

Is there any such thing as a 'Thinking School'?

Bob Burden

The first decade of the 21st Century has witnessed the beginnings of a mini-revolution in curriculum planning and delivery in British schools. Tired of the constricting demands of an over-prescriptive National Curriculum and the invidious requirements of teaching to SATs, many within the teaching profession have become conscious of the transformational nature of cognitive approaches to learning as an alternative to transmission-based teaching. The ideas of such luminaries as Matthew Lipman, Edward de Bono and Reuven Feuerstein, previously considered to be 'on the fringe' of educational thinking, have increasingly come to be seen as offering valuable insights into the fundamental connection between thinking and learning.

Attempts to introduce thinking skills into schools are certainly not new. As far back as the mid 1980s an OECD report emphasised the need for schools to produce more independent thinkers and problem-solvers, a demand repeated more recently by the World Bank amongst others. A Government sponsored inquiry carried out by Carol McGuinness in the 1990s came to very similar conclusions and offered sensible advice as to one possible way forward. Meanwhile, however, research into the effectiveness of such approaches, such as Nigel Blagg's evaluation of the introduction of Instrumental Enrichment into Somerset secondary schools, appeared to produce negative or, at best, equivocal results.

At Exeter University's Cognitive Education Centre our preliminary analysis of why so many thinking skills initiatives either petered out or simply failed altogether led us to conclude that the problem did not necessarily lie within the programmes themselves. Feuerstein's theory of Structured Cognitive Modifiability is one of the most impressively constructed theoretical frameworks for cognitive change that has ever been produced. The foundations of Lipman's Philosophy for Children stretch back to Dewey and to Socrates. De Bono's Six Hat Thinking has been shown to bring about remarkable improvements in business organisations worldwide. If this is the case, then where did the roots of the problem lie?

The conclusion that we reached was that the obstacles to the successful implementation of any programme designed to teach children to learn how to learn were almost entirely systemic. There was little wrong with the programmes themselves, only the ways in which they were being introduced into schools. Firstly, there was what Georgiades and Phillimore referred to many years ago as 'The Myth of the Hero Innovator'. In a highly influential article

they pointed out that innovations are often introduced by enthusiastic individuals, possibly teachers returning from a conference or course, who seek to impose their new-found enthusiasm upon an unresponsive audience of sceptical colleagues. In a telling phase, Georgiades and Phillimore commented that 'organisations, like dragons, eat hero-innovators for breakfast.' Thus, deprived of support or nourishment, the innovation will inevitably fail. This was clearly exemplified in Blagg's study and a more recent small scale evaluation of one school's thinking skills initiative by the present writer and his colleague, Lousie Nichols.

Secondly, the ever increasing demands on teachers to meet various externally imposed targets left little time or opportunity for creative curriculum planning, or for further reflection and innovation. It was only when frustrated with a National Curriculum that gave the impression, at least, of focussing mainly on the regurgitation of information by means of timed assessment tasks, that teachers began to cast their eyes widely for more process-based approaches to teaching and learning. Although cognitive (or, as they were more commonly known, 'thinking skills') approaches appeared to many to offer more promising alternatives, advocates of each of these programmes often fell into the trap of appearing to claim that they could provide the answer to all of traditional schooling's ills. Alternatively, by taking a piecemeal approach to teaching thinking and study skills, the danger became one of adding the occasional stimulating lesson devoted to thinking skills as a kind of 'sticking plaster' solution. Fairly soon those who took on the message found themselves asking, in the words of the immortal Peggy Lee, 'Is that all there is?'

The breakthrough came from an unexpected direction. The literature on school effectiveness and school improvement, since the early work of Michael Rutter and Peter Mortimore and his colleagues at the Institute of Education, later summarised by Teddie and Reynoldshad more or less come to similar conclusions on how to recognise an effective school and what needed to be done to achieve a school's vision. What they did rather less well was to offer ideas on how to reach those goals. It was the recognition of the potential value of combining the lessons from the school effectiveness/improvement literature and cognitive education approaches that gave rise to the concept of the 'Thinking School'.

What is a Thinking School

The definition of a thinking school that emerged is one of

an educational community in which all members share a common commitment to giving regular, careful thought to everything that takes place. This will involve learning how to think, reflectively, critically and creatively, and to employing these skills and techniques in the co-construction of a meaningful curriculum and associated activities. Successful

outcomes will be reflected in students across a wide range of abilities demonstrating independent and co-operative learning skills, high levels of achievement, and both enjoyment and satisfaction in learning. Benefits will also be shown in ways which all members of the community interact with and show consideration for each other and in the positive psychological well-being of both students and staff.

