

Hattie's concept of visible teaching and learning

Why is the issue important?

There is a great deal of research that shows what makes a difference in the classroom. The difficulty for teachers is identifying not just 'what works', but 'what works best' through seeing the relative effectiveness of different influences. Of greater value still however, for experimenting with researched practice, is understanding the underlying principles about why some innovations are more successful than others.

What did the research show?

Hattie's study explored the influences that had the most and least impact on student achievement. The influences that had the largest effect related to the teacher, and teaching and learning approaches. He proposed a model of 'visible teaching and visible learning' which identified the most significant factors of the effective approaches.

Visible teaching involves:

- making learning the explicit goal;
- sharing challenging learning intentions and success criteria;
- planning interventions that deliberately encourage mastery of these intentions;
- seeking and giving feedback; and
- adapting teaching as a result of feedback from learners.

Visible learning involves students:

- being committed and open to learning;
- being involved in setting challenging learning intentions and success criteria; and
- seeking feedback for learning.

According to Hattie, for many students, success at school relates to adopting a surface approach to learning in which they reproduce taught material in order to maximise their achievement in assessments. However, many teachers believe that the goal of their teaching is enhancing deep learning. Hattie argued that in fact true learning requires a balance of surface and deep learning. The surface learning of ideas and facts is balanced with deeper learning which requires higher levels of thinking, a process where learners construct ideas and develop their conceptual understanding.

Visible learning involves students being committed and open to learning. It also involves them taking an active role. This includes being involved in setting challenging learning intentions and success criteria, and seeking feedback for learning. As students do this they develop their belief in themselves as learners and engage in self-monitoring, self-evaluation and self-assessment. They start to become their own teachers.

The role of gender

The nature of the relationship between gender and achievement is an area of concern for many teachers. Hattie's synthesis of meta-analyses found only very minor differences between males and females. Gender differences were virtually zero in verbal ability; there were small differences in mathematics and very small differences in science. There was more variation within groups of boys and within groups of girls than there were differences between boys and girls. Consequently, Hattie argued

that the difference between males and females should not be of major focus for teachers and schools; the way to tackle differences in achievement is to focus on effective pedagogy for all pupils.

How did Hattie arrive at his conclusions?

Hattie identified six main contributors to learning: the student, the home, the school, the curriculum, the teacher, and teaching and learning approaches. He worked through each of these categories of influences to evaluate which specific innovations and influences had the greatest impact on achievement. From these he developed his model to highlight and explain the most important aspects of the influences.

How was the research designed?

Hattie carried out a synthesis of more than 800 meta-analyses about influences on learning. Each meta-analysis had converted the effects of each study included in it into a common measure (effect size). Hattie developed a way of ranking all the various influences and innovations in these meta-analyses according to their effect sizes. From these rankings he was able to identify the most significant influences on pupil learning and develop his model.

What are the implications?

Teachers may like to consider the following implications of this research:

- Hattie's model stressed that learning needs to be made visible to students. Could you invite a colleague to observe a teaching episode and discuss afterwards the ways in which you approach, for example, making learning intentions and success criteria clear, involving students in creating success criteria, planning learning activities that directly relate to the learning intentions and giving feedback?
- Hattie's model emphasised that the most powerful feedback is that given from the student to the teacher. How do you gain information about the learning of the individuals in your class? One possible way of gaining this information could be to ask all the class to sketch a graph to show the results of a science experiment, or the emotions of a character in a book which can be quickly held up for you to scan. Which strategies are most effective for gaining a picture of students' skills and understanding? Discussing with a colleague the way in which you use feedback to inform your teaching could be a helpful next step.
- Hattie found that teacher-student relationships were extremely important. Developing relationships requires skills such as listening, empathy, caring and having a positive regard for others. It also involves creating an environment where it is acceptable to take a risk. Could you gain feedback from your students on their views of the climate you create in your classroom?
- Hattie noted the importance of teachers having high expectations of their students.
- He argued that teachers must 'stop seeking evidence to confirm prior expectations but seek evidence to surprise themselves'. You may like to share with a colleague 'critical incidents' where a student has surprised you with the level of their learning. Can you identify any students for whom setting out to be surprised would be a helpful next step? Would doing this in collaboration with another colleague help you to widen the scope for being surprised?

School leaders may like to consider the following implications:

- Hattie's meta-analysis showed that some teaching strategies were much more effective than others in raising student achievement. Could you spend time with your leadership team collecting evidence about the aspects of teaching that have the most impact on student

outcomes and about which approaches could be reduced to make room for other, more effective ones?

