describe these three ideas, and where they came from. I am sure they will be familiar.

The first educational idea is that children should be shaped to the norms, values and beliefs of the adult society. In the jargon of textbooks, this is called ‘socialization’. This idea of education is recognized when items in the curriculum are justified on the basis of their future social utility. So reading, writing, computing, sex education, consumer-economics, basic common knowledge and so on, are all justified in terms of their necessity for someone to get on and be a good citizen tomorrow. This is an ancient idea which contemporary societies have inherited from oral cultures long ago. When governments came to establish the public schools, this idea was still prominent, and the curriculum was designed to produce good citizens who would embody the dominant values and beliefs of the social group, and who would be equipped with the skills required by an industrial society. When
politicians fulminate about education, it is very largely this idea of education that governs their thinking.

The second educational idea was Plato's. As he chatted with the best and brightest of Athens, he concluded that well-socialized citizens were more or less contemptible. Their ready acceptance of the conventional norms and values of the society they grew into seemed to him appalling, as such beliefs, he showed, were typically a collection of confusions, illusions, stereotypes, prejudices and dogmas that did not bear much scrutiny. Plato proposed a new idea of education and bequeathed it to subsequent generations with such compelling force that they have been unable to shake it off; he conceived of education as the process of seeking the truth about reality. It requires a lot of hard work over many years to develop a rational, sceptical and ironic cast of mind and a commitment to the pursuit of knowledge that requires something akin to sanctity. It has never proven to be everyone's cup of tea. But when public schools were organized, their designers, too, were unable to shake off Plato's high-minded idea, and so they instituted a curriculum that aims to teach students many things that are of no practical value but which are supposed to help them to understand the world. For Plato, the mind is made up very largely of the knowledge that it accumulates, and accumulating a lot of the right kind of disciplined knowledge can turn the soul from its easy acceptance of whatever conventional rubbish happens to be fashionable to an austere and disciplined search for what is true, good and beautiful (Cornford 1941). Hard to knock, but hard to get kids enthusiastic about!

The third idea is largely derived from Jean-Jacques Rousseau. He shared Plato's contempt for the conventionally well-educated person. He also shared Plato's view that early socialization generally taught children a load of nonsense that was immensely difficult to dislodge once learned. But he thought Plato was wrong in his view that children's minds were shaped very largely by the knowledge that they accumulate. He argued, with a persuasiveness not much less compelling than Plato's, that the mind has an internal, spontaneous, natural developmental process through which it grows, and proper education is the process of furthering its fullest development. He suggested that the mind is like the body in that the particular food eaten does not radically influence the shape of the body; eating lots of broccoli does not make people grow to look like broccoli, so what people learn is not the vital part of education. Plato's idea was equivalent, Rousseau argued, to thinking that eating lots of broccoli would make people more broccoli-like. Sensible methodology requires educators to make what they teach conform with the nature of students' learning. So education became for Rousseau a matter of encouraging the fullest development of a natural psychological process, and thereby fulfilling as far as possible the potential of each individual student (Rousseau 1911). Clearly a more attractive and hopeful idea than Plato's – it promises the fulfilment of educational aims by simply doing what is easiest and natural. No wonder it has appealed so widely in North America, where it has become the anchoring idea of 'progressivism'.

Nearly all modern conceptions of education, from the most radical to the most conservative, are compounded from these three ideas. No one
holds one of them to the exclusion of the other two, of course; it’s a matter of the proportions in which they are mixed. So the more radical conceptions tend to combine a large amount of Rousseau with a small dose of socializing, and go very sparingly with the Plato. The conservative tends to stir in a good measure of Plato, a healthy dose of socializing, and go light on the Rousseau. The average politician throws in a very large dose of socializing, is very sparing of Rousseau, and sprinkles in just a little bit of Plato.

The three ideas are still familiar in all disputes about education. I think one might fairly describe educational arguments as nothing other than an assertion about the precedence these ideas should take in determining educational programmes. In recent battles over the social studies curriculum in various parts of the US, for example, some contend that children should continue to follow the sequence of study from self and families to communities to interactions among communities, etc., preferring more Rousseau and socializing over Plato. Those who argue for charter schools where strong academic programmes aimed at ‘excellence’ will predominate are expressing a preference for more Plato and socializing and a bit less Rousseau. I am sure that readers would find it easy to classify most educational positions in these terms. My main point, however, is that these three ideas, that have given shape to our schools from their nineteenth-century beginnings, are mutually incompatible.

