G&T UPDATE

Supporting G&T coordinators and leading teachers

Issue 62 March 2009

Phase 4 diplomas to come

The aim of the new diplomas is to give young people the knowledge they need to go on to university, work or apprenticeship with the right combination of academic rigour and practical learning. Content for three more diplomas (Phase 4 – humanities, science, languages) was published for consultation last month. The design of the programmes aims to give learners understanding of the subjects alongside real-life, hands-on skills.

The diplomas have the backing of leading universities. According to Dr Donald Henderson, Imperial College:

'The new diplomas in Science, through personalised experiential learning, will produce youngsters who are excited by science, who know the importance of science in life, who understand scientific method and design and who are eager to pursue a science based career. The diplomas will give the students highly marketable skills ensuring employment and success in higher education.'

The diplomas will be finalised for Foundation, Higher and Advanced levels and published in July 2009. See:
● Languages: www.diploma-in-languages.co.uk
● Humanities: www.ccskills.org.uk/Qualifications/diplomainHumanities/tabid/85/Default.aspx
● Science: www.sciencediploma.co.uk

Boarding school works for vulnerable children

Some vulnerable children can flourish in boarding school, according to an evaluation of a two-year government programme (Boarding Pathfinder for Vulnerable Children) by the Thomas Coram Research Unit. Working with maintained and independent boarding schools and charitable trusts, LAs can now consider this means to provide support for vulnerable children while enabling them to remain with their families or carers. Factors that can determine success include:
● early intervention helping to avoid the young person going into care
● careful assessment of the child's needs, including their personality and social skills, prior experience of, and engagement with education
● careful matching of child to boarding school
● making sure both the child and their family are happy for them to go.

To encourage take-up, the DCSF will provide start-up costs of up to £10,000 for another 50 local authorities and children's trusts to identify those who could benefit. The DCSF will also provide leadership, support and materials for the authorities.

www.dcsf.gov.uk/research/programmeofresearch/index.cfm?type=5&x=104&y=8

The National Peer Mentoring programme aims to enable young people to build friendships and provide support and advice to one another in schools. The programme involves training young people to peer mentor, listen to problems and engage others in the community. It applies to young people in pre- and post-16 education and follows a successful pilot scheme which involved 180 schools and 3,600 pupils. It focused on attainment, behaviour, bullying and transition. www.dcsf.gov.uk/pns/DisplayPN.cgi?pn_id=2008_0300

A review of the Primary Curriculum being carried out by Sir Jim Rose is reaching completion and the final report is expected this spring. The draft titles for the six proposed areas of learning are:
● human, social and environmental understanding
● understanding physical health and wellbeing
● understanding the arts and design
● understanding English, communication and languages
● mathematical understanding
● scientific and technological understanding.
http://curriculum.qca.org.uk/key-stages-1-and-2/Values-aims-and-purposes/primary-curriculum-review/

The SHINE festival in July 2008 involved a million students. Over 2,500 schools and organisations revealed the talents of young carers, entrepreneurs, motivators, leaders, scientists, musicians and artists. This year, the festival will take place 6-10 July. www.shineweek.co.uk

MANAGEMENT FOCUS

Leadership styles for the G&T coordinator

Paul Ainsworth considers how leadership theory can inform and support colleagues in the challenging and often controversial role of G&T coordinator/leading teacher

Many G&T coordinators find themselves in one of the most ambiguous locations within the school hierarchy. You may be paid as a middle leader, (often a junior one at that) yet unlike most middle leaders, you do not have your own team of staff that developed over time to work with you to achieve an agreed aim. Instead, you find yourself working on a whole-school initiative, trying to encourage other middle leaders to take on board your plans. They may not share your enthusiasm for developing the provision for the most-able students at your school and this can be even more personally trying if they are senior to you in the school hierarchy.

Leadership theory

One way of dealing with this ambiguity in roles and seniority could be to consider researching leadership styles. There is a lot that can be learned from looking at leadership theory, which can be used to improve your own practice, but also as a method of trying to understand why others behave in the way they do.

If you walk into any bookshop there will be shelves and shelves devoted to leadership books. If you search for 'leadership' on the Amazon.co.uk website, you will find over 41,000 hits. You may begin with looking at the more populist leadership books, such as the *Seven Habits of Highly Effective People* by Stephen Covey or *The One Minute Manager* by Ken Blanchard and Spencer Johnson. Such titles can provide an inspirational boost to how you could become more effective.

