

How Demanding should Education Be?

by [Christopher Ormell](#) (November 2024)



A Dame's School, England (Thomas George Webster, 1845)

There is a demanding paradigm for education—which treats it as “instruction.” It has been dominant in schools in the UK since the 1980s. It was introduced in the US as far back as the 1950s, but it didn't immediately take-over the UK education system at that time because a more attractive paradigm, “progressivism,” ruled the roost. Progressivism was openly permissive, idealistic and naïve ... and there were many left-leaning (“liberal”) commentators who passionately wanted to it to succeed. They were aware that it would probably slowly destabilise society, but they were not averse to this outcome, because they thought that “capitalism” was unjust ... an unwanted state of affairs anyway. (They seemed to imagine that reducing society to chaos would give them a window to introduce a utopian alternative.) As a result of this support,

progressivism over-stayed its welcome. It finally lost its credibility at the end of the 1970s.

The “instructional” paradigm, which had been waiting in the wings, then took over.

Probably the paradigm’s most ambitious claim was that it could reduce the higher cognitive processes usually described as ‘analysis’ and ‘synthesis’ to ... specific memorisable *behaviours*. (We have to remember that these instructional so-called “cognitive scientists,” who hijacked education, originally called themselves “behaviourists.” They did this because their central tenet was the absurd claim that the human mind was an illusion. Behaviours, they thought, could be plainly seen by teachers, but teachers were not able to read the minds of their pupils because, according to these behaviourists, there were no “minds” to read.) They were sufficiently streetwise to realise that education could not consist merely of rote learning facts. It had to include some higher processes as well.

This raises the \$64 question: “Can analysis and synthesis be reduced to behaviours?”

Specific instances of analysis and synthesis can, of course, be identified via behaviours. But this is a very different thing from acquiring a generalised capacity to analyse or synthesise. Genuine analysis involves a resolve to look carefully at each section of a complicated structure and its relationship with other sections. The point of this search is normally to find out exactly where the structure is going wrong ... so that it can be repaired. When a genuine synthesis occurs, it is an especially satisfying mental experience, a ‘Eureka Moment’ –one which suddenly lights-up a mass of detail derived from a single idea. It can calm the heartbeat or brighten the eyes of a learner, but these physical manifestations are not the kinds of thing we normally describe as “behaviours”.

So instructionalism tries to get-by, using a weak, substandard notion of how to teach learners to analyse and synthesise.

It has now been dominant in schools for more than forty years. It rests on the premiss that education means “getting children to acquire specific behaviours, and learn specific facts about the world”. Quite a lot of ordinary people think that this is what children chiefly need, and that pressurised methods are appropriate to make sure they do. The instructional managers who are running schools seem to consider that their approach is best, because for the first time in history, they claim, they have quantified the behavioural outcomes which learners acquire in school in a “scientific” fashion. They have, they say, identified the key behavioural signs which show that children have definitely learnt facts and definitely mastered processes.

This may sound like a sensible agenda, but it has an Achilles Heel—it does not address the question whether being able to say a factual statement correctly is going to be a *benefit* to the learner, or whether being able to perform a routine correctly, is going to show that the learner has achieved the key understanding necessary to solve *genuine hitherto unmet future* problems. This attempt to reduce education to specific behaviours is, to put it bluntly, pidgin education. In a world in which most citizens have a gadget in their pockets which can display millions of different previously unguessed facts in a few seconds, being able to say a few factual statements word-perfectly has virtually no rationale. A learner who has exactly remembered the sequence of actions involved in a psycho-motor process has not automatically become a ‘skilled person.’ That involves much more: including the individual understanding all sorts of associated preliminary factors, and the having the judgment to know how to target and sustain each action.

These terms ‘understanding’ and ‘judgment,’ though, have been notoriously treated as “hot air” by the instructionalists.

In real life, skilled practitioners display the *vision* needed to see the direction and degree of each step required to solve a specific problem. This is much more subtle and demanding than merely being able to copy actions learnt in standard, simplified, classroom contexts.

In a word, instructional education prioritises the wrong things ... it substitutes clunky memorisation and practising standard routines for the much subtler generative synoptic insights children need to acquire.

The instructionalists, though, don't recognise that children need to acquire subtle insights.