**Incompatibilities**

It has been assumed that these three ideas, whether recognized in the form sketched here or not, are necessary constituents of any sensible conception of education. Everyone assumes that the school should try to socialize children adequately, and should achieve for each student academic achievements commensurate with their abilities, and should strive to ensure that each student’s individual potential should be developed as fully as possible. These have been taken as simply the goals of education, and although occasionally there may be tensions among these different goals, the aim for good administrators is to ensure a sound balance among them, and to ensure that none is sacrificed to the exclusive achievement of another – they don’t want to emphasize academic achievement, for example, at the expense of the development of shared democratic values, as Dewey (1916) feared might happen, or they don’t want to emphasize socialization to the point of encouraging unreflective conformity, or they don’t want to allow so much emphasis on developing students’ individual potential that schools fail to support basic common understandings. In fact, the three ideas can seem like the wise balances built into a national constitution, each branch keeping the potential abuses of the others in check.

Let me try to indicate why I think that incompatibility is precisely the right term for the relationship among our three great educational ideas.
Socialization and Plato

The homogenizing aim of socialization, which is to reproduce in each student a particular set of beliefs, conventions, norms of behaviour and values is necessarily at odds with a process that aims to show the hollowness and inadequacy of those beliefs, conventions and values. Plato promises that the reward for the hard work of his programme is pure intellectual delight; hard-won knowledge is its own reward – an argument confirmed by recent research showing that complex learning releases endorphins in the brain. But this delight tends to be undercut in schools by the more urgent and utilitarian needs of socializing, such as sorting functions related to future employment that have led, among other things, to the frequent use of various kinds of testing.

Imagine that whenever a person sees a movie, he or she will, at its end, be tested by a series of questions about it: What was the colour of the villain’s car in the first chase scene? What exactly were the words of the telephone hygienist when the Greek boy fell from the sky? Describe the motivation of the central character’s husband; was it adequate to his decision to turn his ships from the battle? Can you identify two anachronisms in the Casablanca bar-room scene? etc., etc. An employee of the film company will grade the answers, and the person’s salary will be radically adjusted each week depending on the results. How will this affect a person’s delight in movie watching? What was supposed to be a source of pleasure becomes fraught with anxiety. Well, this is one of the things the requirements of socialization do to the Platonic programme in schooling.

Of course, the public wants the promised benefits of both educational ideas. It wants the social harmony and the psychological stability that successful socialization encourages, but it also wants the cultivation of the mind, the scepticism and dedication to rationality, and the intellectual delights that Plato’s programme encourages. Designing schools to achieve either one is difficult. Schools today are supposed to encourage conformity to specific norms and values while encouraging a way of thinking that leads to scepticism of them at the same time. This is more than difficult.

Rousseau and Plato

For Rousseau and his modern progressivist followers, the unfolding of the individual’s particular potentials constitutes education. As the development of the body proceeds almost regardless of the particular food it eats, so the mind will develop almost regardless of the particular knowledge it learns; educators must focus on the developmental process, not the particular knowledge. And for this unfolding to occur optimally, the student needs time and space to explore. Education, in Plato’s view and in that of modern proponents of the academic idea, is marked rather by students’ mastery of increasingly abstract knowledge. For the Platonists, the only development of educational interest is the accumulation of the particular knowledge that will bring the mind to clarity of understanding.
The progressivists blame the traditionalists for restricting students’ freedom, for imposing a common curriculum on all, for seeing particular knowledge as privileged and for creating ëlites, for restricting students’ own inquiries and individual development. The traditionalists blame the pro-
gressivists for perpetuating ignorance and encouraging students’ self-
indulgence, for producing undisciplined thinkers, for threatening the
intellectual foundations of human culture, and for encouraging students
to imagine that their opinions are as important as hard facts, and confusing
the two.