From an academic perspective, more than 65 different classifications of leadership have been developed. It's unlikely that without the impetus of further study, such as a Master's level course, busy teachers would consider looking at all the models of leadership which these more academic texts examine, and consequently few people really understand the leadership terms used in school documents. One example of this has been the increasing use of the term 'transformational leadership'. It has been suggested that there is a 'leadership continuum' from transformational leadership to laissez-faire leadership (Yammarino, 1993). I have amended this theory slightly to add on heroic leadership, as shown below.

Many people have an instinctive definition of

You may recognise that your best method of developing projects is by working with individual staff or with small groups

heroic leadership and laissez-faire leadership. The hero leads by charismatic example, whereas the laissez-faire leader, as the French phrase signifies, takes a 'hands-off, let-things-ride' approach. However, it is likely that we may be less clear on the middle-ground styles. Transformational leadership is described as 'a process that changes and transforms people', whereas transactional leaders 'exchange things of value... to advance their own aims and agendas' (Northouse, 2007).

The leadership continuum shows the leader taking a more assertive role as we move from right to left. It was suggested that as you move from laissez-faire through transactional leadership to transformational leadership, the leader's effectiveness peaks (Bass & Avolio, 1990). Following an urge to implement projects however, it can be easy to slip into a heroic leadership mode, and as a result lose some measure of effectiveness.

Leadership styles in practice

In analysing the effectiveness of these styles in practice, it is worth modelling them against actions that we have either seen or taken ourselves, and then considering what the response has been.

Heroic leadership

Heroic leadership is immediately recognisable and we may well have worked with people who display these traits. This is the leader who rules by the authority of their hierarchical position, or as Haigh (2008) vividly describes the heroic leader 'roaring in, soliciting approval like a colonel'. There can be a temptation as a G&T coordinator, especially with the backing of the senior leadership team to boldly announce to staff that 'this is what we are going to do' – an example of heroic leadership.

You may have analysed the situation perfectly and conducted reading on the situation; the solution may even be the best one on offer; but when delivered in such a style it is unlikely to work to its full potential.

You may become instantly aware of this if a group of middle leaders or teachers mutiny against one of your proposals. You may have had SLT support at the beginning of the process but this can disappear at such a point. This is particularly frustrating if you have observed other colleagues presenting in a similar style, but without conflicts. However, Smith (2008) observes:

'Heroic leaders are memorable but hard to emulate, as any teacher knows who has tried to copy the classroom management style of a revered colleague and failed miserably only to experience success in an independent way.'

You may be luckier and are working with a

The leadership continuum

Heroic leadership	Transformational leadership	Transactional leadership	Laissez-faire leadership
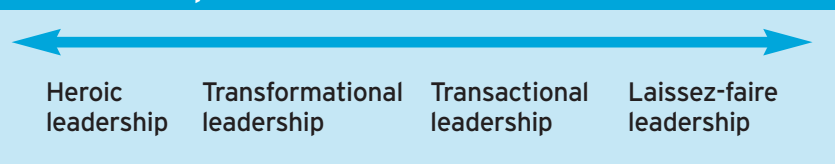
member of staff similar to those of one colleague who famously said, 'Just tell us what to do and we'll do it!' However, such initiatives are unlikely to survive in this climate, especially if you change roles.

Laissez-faire leadership

If you do get your fingers burned when introducing a proposal, you may be advised that the answer is to consult with staff. You take on the advice, consult and find there is no apparent consensus. In such circumstances, it is easy to take a laissez-faire attitude and just allow colleagues to get on with their own thing. However, as a committed G&T coordinator who wants to do the best for your pupils, it is possible to compensate for this lack of a coordinated G&T approach and replace it with lots of out-of-school activities which you organise yourself. This is sometimes described as the outside-in method of G&T delivery. While you are providing worthwhile opportunities for the children, this is a bolt-on method, only sustainable through your own personal efforts and likely to be unsustainable by the school as a whole upon your promotion or absence.

Transactional leadership

Another solution is to look for a reward that may persuade middle leaders to develop provision. Perhaps you can provide funding for those subjects which support the G&T vision. The realities are, though, that such a budget is likely to be small and hence will not persuade your more recalcitrant colleagues to support you. In addition, those who do work with you would have been likely to have done so anyway. If the monetary exchange does influence some individuals, it is unlikely to do so in the long term. One of the most powerful rewards that you can offer staff is the time to develop a G&T master class or a particular in-class activity. However, as we all know, time off the timetable is one of the most precious commodities in a school and it can be very difficult to persuade senior leaders to support this proposal.