The dogma behind instructional schooling has shown its true colours when it has tried to rubbish the concept of understanding. This is a howler to the *n*th degree, because it is precisely understanding which is missing and which many of today's youngsters urgently need. They are being starved of the strong synoptic cognition which is desperately necessary in today's world, and fobbed-off with pidgin accomplishments which are useless in these currently confused, rough, immensely complicated, sophisticated times.

The instructionalists have kicked out what they regard as the kind of "vaguely emotive, cultural, woolly, generalised language" which used to be associated with education. In its place they have inserted a drive towards verifiable, defined, specific "observable behavioural" outcomes. This is supposed to be their major feat. Actually it simply means that they are trying to get youngsters to be able to recite specific facts and correctly perform specific processes. They think that defined, verified, behavioural outcomes of this kind are the magic bullet for which teachers yearn: because such outcomes can be checked, counted and classified. Unfortunately, though, this kind of checking, counting and classifying has absolutely no value when it is being applied to the wrong things.

The crucial difference between instructionalists and synoptic educators is that the former are only looking at specific, stereotyped, performances. The latter are looking for a mature, informed, penetrating vision ... a capacity for "seeing" more clearly and constructively than before. They hope to be able to pronounce that their learners "have gained a capacity to understand."

The essence of the issue is that education is (should be defined as) a process by which the *mind* of the learner is energised and enlarged. Education is about stretching, strengthening and balancing the mind of the learner. To make sense of this aspiration, one needs to have the expectation that one can identify-with, and catch-a-glimpse-of, what is going on in the mind of a learner. This is central. This involves acquiring the subtle sensibility which makes decentering possible, and which underlies empathetic introspection ... an unobvious kind of understanding. It is not something immediately obvious.

Instructionalism fails this test, because it is fixated on the kind of crude positivity which notoriously led Ernst Mach to declare that atoms cannot exist, because no one has ever seen one! They seem to want to turn education into an idiotfree process: one where the outcome to be achieved is quite banal and obvious.

Since they started calling themselves "cognitive scientists," these instructionalists have done a U-turn, and conceded, belatedly, that minds *do* exist. (Their earlier tenet that minds did not exist sounds quite wrong nowadays.) However, they now put a spin on the idea of mind. They treat 'the mind' as a term which refers to a postulated neural register in the brain. This assumes that the human brain includes "registers" al la digital computers ... an assumption for which there is zero evidence. The crucial point—which they overlook—is that

whatever is happening in the brain of the learner can, against the odds, become apparent to a teacher who is able to identify with the student holistically, via empathy and introspection. Liberal education is all about this kind of sensibility, a vein of culture richly present in fiction, drama, historical narrative, poetry, etc. Instructionalists sweep all this brusquely aside, and appear to be deaf to what it says.

So these instructualists are in denial about the heartland of education, which is intrinsically about inspiring youngsters to *understand* ... an activity which can look (to a blinkered observer) like “talking vaguely and woollily.” Instead they make the discredited claim that their behaviouristic methods “empower” learners.

Mere training in regurgitating simple facts and simple process is hardly going to “empower” students, though, when they face difficult problems. Students need to start by *seeing* the big picture. They need to spend many Ogdens of mental effort conceptualising, clarifying and erasing the notoriously misleading features which tend to cluster round today’s tricky memes. Instead, instructionalism tries to cut corners by getting them to memorise stereotyped solutions.

Describing the theorising behind this substandard paradigm as “cognitive science” is an affront to commonsense. It would be a joke, if it’s consequences were not so serious. It is leading the mass of youth down a garden path, and quietly ruining the vital culture of once proud, lively countries.

The instructionalists think they have modernity on their side, because they can call on moral support from the computer establishment ... which likewise regards some of its so-called “knowledge engineering” as “cognitive science.” This link is treated as a tower of strength by today’s instructional managers, because IT is of course the dominant, forward-looking, development of the last sixty years. They can also rely on some support from the corridors of power ... because the

last thing most democratic governments want is to go back to the woozy notions of progressivism which led to breakdowns of order and meltdown in schools.

But, let's bear in mind that this "cognitive science" school status quo has now been the dominant influence on youth (in the UK and many other countries) for about four decades. ('Dominant' because youngsters are exposed to it for hours, day after day, and for a majority of days in the year.) The instructionalists must surely, themselves, have expected their regime to lead to a sharper, more thoughtful, more creative, population. That this thought appears to have eluded them, is another sign that they have lost the plot.

