

Thinking hats on...

Edward De Bono's Six Thinking Hats are increasingly used in schools to help students develop thinking skills. [Kim Wells](#) vouches for their effectiveness with learners of all ages

'Imagination is more important than knowledge.'

Albert Einstein

It's hard to imagine this being the last statement made by a teacher sending his class into their final A2 exam. However, it does make you reflect upon whether success in exams is a true measure of a child's ability to think for himself. In particular, do we give our students the skills and the self-belief necessary to stand on their own two feet in their learning, and thus help them to become successful university students, and more effective in their future careers?

Teaching children and young people to think is moving ever closer to the forefront of the educational agenda. Cambridge's Pre-U qualification has been launched to bridge the gap between A-level and university-style learning, with its far greater call on independent learning skills. A recent survey rated the 'ability to learn' and the 'ability to think' as the two qualities most sought-after by blue-chip employers.

Thinking as a skill

It was in this context that I first became interested in Dr Edward De Bono's 'Six Thinking Hats' in 2005. I had used them briefly as a city banker a decade ago to help manage meetings, but as yet had not applied them in a classroom environment. I was particularly interested in De Bono's philosophy that thinking is a skill which can be developed, unlike our innate intelligence. Indeed, by improving the clarity and effectiveness of our thinking through the explicit use of tools (such as the hats) we can make far greater use of the intelligence we possess. Think of the analogy of a car and a driver. The car is our IQ, the driver our ability to think or to harness that IQ. Lewis Hamilton behind the wheels of a Robin Reliant is still likely to perform better than a learner driver in a Formula One car.

How do the hats work?

To those who are as yet unfamiliar with the De Bono's hats – and a quick recap for those who know of them – here is a brief introduction. In a classroom environment they can be introduced in as little as five minutes using the notes in Box 1.

Classroom applications

The Six Hats are a great tool for helping children to think for themselves, but it is just one tool among many others in the teacher's toolkit. Thus I would squirm at the thought that six hats was the only way to think, and that traditional debate has no place. However, there are certain scenarios in which the hats provide an effective means as any to structure

Box 1: Six Thinking Hats

The underlying principle of the Six Hats is simple, though not simplistic. The hats are based on the principle of parallel thinking; instead of trying to do everything at once, the thinking is broken down into segments, and everyone thinks in the same 'direction' (by wearing the same hat) at the same time.

The **White Hat** is for information, data, statistics, expert opinion (or stakeholders' opinions), facts, etc. Think of a blank sheet of paper which you are trying to fill with everything you know about the issue you are dealing with. The White Hat, if used properly, helps to separate fact from speculation.

The **Red Hat** is for emotion, gut-feeling and hunches. Think of blood or your heart. The beauty of the Red Hat is that it allows you to say how you feel without having to justify it. In fact, the Red Hat should be used for less time than the others as it is purely the chance to say things like 'great idea' or 'I feel uncomfortable about that' without entering into prolonged reasons why.

The **Yellow Hat** and the **Black Hat** tend to operate in tandem, although you would never wear more than one hat at any time. Yellow is for logical positives, benefits, advantages, feasibility (think of sunshine) and Black is for caution, risk assessment, downsides or dangers (think of a judge's robes). Some mistake the Black Hat as the 'naughty' hat or perceive it in a negative way, but in fact it is the most important hat as it allows us to analyse risks and set up the road map for improvement that can be addressed by the next hat...

The **Green Hat** creates a micro-culture for creativity. It allows you to explore alternatives, possibilities and new ideas without being bogged down by evaluation of those ideas (which comes later). Think of grass, trees and natural energy.

There can be confusion between the Green Hat and traditional brainstorming. In my experience, the latter always starts off as creative thinking, but sooner or later someone will get side-tracked into evaluating an idea: 'That's great, lets run with that' or 'Wouldn't there be safety issues?' and in an instant the thinking goes off at a tangent and the creative climate is lost.

Professor David Perkins, who leads the Thinking Skills Educational Agenda at Harvard University, makes exactly this point in his excellent book *Outsmarting the IQ*. He illustrates how we are conditioned to move from the perceptual to the logical stage of thinking too fast, before we have exhausted all avenues and ideas. The key for him, and De Bono-style thinking, is to stay in the perceptual stage for as long as possible as that is where most good thinking will occur.

Finally, the **Blue Hat** is the chairperson's or the metacognitive hat (think of blue sky representing overview of the whole process). The Blue Hat wearer facilitates the whole process, and at some point the whole group would don their Blue Hats in order to reach a conclusion or to decide on next steps. You would also wear this hat to decide what sequence of hats you were going to wear to tackle the issue, and for how long each hat should be worn.