In order to achieve this goal, a whole school approach will be necessary whereby all stakeholders (including parents and school governors) are fully committed to the school's aims and how they can best be achieved. Staff will need to be specially trained and methods will need to be introduced into the curriculum for teaching the skills of thinking and associated cognitive and meta-cognitive strategies. The widest possible application of these skills and strategies should underpin all other aspects of the curriculum and should guide behaviour policies and expectations about human interactions at every level and care for the environment.

Working with such pioneers as Gill Hubble from St Cuthbert's School in New Zealand and a group of thinking skills practitioners and trainers from the Kestrel organisation we followed this definition by constructing criteria for identifying and achieving a successful Thinking School. In sharing these criteria with various schools that had already started on the journey, the idea of Thinking School accreditation became the logical next step. Fourteen criteria were established and schools were offered the opportunity of producing a portfolio of evidence to demonstrate how these had been met. A follow-up visit to the school by a member of the Cognitive Education Centre Team made it possible for teachers, classroom assistants, school governors, parents and pupils to be interviewed, lessons to be observed and pupils' work to be shared. At the completion of this process the school receives a report and, if successful, a certificate and trophy, and the right to print the CEC logo on any formal school literature.

The selected criteria, their reasons for selection and the kind of evidence needed to show that they have been met, are presented below.

Criteria for Accreditation as a Thinking School

1. There is a need for the Principal/Headteacher to have made a formal commitment to cognitive education as a means of school improvement as a central aspect of the school's development plans. This is because all the school effectiveness/improvement literature identifies the crucial importance of leadership in the change process. This is most readily shown in the printed documentation that

the school makes available to current and prospective parents and to reports to the governors.

2. This commitment to cognitive education must have the explicit support of the school governors. There have undoubtedly been occasions when an enthusiastic headteacher has been frustrated by a governing body that has failed to see the full benefit of a cognitive approach, but has been more influenced by a drive for examination success at all costs. For this reason a formal statement of support by the Chair of Governors is necessary, together with evidence of ongoing support from the governors in the minutes of their meetings, which may well include a record of how they themselves have been informed about or even trained in the cognitive approach.
3. It is necessary for each school to have a formally appointed high status member of staff as their Cognitive Education Coordinator to organise and oversee the implementation of the cognitive education development agenda. There are several reasons for this. It is usually impractical for the Principal to take on this role, but unless it is seen as a highly prestigious post within the school, particularly in large schools, research has shown that the cognitive agenda can be so easily sidelined or undermined by competing demands. Here we are looking for details of the appointed person's background and experience, particularly with regard to their previous and current training in different cognitive approaches.
4. One of the first tasks of the Cognitive Education Coordinator after their appointment should be to establish a task force or subgroup of colleagues, from across curriculum subjects in large schools, to ensure that communication and co-operation takes place across the school and that discussions amongst staff and the teaching of thinking skills and strategies can occur by means of a cascade model. This will help to overcome the dangers of the hero-innovator tendency and will prove vital in leading to a committed 'critical mass' of cognitively orientated staff. Evidence here should take the form of listed names and roles, together with recorded details of discussion and planning meetings.
5. This should in time lead to the vast majority (at least 80%) of the school staff, including LSAs, demonstrating a clear understanding of what is meant by a cognitive curriculum, why it has been undertaken and how they can best contribute to it. This should be demonstrated in their pedagogy and in the nature of the tasks they set and the quality of the work produced by their pupils.

6. Implementation of a cognitive curriculum is most likely in the first instance is to be through an examination of the major cognitive programmes on offer. This should lead to the adoption of a least two programmes over a three year period, but may involve some degree of trial and error learning, that is, by deciding to reject one or another of the commercially available programmes and favouring another which seems to fit more readily with the school's vision and action plan. At the time of writing, the most popular and well founded programmes in the UK appear to be David Hyerle's 'Thinking Maps', Edward de Bono's 'Six Hat Thinking', variations of Matthew Lipman's 'Philosophy for Children', Art Costa's 'Habits of Mind' and Guy Claxton's Building Learning Power.

Schools tend to vary in order in which they begin, but no school achieving accreditation has yet indicated that any one programme fulfils all the requirements of a cognitively oriented curriculum. Two is an absolute minimum, for starters, but gradually schools find that they can build upon their growing confidence and expertise by taking on complementary programmes like Adey and Shayer's 'CASE', 'CAME' and 'Let's Think' programmes, the Thinking through History, Geography etc programmes constructed mainly at Newcastle University, or by developing their own home-grown approaches. The evidence of this process and the reasoning behind the adoption and/or rejection of different approaches should be clearly documented.