So, if we stand back and ask what instructionalism looks like when measured by the long-term effect it is having on the wider community, I'm afraid the answer is that it is poor, it is on the floor. High culture has been going downhill, confidence has been disappearing, street gangs have been flourishing, law-and-order has been dissolving. The effects on wellbeing, health, mental health, substance abuse, misogyny, family and relationship breakdown are no better. We can't simply ignore this across-the-the-board deterioration of formerly trusted social norms and practices, assumed competencies and civilised behaviours.

Since 1980, a furious chorus of complaints about the poor mental preparation of many youngsters for the jobs they later find themselves doing, in business and industry, has been getting louder and louder. A much-heard complaint from employers and university tutors is that many of these youngsters "have not acquired the basics." Here we are talking about a lack of the precise outcomes the cognitive science crowd pointedly claimed would justify their methods. So these complaints about the quality of the "education" these young people have been exposed-to, are complaints about the very thing instrumentalism is supposed to be good at. Could "cognitive science" based schooling be one of the principal

reasons why the quality of the culture of Anglophone and Western countries has been gradually deteriorating during the last sixty years? Yes. Education has always previously been a slightly idealistic process which promises parents that their children can become the people they hoped to be.

This is the question everyone in the corridors of power should ask ... before the sheer wrongheadedness of these dumb “cognitive science” methods sucks the human race into oblivion.

This question is evidently not being recognised in the corridors of power. The cognitive science paradigm was initially warmly welcomed in the 1980s, because it saw off the fiasco of progressivism. Since then it has not been challenged by any serious, credible alternative. As a result, in spite of noisy, long-standing doubts, and a rising clamour of complaints, traces of support for this wrongheaded attitude seem to have survived after four bumpy decades of dysfunctional schooling.

Successive governments in the UK have done virtually nothing to address the problem: indeed they have neglected the issue, and reacted as if everything in the garden was rosy—or at least as rosy as anyone could reasonably expect.

This highlights another scandalous lapse of responsible governance—that a cognitive paradigm, which was already dubious from the beginning, has survived for so long, after the feedback which matters (the response of employers and university tutors) had turned against it. It is a mind-blowing anomaly that these ideology-driven instructionalist managers seem not to have noticed that their methods in schools have done an immense amount of harm. Of course, pressurised instructional methods in schools are not the only cause of cultural decline. No doubt poor leadership, mental laziness, the clamour of social media, austerity, poor accountability, pop culture, loss of rigorous ethics, etc. are also to blame.

(But some of the downdraught associated with these factors can also be put at the door of instructional schooling.)

Opposing pressurised instructional “educational” methods, is crucial, because the historic remit of schools has always been to *sustain* the quality of the culture of society. This is why education was started more than two millennia ago. Education was certainly not introduced in Antiquity to weaken the culture, confidence or morale of society.

A symptom that something is going badly wrong is the preponderance of quite absurd conspiracy thinking among the masses during the last two decades. This alone tells us, loudly and clearly, that education isn’t educating. Education should be energising, expanding, validating and sharpening the minds of youth, not leaving them luxuriating in superficial, silly, delusional reasoning.

So what has gone wrong with this so-called “cognitive science”?

Well, it has many questionable aspects. It treats the human ear and eye like a camera—assuming that it automatically registers whatever it hears or sees—and it steers well away from the known characteristic feelings, resonances and attitudes of young people. It is a prime axiom of education that teachers should be 100% aware of the innate curiosity and mental appetite of youth. This is the starting point for preparing them mentally for their future satisfying adult lives. Progressivism capitulated wholly to this warped (media influenced) curiosity, and treated the attitudes it found as untouchable. This was disastrous, because the average youngster had almost no awareness of the mental hurdles which they would likely encounter ahead.

Instructionalism deliberately tries to be valuefree and non-judgmental, because—it is assumed—passionate values will upset the morale of multicultural societies. This alone is an own

goal, because it guarantees that the content will be dull. It checks its crudely imposed behavioural outcomes by testing, but wholly ignores a by-product of this imposition ... that typically students *forget* what they have learnt almost as soon as the test is over. (This has been found by successive researchers.)