Transformational leadership

The transformation style of leadership has received much positive research in recent years. People who exhibit this leadership style often have a strong set of values and ideals and use these to motivate people to work with them. As a G&T coordinator you are likely to have such beliefs with the central aim that all pupils reach their full potential. What makes transformational leadership more accessible is that it can be broken into four groups (Bass & Avolio 1990), sometimes known as the four I's, and you may find that one of these fits with your personality more closely than the others.
● *Idealised influence*: leaders who use their charisma to act as strong role models so that others wish to follow them. You may be one of those legendary teachers in the staffroom with excellent pupil discipline and it might be these characteristics which your colleagues recognise

and admire, leading them to want to become a part of your success.
● *Inspirational motivation*: leaders communicate their high expectations to others. Perhaps you can deliver really high-quality training sessions to staff which can inspire them.
● *Intellectual stimulation*: the leader uses creative and innovative ideas to challenge the beliefs of others. It may be that your greatest strength is your ability to research proposals and develop a logical process of improvement. If so, do not rush to tell your colleagues the proposals, but instead take your time to explain why they have been developed and what evidence you have found which indicate they will be a success.
● *Individualised consideration:* the leader provides a supportive climate and listens carefully to those who they are trying to lead. You may recognise that your best method of developing projects is by working with individual staff or small groups in order to get the most successful result. If so why not consider forming a group of G&T coaches or G&T champions who you can work with on a more personal basis. Do not rush to develop things at a whole-school level, but instead chip away at individuals with the aim of reaching a critical number of advocates: a tipping point for a change of whole school ethos and culture.

Conclusion

Even though the role of G&T coordinator is challenging, there are two kinds of personal comfort that you may wish to think about. First, the rich diversity of approaches gives one a real opportunity to try out different leadership styles and hopefully find the one which is the most appropriate for a particular occasion. Secondly, in my experience (perhaps as a result of these opportunities) the biggest common factor amongst recently promoted senior leaders is that they have previously undertaken the role of G&T coordinator!

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There can be a temptation as a G&T coordinator, especially with the backing of the senior leadership team to boldly announce to staff that, 'This is what we are going to do'

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MANAGEMENT FOCUS

Teaching assistants: enhancing learning for all pupils, including the gifted and talented

Martin Truckle sees support for G&T pupils as a natural development within the TA role

It seems no time at all since the term teaching assistant (TA) simply meant a mum who helped out at her local primary school. For those of us in mainstream secondary schools, the history of the TA is an even shorter one than in primary schools. When I started teaching in the early 1990s none of the schools where I worked employed TAs. I came across my first secondary teaching assistants when I moved from London to my current Midlands school in 1999.

However, the role has developed so rapidly in the last 10 or so years that in most schools the 'amateur' classroom assistant is a thing of the past. Today there are about 200,000 teaching assistants (FTE) in the state-funded sector, a figure which is increasing year on year (*School Workforce in England*: SFR 10/2008 DCSF). Alongside this expansion of the workforce is an increasing expectation that TAs will have training and acquire qualifications which equip them to work side-by-side with their teacher colleagues as fellow professionals. Ofsted's expectation is that TAs are not simply 'another pair of hands' in the classroom; teachers must show clear evidence that they and their TAs are working together.

Challenging boundaries

TAs are developing teaching and other skills that are testing the boundaries between their established role and that of the classroom teacher. In my current secondary school they fulfil a number of roles, including:
● acting as caseworkers for statemented children
● running groups to help children with core subjects, social skills and handwriting
● managing the behaviour unit
● mentoring individual students
● coordinating provision for looked-after children, EAL and travellers' children.

In primary schools teaching assistants are teaching whole classes, allowing the class teachers to have PPA time, and I know of one exceptionally talented primary TA who is also the school's Senco. Schools are now recognising that a huge, previously untapped resource of very able people is available to them in this form.

Where once the TA gave general support in the classroom, now the role is much more to do with providing targeted support for children with particular needs – and not only those with physical, sensory and learning difficulties, but also those children who need emotional, social and cultural support.

The one area of special need that appears to be off limits for TAs in most mainstream schools, is gifted and talented children

The one area of special need that appears to be off limits for TAs in most mainstream schools is gifted and talented children. We can speculate about why this might be the case:
● TAs constitute a significant cost, so the support they provide is precious and should perhaps be confined to 'those children who really need it'; the most-able children should be bright enough to find their own solutions to learning issues, shouldn't they?
● TAs aren't usually graduates; they may not have the skills to work with bright children and are better suited to working with children who struggle academically.
● Very able children see the TA as someone who helps those children who struggle – or those who need 'sitting on'.