7. All this should be part of an Action Plan that has been drawn up by the Cognitive Education Team, endorsed by the Principal and governors and disseminated to all members of staff.
8. It is obviously important that a Cognitive Education Coordinator needs her/himself to be highly trained and confident in a range of potentially useful programmes and techniques and should see this as an essential ongoing aspect of his/her role. It is not enough for someone in this position to have attended a preliminary training course in a particular technique and expect to remain ahead of the game. Details of an ongoing CPD programme must therefore be made available.
9. All staff should be encouraged to attend external courses or should receive constant in-house training by the 'home' team and/or highly rated external consultants. Documented reports of such training and its outcomes should also be available for public scrutiny.
10. Taking a cognitive approach to the curriculum carries with it assumptions about alternative forms and outcomes of assessment, formative assessment for learning

should be the norm running alongside more conventional assessment of learning outcomes. We would also expect to see an emphasis upon pupil self-assessment and peer assessment as part of the regular assessment process. A Thinking School will also have considered possible alternative ways of assessing learning outcomes such as enhanced pupil self-esteem and increasing enjoyment in learning, and even increased staff satisfaction in teaching.

11. At the end of the day, there is a requirement for evidence of positive learning outcomes, attitudes and behaviours of the pupils to indicate that they are operating as thoughtful responsible learners who are able to articulate how and why thinking skills and strategies are a vitally important aspect of all that occurs in their schools. This can be seen in the nature and quality of the pupils' work (including homework), interest they show in their work, positive attitudes towards school, enjoyment and confidence in learning, good attendance and behaviour records, a significant decrease in bullying and improved attainment and exam results, where this is reasonable to expect. Much of this can be revealed during the evaluation visit to the school, but will also require careful record keeping of critical incidents and other indications of change.
12. Few innovations ever work completely smoothly from start to finish. In fact, becoming a recognised Thinking School does not signify the end of the journey, merely a significant moment along the way. This implies that there will be a need to constantly review the effectiveness of the thinking tools employed in developing pupils' metacognition and wider thinking strategies. A Thinking School will constantly be on the look-out for additional or useful approaches to enhance their children's learning, and for ways of evaluating these.
13. The whole school approach means exactly that. Here we are looking for evidence that all members of staff are being encouraged to discuss on a regular basis the process of cognitive education and how it can be maintained and improved. The evident enthusiasm of all staff members for the cognitive approach will be a significant feature in illustrating how well this is working.
14. All of the above should be manifest in the whole ethos of the school, in the way it conveys a positive, caring and creative atmosphere to all stakeholders and visitors, whilst at the same time demonstrating that careful thought has been put into its organisational structure and visual presentations. This is likely to be shown in examples of the pupils' work and displays that adorn the school, the way that visitors

are received and treated and the general 'feel' of the way in which everyone goes about their business.

Outcome so far

At the time of writing nearly 30 schools across England and Wales and one school in South Australia have successfully navigated the accreditation process. The ratio of primary to secondary schools currently stands at about 4 to 1, but every level of socio-economic and cultural background has been represented. Some are small, three teacher schools, others cater for more than a thousand students. Of the secondary schools four are single sex grammar schools, whilst three are comprehensives. All have received good or outstanding Ofsted reports, with many receiving specific mention for the unique contribution of the cognitive approach to the pupils' learning. As yet there is little formal evidence of the effects of the cognitive approach apart from the schools meeting the set criteria, but the following informal outcomes have been very apparent. Where there has been obvious room for improvement, attainments have risen; attitudes to towards school and to learning have been shown to be positive across the board; bullying and negative behaviour is virtually non-existent. The expressed attitudes of more than 90% of the teaching and support staff in every accredited school reflect high personal satisfaction and enjoyment in their chosen profession.

Accreditation is provided for a three year period, after which the school will need to provide evidence that it has continued to move forward in its quest to demonstrate that an emphasis upon the transformational process of teaching and learning offers far more than one in which information transmission rules the day. Several schools are currently preparing for reaccreditation as they approach the end of this initial accreditation period. The task of the CEC is to find ways of identifying whether and how well they have moved forward in that time. One important criterion currently being considered is the production of evidence of student, staff and/or parental responses by means of questionnaire surveys or 'home grown' research projects. Another criterion may well be how well the school has been able 'to spread the word' and influence the take up of these ideas in other schools. Another may be the way in which the school has been able to apply the cognitive approach to considering 'big questions'.

What does seem indisputable is that this revolution is growing fast, even to the extent of provoking the forces of reaction into ludicrously seeking to suppress schoolchildren's rights to partake in decision-making processes that affect their future. To paraphrase a famous Bette Davis quote from 'All About Eve', 'fasten your seatbelts folks, this is going to be a bumpy ride!'

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<http://education.exeter.ac.uk/projects.php?id=24>