A common misconception about the hats is that you must use all six hats – a good practitioner will simply decide on the best route to reach the desired result. With young children, you may use only one or two hats at a time, and the school council may use 10 hats on one issue.

thoughts and reach a desirable outcome.

If pupils are reluctant to open up on a topic – for example, because it is an emotive issue – or because they are shy, then the hats can provide a safe environment in which anyone can offer their thoughts without the fear of being shouted down by others. PSHE topics such as sex education, bullying, drugs abuse or abortion can be daunting for teacher and student alike, but using the Six Hats can help to overcome many obstacles to inclusion, as shown in the examples in Box 2 and Box 3.

Do the hats actually work?

Despite the inherent difficulties in measuring a child’s ability to think, I was keen to examine whether our drive to get our students at Caterham thinking for themselves was actually making a difference. To this end, I and three colleagues undertook a research project (subsequently published as the first chapter in HMC’s *I ≈ = Independent + Innovative* publication in 2006).

Students were taught a series of thinking techniques (including using the hats) and then asked to comment on them in questionnaires and interviews. They were asked to explore the impact of the techniques on their thinking, learning, enjoyment and understanding.

In their feedback, students echoed many of the benefits that De Bono himself linked to the tools:

- they are a deliberate and systematic approach to thinking
- they provide a ‘common language’ across all subjects
- they enable you to create better ideas quicker
- they create a conceptual framework that is transferable to other activities (such as university applications), and so on.

Management applications

When running a heads of department meeting (22 middle managers defending their territory), it can be very useful to have them all think in parallel as a team, and yet still allow each individual to have their say in a constructive way. Agenda items on such issues as the structure of the school day, allocating £5,000 of PTA money and the usefulness of homework used to involve up to an hour of frenzied, emotive debate which sometimes failed to produce any sort of conclusion. Meeting times can now be significantly reduced, and logical, collective conclusions reached with none of the heartache of old by appropriate use of the hats. People on all sides have been encouraged not just to listen to but also to contribute to different points of view.

Conclusion

We have moved from the Information Age to the Concept Age. There is simply too much information out there, far too much for our children to be mere regurgitators of facts. Schools cannot hope to give a child even a fraction of the knowledge that he will come across in his lifetime – for example the US

Box 2: Thinking Hats in practice - Discuss the issue of abortion

- Red Hat: What is my personal view? (Decide how you feel about the issue.)
- White Hat: What is the current law? What information do I know, and what do I need to find out? (Statistics on abortion; different views on when life begins; the view of the church.)
- Yellow hat: When might abortion seem to provide a necessary outcome for someone? (The mother’s life is in danger; the child is severely disabled; the mother is rape victim.)
- Black hat: What are the potential downsides of abortion? (Violation of the rights of unborn child; surgical risk to mother; religious objections.)
- Green hat: Can we suggest some alternative outcomes? (Subsequent adoption of child; possibility of the mother accepting and loving the child.)
- Blue hat: What is my position now? (Decide where you stand on the issue.)

Box 3: Thinking Hats in practice - Writing an essay

Often students struggle just to make a start with longer-term projects, coursework or extended pieces of writing. The hats can help them overcome this feeling of hopelessness by providing a clear structure, as per this example of an essay for Key Stage 2:

Story-telling in English: ‘Dawn broke over the trenches’

- White Hat: What characters shall I put in my story? (Fresh-faced young lieutenant and battle-hardened sergeant.)
- Yellow Hat: What qualities will each character have? (Lieutenant – courage, enthusiasm; Sergeant – experience/nous/wisdom.)
- Black Hat: What faults do they have? Are there any difficulties they have to overcome? (Lieutenant – reckless with his men, always volunteering for patrol; Sergeant – disrespects officers, stirs up mutinous feelings.)
- Green Hat: How will they overcome the difficulties? (Lieutenant sees platoon mowed down on patrol in front of own eyes; Sergeant saves Lieutenant’s life in No Man’s Land).

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Department of Labor estimates that current secondary school students will have between 10 and 14 different jobs... by the age of 38! It has been claimed that the top 10 jobs that will be in demand in 2010 did not even exist in 2004 – we are preparing students for jobs that don’t yet exist, and to solve problems that don’t yet exist. What schools must do, of course, is give their students the tools to cope with what life will throw at them, and in particular the ability to deal with new concepts and situations.

The Six Hats is just one such tool, but its powerful simplicity allows it to be applied in many scenarios.

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