However, it is possible to make a strong case for directing some TA support to gifted and talented pupils:
● If some children are entitled to extra support when they need it, why not all children, in this case, gifted and talented pupils?
● The extra cost argument is a strong one, but so too are the arguments for inclusion and the personalising of learning. On those bases alone it can be justifiable to widen the extent of TA support.
● G&T learners benefit enormously from adult attention, yet they are often set to work independently because they can 'manage on their own', while the TA looks after the group with SEN and the class teacher focuses on the 'middle' groups. One could argue lack of equality of opportunity in this sort of scenario.
● There is always a risk of stigmatising pupils by working closely with them and sending the message that they need more help, but by working with G&T learners and adding to the degree of challenge in the classroom, a TA can change perceptions about support.
● Targeted intervention can be further facilitated – particularly with those pupils with dual or multiple exceptionalities (eg, those with Asperger syndrome).
● Gifted and talented pupils have weaknesses too. They often need support as well as challenge. Sometimes they need academic (or practical or creative) support, and sometimes emotional reassurance.

Just as G&T pupils are like other pupils in many ways, so TAs are like other professionals working

with children. They can be just as dynamic and ambitious in this role as others. They can relish new challenges, experiences and responsibilities. In short, most TAs I know would seize the opportunity to work with G&T pupils with enthusiasm, and some undoubtedly would undoubtedly excel in this particular role.

G&T support provided by TAs

As a G&T coordinator or leading teacher, persuading colleagues to use a TA specifically to enhance the learning of G&T pupils may be more effective if you can suggest some practical ways of actually doing this.

A staff meeting or part of an Inset day could be devoted to sharing ideas and examples of successful strategies; if you know of a colleague who has been effective in this area, ask him or her to describe the approach they used and how it works. If possible, involve the TAs themselves in discussions. Some starting points might include the following questions:

What type of support?
● working with a 'top group' in the classroom
● working with G&T pupils withdrawn from the classroom
● supporting individual pupils with, for example, language/literacy or social-behavioural needs
● running a study-skills session
● supporting learners in self-assessment and target setting
● overseeing prep work (where pupils prepare an introduction, practical presentation or plenary to perform to the class)
● planning with the teacher and taking responsibility for an extension or enrichment task
● taking the lead in a lesson so that the teacher can focus on working with G&T pupils
● leading extended day activities/interest groups linked to subject areas.

What CPD is needed by TAs and who should/could provide it?
● generic awareness-raising of effective G&T provision
● understanding of higher order skills and personalised learning
● subject specific knowledge
● knowledge of resources
● ICT competence.

How can we monitor effectiveness?
● qualitative measures – pupil motivation and enthusiasm, improved behaviour
● quantitative measures – achievement and attainment, attendance.

Remember, too, that a competent TA can be extremely useful in helping the G&T coordinator or leading teacher to cope with the increasing amount of paperwork associated with G&T provision.

www.teachingexpertise.com

Is G&T the next development for TAs?

The development of the TA role has happened so smoothly and imperceptibly over recent years that a more proactive role with the gifted and talented is an inevitable development.

Enlightened heads will see that supporting and meeting the full range of needs is an inclusive, fair and appropriate thing for them to do. The more pragmatic headteachers might also recognise that individual behavioural, social and emotional issues would also be addressed. A TA who can provide both academic and emotional support would almost certainly prevent disruptions and help hold down exclusion figures – as well as maximise pupil progress. So will TA support for G&T students soon be widespread? Most TAs would almost certainly need further training in order to give them the confidence and knowledge to work with the most-able children, but my guess is that in 10 years' time people will see targeted support for gifted and talented children as the norm.

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Teachers must show clear evidence that they and 'their' TAs are working together

Challenge and support – some strategies

The TA as mediator:
● recasting tasks to add challenge, eg, using Bloom's Higher Order Thinking Skills as a guide:
● recognising when tasks are limiting rather than expanding pupils
● negotiating alternative tasks with or for the pupil
● negotiating alternative homework with or for the pupil
● mediating relationship between the pupil and peers.

The TA as part of the identification process:
● understanding subject specific behaviours of G&T pupils
● stimulating subject thinking through an understanding of questioning skills
● conducting focused observations of pupils
● having an awareness of provision as a means of discovering gifts and talents.

The TA as a monitor of learning:
● encouraging students to create a bridge between previous learning and experience and the intentions of the current lesson
● playing a central role in the framing of lesson plenaries
● leading students to shape their own questions
● challenging students to think and talk about how they have learned
● monitoring and promoting independent, self regulated learning
● providing encouragement and positive feedback.

● *The TA as mentor:*
● playing a key role in supporting agreed targeted intervention strategies
● praising effort, commitment, participation
● identifying individual needs – social as well as academic
● advocating for the pupil's academic, emotional and cultural needs
● maintaining a high level of dialogue with the pupil: maximising engagement, promoting choice and articulating needs and progress.