One sees the conflict between these ideas in almost every media account
of educational issues, where the Platonic forces argue for ‘basics’ and a solid
academic curriculum, and the Rousseauians argue for ‘relevance’ and space
for student exploration and discovery.

And, of course, sensible people want them both. Schools could be
designed to implement either of these conceptions of education, but the
public requires schools to implement both together. But the more people
try to implement one, the more they undermine the other.

Socialization and Rousseau

In socialization, educational aims are derived from society’s norms and
values; in the Rousseauian view, the child should be kept from contact with
society’s norms and values as long as possible, because they are ‘one mass of
folly and contradiction’ (Rousseau 1911: 46). If educators want to let the
nature of the child develop and flower as fully as possible, they will
constantly defend her or him against the shaping pressures of society. An
aspect of this conflict is apparent today in attitudes to the general influence
of television on children. Television provides a powerful shaping to a set of
prominent social norms and values, but most parents resist much of this
shaping in favour of activities that seem to them less likely to distort proper
or ‘natural’ development.

No one, of course, is simply on the side of Rousseau against socializa-
tion, or vice versa. Everyone recognizes that any developmental process has
to take place within, and be influenced by, a particular society. A problem
arises because of the attraction of Rousseau’s ideas about a kind of
development that honours something separate from the compromises, the
corruptions and the constrictions of spirit that social life so commonly
brings with it. People do not have to share Rousseau’s own disgust with
society (which returned him high regard and money) to recognize the
attraction of his idea that there is a natural course to human development
which should be kept clear and followed. Although parents do not often put
it in Rousseau’s terms, many regret – to a degree that amounts in some
cases to heartache – seeing their children off to school for the first time,
knowing that they will be bruised by callousness and insensitivity, made
somewhat callous themselves, and seduced by cheap fashions in pleasure,
and that their quick minds will be anaesthetized by the boredom of the
classroom.
There does not seem room for much compromise between Rousseau and socialization. People cannot sensibly aim to shape a child’s development half from nature and half from society. The more they do one, the more they undermine the other. By trying to compromise, they ensure only that neither is effective. So the products of schools are at best a bit lost, a bit alienated and adrift on a social ocean in which they know little of whence or whither. At worst they suffer ignorance, powerlessness and rage.

A new idea

How else can we think about education? We can think of it as learning to use as well as possible the intellectual tools developed in human evolution and cultural history.

Humans’ relationship to their tools is very peculiar. While at some simple level tools extend our senses, in more complex ways they also transform our senses and consequently our very conception of ourselves. Polanyi (1967: 12–13) indicates something of this odd relationship when he describes how we use something as simple as a walking stick. Imagine being in a dark cave feeling ahead with the tip of a walking stick. What one actually feels is the impression of the stick against the hand, but the mind transforms this so that what we consciously sense is the stones or rock or moss at the tip of the stick. It is as though we flow into the stick and it becomes integrated into our sensorium.

The mind’s interactions with our symbolic tools is even more complex. Our understanding of the world and of ourselves has been transformed again and again by our incorporation of various symbolic tools such as language, literacy and theoretic abstractions.

I think we can reconceive education as the process whereby we acquire as fully as possible the major symbolic tools invented or discovered in human cultures. Each major set of tools generates for us somewhat distinctive kinds of understanding. I will briefly sketch these main sets of tools and describe the kinds of understanding to which they give rise.

The main construction blocks of this new idea of education is ‘kinds of understanding’, rather than the more familiar ‘knowledge’ or ‘psychological development’. What is a kind of understanding? Consider that at El Quantara railway station in the Suez Canal Zone during the 1920s there were ten lavatories. Three were for senior officers (one for Europeans, one for Asiatics, and one for Coloureds), three were for non-commissioned officers, similarly divided by race, three were for other ranks, also divided along racial lines, and one was for women regardless of race or rank.

One might find this simply a boring fact of no relevance to anything in one’s life. One might store it as a delightful piece of exotica. One might be outraged by such lavatory arrangements, taking the position of the other ranks, or be pleased, taking the point of view of the officers, or have mixed feelings, taking the point of view of the women. One might find such arrangements objectionable in one way if race is a major determiner of one’s social consciousness, and in another way if class is more prominent. One might consider such lavatory arrangements part of a progressive historical
story reflecting a change from authoritarian to more democratic social forms. Or one might consider these arrangements as simply one set among a kaleidoscopic variety of possible forms, none of which is any more ‘natural’ or normal than any other.