Various researchers (in London, Monash and East Anglia universities) have found that the retention of information of average students who have passed their exams with flying colours is commonly quite poor. This is a consequence of the motivation used to get these students to memorise stuff in the first place: namely, telling them that “they need to memorise the stuff ... *to get good marks*... because the certificate which ensues will be a priceless possession (a “meal ticket”) afterwards.” But it is a feature of our unconscious minds that they happily forget what is no longer needed. (This has been confirmed by the researchers mentioned above.) Ignoring this very short half-life of grudgingly memorised information—a development called “gaming the exam” —is indefensible. That it has shamefully become a virtual norm, is not just wrong, it is the diametrical opposite of education. It implies the official tenet that it is *OK to forget the knowledge which has been demanded over years of toil*. We expect education to furnish the mind of the youngster with positive knowledge, interests, insights and agendas ... and we expect it to sustain her or him for a lifetime. The fact that it is currently being organised in such a way that most of it is predictably going to be forgotten a few weeks after the exam, is a scandal of monumental proportions. If the car industry tried to get away with delivering cars which began to disintegrate a few weeks after they left the showroom, there would be uproar. But this is the exact equivalent of what has become standard practice in schools operating the instructional paradigm.

Whyever do students forget this supposedly special, life-enhancing, essential, important knowledge, so easily? Because

they were never led to recognise it as being visibly *special, life-enhancing, essential and important* in the first place.

How could they possibly feel that these life-enhancing qualities were around, when the content was treated as “instructional stuff” ... a chore to be rote-learned and memorised? No effort had been made to warm them to it in the first place. It was stuff they were shown, and supposed to remember, after hasty introductions. Those who showed it to them (the instructors) were supposed to be “cognitive experts,” but they seem to have been unaware that youthful minds need time, reflection, role-model motivation, and repeated involvement in interesting, colourful, meaningful contexts, to take things to heart.

So this supposedly “scientific pedagogy” actually turns out to be, ironically, a high-risk, cut-price approach. In addition to an inexcusable impatience, its broad assumptions are ill-judged to win the hearts and minds of students. Prudence, orientation towards naff, materialistic gains, non-committal attitudes don’t carry much (if any) inspirational appeal to youth, or to the influencers and opinion-leaders of youth.

There is also an elephant in the room. It is the now worrying gulf between the sensibility assumptions of the average youngster and the adult generations. This generational gulf seems to have widened alarmingly in the last two decades, probably mainly because the adult population is investing less effort in seeing things from a youthful point of view. Trust between generations may now be at an all-time low. Michael Oakeshott famously observed that *Education is a conversation between generations*. Today, civilisation is passing through a period of unexpected strain, uncertainty and demoralisation. The lacklustre monotonous future suggested by austerity and inflation in the Western and Anglophone countries is miles away from the hopes and optimism of youth. Cognitive science seems powerless to address, still less counter, this challenging background. The dreadful implications of current

wars in Ukraine, Sudan, Gaza, Yemen, Lebanon, etc. don't help.

The essence of the unsatisfactoriness of instructionalism is that it is insensitive. The behaviourism it embodies started with Dr Pavlov's work on training dogs. Then, after Watson, Skinner, and others generalised the same methods to "training people," it became a way of manipulating human beings. These behaviourists have now met their Waterloo, because young learners are more sensitive than adults, and the inherent insensitivity of instructionalism is an especially poor way to try to get onside with young learners.

So what would a revival of hopeful education look like?

Well schools should abandon their bleak "instructional" mode and become much more pupil friendly.

Getting children grudgingly to memorise facts and processes in which they are not interested, and do not understand, should be immediately banned. The aim of education should be to get children thoroughly to understand otherwise baffling things. This involves getting them not to be dazzled by over-hyped fashions, trends, fads and emphases which they meet all the time both on-line and off-line. It is the dazzling and disorienting effect of modern media, which is at the heart of the problem. Older people don't warm to a media which is openly continually doing its damndest to manipulate them towards hyped, vested interest-serving opinions. But young people with uncritical, fresh, unspoiled minds do tend to lap up a lot of toxified, compromised information.

In other words, modern society seems to have abandoned the restraints which used to be in the forefront of attention in the sensible, mature, realistic past, when adults were careful *not* to risk prematurely disorienting the minds of youth.

Fortunately the heavy conceptual fog, which hovered over education in the 1950s when instructionalism was first launched, has now gone. There are new approaches waiting in

the wings which can save the day—if enough people are minded to back them.

[Table of Contents](#)

Christopher Ormell is a philosopher who has taught learners of all ages from seven upwards in schools and universities. He was a co-founder of the Philosophy for Educational Renewal Group (PER Group) in 1993 and has been its Secretary ever since. His websites are philosophyforrenewingreason.com and mathsforrenewingreason.com

.

Follow NER on Twitter [@NERIconoclast](#)