PROFESSIONAL FOCUS

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 a 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).

A recent survey rated the 'ability to learn' and the 'ability to think' as the two qualities most sought-after by blue chip employers

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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A-Z of G&T Education (11): Intelligence

Not too long ago, it was generally believed that intelligence was a single, fixed and inherited entity which could be identified by intelligence tests. More recently, it has been argued that intelligence is whatever abilities are valued by one's culture. For example, North Americans often associate verbal and mathematical skills with intelligence, but some seafaring cultures in the islands of the South Pacific view spatial memory and navigational skills as markers of intelligence. Most people have an intuitive notion of what intelligence is, yet no universally accepted definition of intelligence exists. Fundamental questions remain: Is intelligence one general ability or several independent systems of abilities? Is intelligence a property of the brain, a characteristic of behaviour or a set of knowledge and skills?

Intelligence testing of some sort or another is widely used in schools as part of a range of assessment techniques. Such tests are not foolproof, especially with younger pupils, but cognitive ability and IQ tests rarely deliver 'false positives' and can be useful, therefore, in highlighting underachievement. (A 'normal' IQ ranges from 85 to 115, but exceptionally gifted people have scores starting at 145.) There is now wide acknowledgement, however, that such tests quantify only certain types of intelligence when an increasing number of educationalists believe that there are a number of different, harder to measure intelligences. Furthermore, these intelligences are not fixed, but can be developed. Howard Gardner questioned the idea that intelligence results from a single factor, and that it can be measured simply via IQ tests. He originally formulated a list of seven intelligences.

Linguistic intelligence: the ability to learn languages and to use language effectively to express oneself (verbally and in writing) as well as to remember and convey information. Writers, poets, lawyers and speakers are among those seen as having high linguistic intelligence.

Logical-mathematical intelligence: the ability to detect patterns, reason deductively, think logically; understand mathematical operations, break code and investigate issues scientifically.

Musical intelligence: skill in the performance, composition and appreciation of musical patterns; hearing and creating pitch, tone and expression. Musicians obviously have well-developed auditory and sonal abilities, but poets, writers and public speakers are also able to use rhythm, pattern and alliteration to good effect.

Bodily-kinaesthetic intelligence: the ability to use mental abilities to coordinate bodily movements and use sensory awareness. Gymnasts and sportsmen and women have highly developed abilities in this field, and actors and dancers use body language to convey emotions.

Spatial intelligence: the ability to see details of the physical world; rotating and changing figures, projecting into three dimensions and mentally manipulating images; recognising and using patterns of wide space and more confined areas.

Interpersonal/social intelligence: the ability to understand the intentions, motivations and desires of other people. It allows people to work effectively with others and have a healthy concern for human rights and responsibilities. Educators, salespeople, religious and political leaders and counsellors all need a well-developed interpersonal intelligence.

Intrapersonal/emotional intelligence: the ability to understand, talk about and deal with our feelings, fears and motivations, enabling us to develop self-control and regulate our lives.

Since Howard Gardner's original listing of the intelligences in *Frames of Mind* (1983), there has been discussion regarding other possible types of intelligence. Gardner has added two more categories: natural/scientific intelligence and spiritual intelligence.

Naturalist/scientific intelligence: the ability to observe, identify, classify and explain features of the environment; understanding systems and relationships within the natural world.

Spiritual intelligence: an awareness of the elements of life that are beyond our understanding; searching for deeper meaning and purposes.

In addition to Gardner's intelligences, some educationalists have also posited a 'mechanical/technical' intelligence.

Mechanical/technical intelligence: understanding, creating and manipulating tools and technology involved in all aspects of life.

Schools with a broad vision of education recognise that all types of intelligence are important and a good mix, albeit 'uneven', will enable an individual to live well and make a positive contribution to society. Teachers, therefore, need to attend to all intelligences, identifying children's strengths and working with them to both nurture obvious abilities and develop weaker areas.

Howard Gardner questioned the idea that intelligence results from a single factor, and that it can be measured simply via IQ tests

References
Gardner, Howard (1983) *Frames of Mind: The Theory of Multiple Intelligences*, New York: Basic Books

Using Gardner's theory in departmental planning

Members of a humanities (history, geography, RE) department identified a need to ensure that activities were meeting the needs of their most able learners. They have added additional sections to the schemes, so that for each unit or group of lessons staff must indicate which 'intelligence' (Howard Gardner's categorisation) of learning style is being accessed, and whether the plan includes opportunities to use higher-order thinking skills.