That is to say, our understanding today is commonly complex, mixing various ways of making sense of knowledge and experience. What I want to do is suggest a way of breaking down this complex of understandings we have available to us, organizing them in the sequence in which they were developed historically and logically, and using them as the basis for an educational programme.

The first tool we have available for understanding the world is our bodies; we see those aspects of the world that are within the band of radiation our eyes are sensitive to, we perceive a certain scale of things because of our size, we attend to sounds in a range our auditory organ can hear, and so on. Our first ‘somatic’ understanding comes with the mind’s expansion into and, as it were, through the body out into the world. We are an animal that recognizes certain rhythms, especially those connected with language. Our Somatic understanding is a distinctively human, pre-linguistic ‘take’ on the world; it remains throughout our lives as basic to all other forms of understanding. In terms of the El Quantara example, it provides a basic sense of what would be involved physically in using such lavatories, manipulating doors, the likely smells, the needs that would make them welcome.

The second main tool we acquire is oral language. Language leads to a distinctive kind of understanding, which I call ‘mythic’. It makes us see experience in story-shapes that orient our emotions to the events in our lives and our fictions. It makes us break the world up into opposites – good/bad, big/little, brave/cowardly, secure/anxious – and then elaborate or mediate between the opposites. Our mediations between discrete opposites – such as life/death, human/animal, nature/culture – generate for us ghosts and spirits (between life and death), monsters and mermaids (between human and animal), and talking animals (between nature and culture). We prominently use the logic of metaphor (making sense of things in terms of other things) which is a source of our imaginative lives and creativity. We can use words to generate in our minds images of what could be or even of what cannot be, which gives us a subjunctive understanding, unconstrained by brute facts. In terms of the El Quantara example, Mythic understanding would contribute an affective orientation to the image we generate of these lavatories.

The third general tool we acquire is literacy, literacy not simply as a coding and decoding procedure, but tied into the set of uses developed for it in cultural history. Literacy gives us first an intimation of a reality beyond our stories, gives us the unwelcome understanding that what we believe, hope, fear and think about the world are irrelevant to the way the world really is. We begin to access this reality by means of its extremes – so literate children find information such as that in the Guinness Book of Records immediately engaging. This kind of understanding I call ‘romantic’, in that the mind tries to transcend reality while recognizing that it is constrained and vulnerable within it. So we mentally associate with
whatever seems best able to overcome the threats of the world around us; we form romantic associations with heroes, or great institutions, or whatever is most powerful, tenacious, compassionate, strong, beautiful – whatever, that is, that compensates for what we feel most insecure about in the face of everyday reality. (Tell me your heroes and I’ll tell you what you feel most insecure about.) A Romantic understanding tends to make sense of the world in human terms, so we are engaged by knowledge if we can see it as the product of some human emotion or transcendent quality – genius or compassion or nobility or courage or craziness or any of the old virtues. In terms of the El Quantara example, Romantic understanding contributes a sense of the peculiarity of the arrangements and how perfectly they reflect an exotic imperial system and its prejudices.

The fourth general symbolic tool kit we acquire comes along with learning to use theoretic abstractions – evident in our use of big, general terms like ‘society’, ‘evolution’, ‘natural’, etc. These theoretic forms of thought compel us to recognize that our romantic struggle to transcend reality is futile and that the mind is trapped within reality as in a spider’s web. These theoretic tools deliver a kind of understanding that comes from grasping in general terms – like ideologies, theologies, moral systems, metaphysical schemes – the truth about the processes within which we exist. The mind seeks the truth in general schemes; it wants to know the nature of the historical process – is it tragic, or gradually ameliorative, or Marxist? what is the nature and proper organization for society? what is the truth about human psychology? I call this kind of understanding ‘philosophic’. It tends to make sense of the world in terms of processes rather than discrete events. Whereas Romantic understanding focuses on limits and extremes, the bright bits and pieces of the world, the Philosophic mind sets about charting or making a map of the whole. It embodies what Wittgenstein famously called ‘the craving for generality’. In terms of the El Quantara example, Philosophic understanding contributes a judgement on those lavatory arrangements in terms of some ideological scheme or some moral perspective or an appreciation of them as reflecting some social order.