- Hattie found that some approaches, such as teaching to the test, had very little impact whilst others such as using feedback had a very large effect size. Does your school focus its attention on the contributions that have the greatest impact on student achievement?
- Whilst Hattie argued that it was important to identify contributions that had large effect sizes he also emphasised that it was important to understand why they were effective in terms of their relationship to his model of visible teaching and learning. Could you work with your staff to identify why an aspect of classroom practice that has a positive impact on student learning is effective in your school? You may like to provide teachers with a copy of the signposts to effective learning to facilitate their discussion. These signposts can be found in the 'What did Hattie conclude from his work?' section.
- Many schools have emphasised the importance of student-centred learning. Some teachers may believe that Hattie's findings about the value of direct teaching contradict this. Would it be helpful to involve staff in clarifying what Hattie meant by direct instruction, such as having clear learning intentions and taking an active role in driving the learning forward rather than didactic teaching from the front?
- Hattie argued students need to work in an environment where they are able to make and learn from mistakes. If teachers are to become as effective as possible they also need to feel that they can talk about their teaching and see errors or difficulties as critical learning opportunities. Which strategies do your leadership team use to create this learning climate? How do you gain feedback from staff about their perceptions of the climate and how safe they feel to make mistakes?

Case study: Making teaching and learning more visible

This case study shows how teachers at one school (a smaller than average 11-16 comprehensive school serving a rural, economically-mixed area) set out to make teaching and learning a more active and visible experience. The three English teachers focused particularly on higher-ability boys (many of whom they felt were underachieving) studying for GCSE English. The boys were taught as a single-gender group. The teachers made learning more visible through making learning objectives and success criteria clear, active approaches to teaching and learning, and raising expectations.

Clear learning objectives

The teachers felt that boys worked better when they understood the big picture. Consequently each lesson was put into a wider context. For example, each teacher set out to ensure the boys understood how the skills they were developing in the classroom related to the exam they would be sitting, such as showing how a speaking and listening task related to the skills required for the GCSE paper involving analysis of texts.

Clear success criteria

The teachers set out to ensure that the boys understood how they would be assessed on what they had learned to that point. Sometimes they used toolbars created by the class. For example, the boys used a toolbar as a checklist, which they ticked as they listened to a presentation. This was a popular activity as the boys were eager to find out who had ticked which key feature and whether their own assessment matched the teacher's. The boys were also involved in peer marking linked to the success criteria while the teachers used comment-only marking which provided the boys with guidance about

where on the grading system they were working and what they had to do to take them to the next grade on one piece of work.

Active teaching and learning approaches

The teachers used ICT as a means to improve writing skills and help boys take ownership of their own learning. Examples included getting the boys to make comments on each other's work using the comment facility in Microsoft Word which focused the boys on analysis and allowed changes to be made easily and getting the boys to create Microsoft PowerPoint presentations. Drama was used to explore ideas and themes. One example was the use of a set of key words and phrases from a part of the set novel still unread which the boys were given on strips of card in random order. In groups of three, the boys had to produce a drama-based presentation that gave a flavour of the character using these words. There was a lot of laughter, but the final product showed an understanding of the author's craft that more conventional analysis may not have achieved so simply.

Raising expectations

The teachers were keen to change the boys' attitudes to doing well in school. They set about raising the boys' expectations through the teacher holding high expectations for them, competition, team work and peer pressure.

- Discussions between the Year 11 group and their teacher were focused on how each one could attain an A* grade at GCSE.
- The boys (particularly the highest achievers) tended to raise their game when they were in competition with one another.
- Activities such as setting the boys the challenge of teaching the rest of the class a section of a poem in pairs, which would then be peer assessed were effective at improving achievement - students who made little effort in their presentations initially, worked harder as they saw others produce better examples, and as the group's expectations for good quality work rose.

The difference made by the strategies

The teachers noted an increase in motivation among higher-attaining boys in Year 11 and a considerable lessening of the anti-academic achievement culture after implementing the strategies described above. Parents also gave positive feedback on their children's progress. Questionnaires showed that the boys were particularly motivated by the physical activities, such as drama and group work, and the use of humour.

Find out more

To access the full version of this RfT summary, visit:

<http://www.curee.co.uk/files/publication/1301578655/Hatties%20concept%20of%20visible%20teaching%20and%20learning.pdf>

Case study reference: Horwood, M. (2006) 'Raising boys' attainment in English through single gender teaching and Assessment for Learning strategies', NTRP, Coventry.