This enables the department to ensure that the full range of learning styles and thinking skills are covered within a unit of work. (When they are not, the scheme needs to be revised.) The department has found that the straightforward tick box reinforces established good practice. It helps all members of the department to focus on the needs of more-able learners and ensure that each lesson challenges and motivates.

Lesson Snapshots

This series looks at classroom strategies for G&T coordinators and leading teachers to share with colleagues. This month, Mike O'Neill describes how to use 'Thinking Graphs'

Activity: Thinking Graphs
Subject: All
Key Stage(s): 2, 3 and 4.

Time to allocate
Thinking Graphs is often used as a main body activity and a time period of 15 to 20 minutes would be an appropriate amount to allocate for an example such as the one shown below.

Suitable for: Students working individually, in pairs or in small groups.

Activity overview
Most teachers would associate graphs with subjects such as maths and science, but all subjects make use of graphical information. In maths and science, activities that utilise graphs often involve students having to read the axes and find a value on the y-axis that corresponds to another value on the x-axis. Despite the fact that being able to 'read a graph' is a necessary skill, using the graph in this manner does not pose a great challenge to the students' thinking. The Thinking Graphs activity, however, allows students to think in a more divergent manner.

How does the activity work?
Students, individually, paired or grouped in threes or fours, are provided with a number of statements and a graph on A3 sized paper. A good Thinking Graphs activity will contain statements that can be placed in a number of places on the graph, although the students have to be able to justify why each statement goes in each place.

Example 1:
Students in a KS3 science lesson have been studying the topic of distance-time graphs. This has involved them using graphs to describe different types of motion and to calculate values for the speed of a vehicle at a particular point in time. The Thinking Graphs activity asks students to consider the speeds and heights involved in a bungee jump, placing the statements where appropriate on the graph. There may be more than one place where each statement can be placed; as long as students can justify this then they will have performed the task correctly.

Where else could I use Thinking Graphs?
The following suggestions show where Thinking Graphs activities can be used in other subjects:
● In a history lesson about the First World War, students could be given a graph showing the number of British ships lost 1914-18 and a graph of the number of U-boats in use during the same time. Statements could relate to people losing their jobs, cricket pitches being dug up to grow vegetables, the German surrender, British military tactical changes, women receiving black-edged telegrams.

● In a geography lesson, students could be provided with a graph that shows how the temperature of a country has fluctuated over a 100-year period. Statements referring to global warming, use of renewable and non-renewable fuels, flooding, population changes and other environmental factors could be on the statements.
● In business studies, a graph showing the value of share prices over a five year period could be used. Statements referring to wars, recession, supply and demand, company take-overs, job losses, bankruptcy could make up the statements.

A distance-time graph

What does Thinking Graphs bring to a lesson?
● a focus on thinking towards multiple solutions
● an opportunity for teachers to conduct 'ephemeral' formative assessment that involves listening to students thinking out loud
● assessment of students' understanding of key words related to a topic as they verbalise their understanding
● opportunities for kinaesthetic work, as this activity will involve the manipulation of materials on paper or card
● if used in conjunction with an interactive whiteboard, the activity can be designed to be interactive as students come to the board to drag their statement to a relevant place on the graph
● a chance for creative thinking to happen and the generation of higher-order open questions
● Socratic questioning as students question each other about the best place for a statement to be placed on the graph
● opportunities for students to work independently or collaboratively.

Would this be useful as a homework technique?
Yes. An activity such as Thinking Graphs can be used as a homework exercise. To increase the demand of the task, or to give the activity a different slant, ask students to design their own graph and statements. They could do this for the same topic or try and adapt the idea to another area of the work they have covered.

RESOURCES

On the G&T trail at the Education Show

Sal McKeown highlights what's on offer at this month's Education Show for enhancing G&T provision in your school

Whatever stage you're at in terms of developing G&T provision in school, it's always useful to leave your immediate domain once in a while to see the bigger picture, share ideas and look for new inspiration. The Education Show runs from 26 to 28 March at the NEC Birmingham and provides an excellent opportunity to find out what's on offer in terms of student resources and staff training (www.education-show.com).

Time is always an issue, but carefully planned visits to national exhibitions like the Education Show can provide valuable CPD and make a direct impact on the quality of your work. Planning is important because without it, you risk the prospect of trailing around a huge exhibition hall, seeing lots of exciting stands and different resources, collecting lots of catalogues and 'freebies', but not actually achieving very much.