The fifth kind of understanding comes with the development of an extreme reflexiveness of language. It is the kind of ‘ironic’ understanding that results from the recognition that our language can never be adequate to whatever it seeks to contain or communicate; that the world is made of different stuff from words, and the latter can never capture the former. Ironic understanding gives us a better sense of where we end and the world begins, of the ways our symbolic tools tend to embroil us in what we try to understand. Irony also opens up for us a wider range of jokes, even the cosmic ones. Irony contributes a perspective on those El Quantara lavatories that includes all the previous kinds of understanding and adds a cool recognition of the underlying absurdity of the beliefs and commitments that govern such lavatory arrangements.

What I suggest is that we can reconceive education as an enterprise aimed at ensuring for each child as full as possible an acquisition of each of these kinds of understanding. Acquiring them ensures that the sensible aims of education embodied in the old ideas will be achieved incidentally. A
person who gains in significant degree Somatic, Mythic, Romantic, Philo-
sophic, and Ironic understandings will necessarily have to acquire a lot of
knowledge, will have to attain significant psychological maturity, and will
become socially competent. What will not happen is traditional socializa-
tion to conformity, nor the acquisition of particular élite knowledge that
privileges one against others, nor the pursuit of some supposedly proper
developmental process. We will leave behind us the enervating battles
among these incompatible aims.

These are not stages we pass through; they are kinds of understanding
we accumulate and that to some degree coalesce. This scheme does not
describe a psychological process through which we spontaneously develop
as we grow older; rather, it characterizes forms of thinking evoked in
individuals today, as they were evoked in our cultural history, by the
development of particular symbolic tools. If these tools are not supported
by appropriate educational activities, they will not be acquired in any
adequate way, and the forms of understanding they stimulate will not
develop.

Education as the acquisition of intellectual tools is not some straight-
forward progressive scheme, but rather a process of gains and losses. That
is, each kind of understanding, while ideally coalescing in significant degree
with previously acquired kinds, also suppresses something of the previous
kinds. So, for example, the elaborated literacy that produces Romantic
understanding suppresses some elements of Mythic understanding – we
sense that ‘there hath passed away a glory from the earth’, as Wordsworth
put it, when the anaesthetizing power of literacy and theoretic thinking
remove us a little from that early vivid participation in the natural world:

The bottom line

In a pragmatic and empirically oriented culture, such as that of the US, it is
sometimes hard to recognize that what people do is determined in large part
by what they think. If they think of education as the process of socializing
and academic achievement and individual fulfilment then they do particular
things driven by these ideas – supposing that they can recognize how best to
achieve the ends they have in view. If the ideas they think with are
incompatible, then the practice that results is likely to be a shambles. I
think schools can fairly be described as a shambles of very varied activities,
often heroically directed towards ends that are undercut by other, often
heroic, activities aimed at quite different ends.

Thinking about education as attaining the kinds of understanding
developed in our evolution and cultural history will incline us to do other
things with schools. Instead of three discordant aims for schooling, we will
have a single coherent one. Anything that contributes to developing kinds
of understanding will have a place within such schools, and everything else
will not. So the socializing, job preparation, arid learning, team sports, and
so much else that is currently dumped into the school will have to be dealt
with by other social agencies. The education system might hope to become
more like the health system, in which each worker shares a single goal. At
the moment it is more like, and rather worse than, the prison system, which has the incompatible goals of punishment and rehabilitation – again, the more people attempt one, the harder it is to accomplish the other.

Schooling for understanding, when described at length (Egan 1997), does not require massive reorganization of everything. In some sense it will be familiar, almost what we have meant by education all along, but Plato and Rousseau bewitched us with their rhetoric and the socializers bullied us with their urgent demands. Education is a business of expanding understanding as much as we can manage for each student by enabling them to acquire as fully as possible the range of symbolic tools that are products of our evolution and cultural history. This is do-able, and there is good reason to believe that it will better satisfy the schools' current paymasters than the doomed attempts to deliver three incompatible ends.

Note


References