Before you go, think about your provision plan for G&T and where gaps exist in resources. Ask colleagues for a wish list: there might be particular pupils who would benefit from additional opportunities provided by YGT membership, attendance at a masterclass or new resources in school. Make a list of what you hope to find and consult the floor plan (see the website above). Be prepared to talk to the exhibitors – if they can't help you directly, they will often point you in the right direction, even if it involves a competitor.

Planning your visit
I've suggested some starting points below for your audit and planning, with some 'not to be missed' points of interest at the show.

● Is there a good variety of external events for G&T pupils (summer schools, visits, enterprise weeks, debating competitions and maths/science challenges)? Use a section of the school's website to market the G&T opportunities to parents of current and prospective pupils. Don't just rely on print: look at developing podcasts. Have a talk with Softease on stand M27 about Podium.

● You could consider forming a focus group where gifted and talented pupils can suggest ways of enhancing provision. Talk to Teachers TV (stand T10) about developing and recording pupil voice.

● AQUILA Magazine's thought-provoking articles and challenging puzzles make it a valuable resource for G&T children seven to 13-years old. Monthly topics are expanded through English, science and maths, developing children's thinking skills with a range of activities. There are features on environmental issues, history, geography, astronomy, crafts and philosophy, as well as cross-curricular challenges. Teachers can photocopy the monthly topic and puzzle pages for classroom use

Be prepared to talk to the exhibitors – if they can't help you directly, they will often point you in the right direction, even if it involves a competitor

and engage their pupils in AQUILA's projects and competitions. See stand PZ-G62.

● Look for a hands-on approach to learning for young children at Teaching Off The Wall (stand EY A45) and Learning Resources Limited (stand E20).

● Gifted and talented capabilities come in all shapes and sizes, so don't just focus on words. Visual learners will excel with images, photographs and films. See the winners of National Schools Film & Animation Awards on the Tag Learning LTD stand (IT P60).

● Is G&T an item for Continual Professional Development (CPD)? Does this need to be an external course or could it arise from of in-house projects and home-grown skills? Look at the courses from the Educational Development Service, stand X25, and Inspire Education, stand V30

● The Young Gifted and Talented Programme (YG&T, stand T30) is showing the portal that will host discussion forums known as Faculty Cafés, specialist online study groups, the new Eco-Builder learning activity, and a Learner Catalogue featuring resources and events.

● The DCSF is running City GATES, a programme dedicated to improving outcomes for G&T 14- to 19-year-olds in London, the Black Country and Greater Manchester. Find out more on stand T30.

● Members of the West Midlands Gifted and Talented Regional Partnership will also be on stand T30 promoting initiatives such as Publishing House Me. This has grown enormously since its beginnings last year (see *G&T Update* issue 59, Nov 2008) and the site bristles with brilliant poems, stories and pictures from pupils of all ages. Schools are using it :

✱ as a model for their own in-house student website.

✱ for stimulus in lessons and student discussions; in circle time, framing questions around texts; thought for the week; assemblies, as starters for lines of enquiry, for stimulating higher-order thinking.

✱ as a way of acknowledging and rewarding original work - each class sends in one piece of work per week to be considered for inclusion on the site – www.publishinghouse.me.uk/index.php.

Seminars
There are no seminars advertised explicitly as G&T focused, but a number of them may be of interest, eg, 'Education for the 21st century: full brain development using technologies of consciousness' and 'Ignition – building a successful science curriculum'. Are you joining the 'Shine' festival this year? Go to the Creative Partnerships Seminar to found out more.

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Stands with resources for G&T pupils at the Education Show

IT N60 A*Star Education Maths Matters contains over 400 three- and four-part lessons with libraries of video introductions, alternative starter questions and interactive tasters. www.maths-matters.co.uk	**N36 Espresso Education** This offers Take Me Further activities to encourage discussion and provoke ideas and opinions The activities will engage pupils in higher order thinking skills. www.espresso.co.uk	**M20 Gigajam** This offers versatile digital music resources. They organised a gifted and talented scheme for Wandsworth City Learning Centre. http://schools.gigajam.com/CaseStudyWandsworth.aspx	**E20 Learning Resources Limited** A good source of resources for early years kinaesthetic learners with photographic story starter cubes and a giant inflatable labelling globe. www.learningresources.co.uk
IT-R43 The Number Gym This has age-neutral interactive teaching tools. As well as covering maths concepts, mental arithmetic and basic skills at KS1 and 2, it also has open-ended explorations to encourages creativity in maths. www.numbergym.co.uk	**G10 Rising Stars UK Ltd** A key publisher of gifted and talented resources, works closely with NACE (the National Association for Able Children in Education), to provide carefully tailored materials. www.risingstars.uk.com	**M27 Softease** Makers of simple but effective social networking and podcasting tools. Winner of the BETT 2009 Content-Free Tools Award for their product *Podium*. www.softease.com	**Q20 Specialist Schools and Academies Trust** This currently focuses on raising standards and achievement and is offering a programme of seminars at the show, many of which are led by schools. www.specialistschools.org.uk
IT-P60 Tag Learning Lots of good resources for making multimedia, puppeteering and creative projects. They also organised the recent National Schools Film & Animation Awards. www.taglearning.com	**EY-A45 Teaching Off The Wall** Educational activities for hands-on learning in early years and primary settings, including maths games, science kits, bingo, puzzles, inflatables, quiz cubes. www.teachingoffthewall.co.uk	**T10 Teachers TV** A good source of information and examples of emerging classroom practice in teaching gifted and talented students. The pupil videos are well worth a look. www.teachers.tv	**T30 The Youngs Gifted & Talented Programme** This has a redesigned online portal with subject specific discussion forums, specialist online study groups, the new Eco-Builder learning activity and a learner catalogue. http://ygt.dcsf.gov.uk

Website focus: read, debate, see, create

The City GATES Needs Analysis Tool is an ambitious project (see www.citygatesneedsanalysis.co.uk/). Its aim is to encourage a broader spectrum of gifted and talented pupils to apply to the most sought-after universities and the most demanding degree courses.

It is a self-assessment tool with 45 questions, and it takes 15 to 20 minutes to complete. It is in essence a prototype and has much to offer schools, but will need some refining before it fulfils its potential. Questions 2 through 9 ask pupils to rate the level of support they need and receive from family, teachers and outside agencies. Pupils have to give a rating between 0 and 100. This is subjective and seems too wide a range; one person's 68 is another person's 85. Surely a mark out of 10 would be better and lead to a more meaningful result? In fact, teachers may want to recommend that pupils give a rating out of 10 or 20 and then multiply to obtain a percentage score.

Questions 16 asks about 'opportunities to participate in groups, clubs or events'. This is confusingly vague. Are we talking about inside or outside school, and does line dancing count? Question 19 was a poser: 'I have opportunities to have some private tutoring in my goal subjects'. It may refer to dedicated teachers offering extra sessions in half-term or after-school, but that is not what is generally understood by private tutoring and may make some schools feel that the questionnaire is aimed at a different class of children altogether. There is also something bizarre about giving a percentage mark to these questions. If someone puts 45% for private tutoring, does that mean they have fewer opportunities than someone who puts 75%, or that they are less aware of them? Perhaps they need to discuss this with a teacher but that might limit the honesty of their responses.

Despite some weaknesses, the City GATES Needs Analysis Tool is a good way of helping pupils to think in a more structured way about their future goals. It will provide them with a profile of their strengths and weaknesses, help them to find suitable resources and services and provide valuable starting points for discussions with teachers and mentors. It can also be used in different ways by groups who might write a report, make a presentation or a mind map of the top 10 factors for good provision for gifted and talented pupils who want to set their sights on good universities. This would help the school make changes which could benefit all pupils regardless of their destination.

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What's on

For teachers:

'Its All about Learning' 10th National Conference for LAs
23 April, Leamington Spa
NACE conference for local authority directors, advisers, inspectors, SIPs, cluster leading teachersand NACE consultants.
www.nace.co.uk/nace/conferences

Analysing data for school improvement
29 April, Birmingham
Gain a deeper understanding of the implications of data, improve your use of data management tools and initiate informed intervention strategies to raise standards at your school.
www.teachingexpertise.com/conferences/analysing-data-school-improvement-birmingham-3799

Developing very able students at post-16
May 5, London
The conference will help delegates create strategic and personalised provision to develop very-able students as independent learners, motivated to succeed in exams and progress to top universities.
www.teachingexpertise.com/conferences/developing-very-able-students-post-16-4131

Thinking Skills
4 June, London
David George leads a one-day course on how recent developments in brain science relate to teaching and learning and how thinking skills can be integrated into curriculum delivery.
www.primeprofessionalconferences.com/courses/21/thinking-skills

Engaging Boys in Education
4 June, London
White working class boys are still achieving significantly lower grades than their female class-mates and peers from different social or ethnic backgrounds. This is an opportunity to explore the barriers to boys' achievement and receive practical advice for overcoming the anti-education culture that exists amongst teenage boys.
www.cpd.info/boys/indexTEX.html

4th National NACE Challenge Award Conference
26 June, London
Useful ideas and successful models to introduce challenge into everyday lessons based on the NACE Challenge Award Framework.
www.nace.co.uk/nace/conferences

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