53 Powerful Ideas All Teachers Should Know About

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It has more impact on educational effectiveness to change learners than it does to change teachers

When educational developers or teachers think about how to get students to learn more, they tend to think about changes in teaching or assessment methods, or changes in curricula. When senior management think about improving student learning, they tend to think about changing quality assurance, organisational changes or regulations. But the research evidence (mainly from schools) strongly suggests that the biggest leverage is to be found in none of those domains, but rather in changing learners. When various kinds of educational interventions are ranked in terms of how much positive impact they have, on average, on learning, the ones at the top of the rankings, with the biggest impacts, are mainly about learners, then about teachers and teaching, then about curricula, and lastly about organisational change (which often has zero or negative effects).

The best chance of improving how much students learn is to change how students learn. Changing other things (such as how teaching is conducted) may impact indirectly on how students learn, but the most direct way to change how students learn is to change students themselves so that they do different things with what is in front of them when they go about their learning. An example can be found in the current emphasis in the UK in trying to improve feedback to students on their assignments. This is a very worthwhile thing to try and do. However it is known that successful students do different things with feedback than do unsuccessful students, and that many students do nothing at all with their feedback. It may make more difference (and also be a lot cheaper) to try and change what students do with whatever feedback they are given, rather than try and change the feedback.

I will concentrate here on just four areas in which improving educational effectiveness is known to be possible through changing students: increasing students' effort; improving their 'metacognitive awareness and control'; developing their 'conceptions of learning and knowledge' and increasing their 'self-efficacy'.

Effort

Students learn more when they spend more 'time on task'. Organising things on courses so that students spend enough time on the right things is perhaps the most important responsibility of a teacher. Making challenging demands, and enough of them, is vital. Knowing how hard students actually work and whether this adds up to what curriculum design assumes is a necessary starting point – in the UK students are normally expected to study four courses in parallel each semester and spend 150 hours on each. Research evidence suggests that they actually often spend only half this. That is a lot of lost

learning, due, in the main, to low expectations and demands, and to students' lack of awareness of what is expected and also how much they are actually doing. There is another of the '53' ideas on student effort, so I will not elaborate further here other than to stress that increasing time on task can be a cheap and effective way to improve learning and may involve little or no extra effort on the part of teachers.

Meta cognitive awareness and control

At the start of my 'educational development' career I was, amongst other things, a 'study skills counsellor'. I had a caseload of students referred to me by Student Services that were judged not to have emotional difficulties but technical difficulties, so they were packed off to the Educational Methods Unit that I directed. Most of these students were not stupid or lazy but they lacked 'meta cognitive awareness and control' (though I was unfamiliar with this term at the time). One student came to me saying he was struggling with his reading, which he found slow and unproductive. He asked for some tips, perhaps 'speed reading' tips. I asked him if he had a book in his briefcase that he was currently working reading, and to get it out, open it where he had last left off, and to continue reading for ten minutes while I got on with some work. I then asked him to tell me what he had been doing, exactly. He was nonplussed. "What do you mean 'what was I doing' he said", "I was reading, as you asked me to!". I persisted: "But what, exactly, were you doing? Tell me what was going on". He

replied, shrugging his shoulders in disbelief at such a stupid question: 'Well I cast my eyes across the rows till I got to the bottom and then turned over!'. It turned out that he had no purpose whatsoever, he always read everything in the same way, and he had no conscious awareness of what was going on in his mind while this happened. It was a perfect example of what Roger Säljö calls being unable to 'thematise' studying – he was completely unable to talk about it. In contrast a student with good 'metacognitive awareness and control' would have said something like "Well I wasn't sure if this chapter would help me with the section on X in my essay so I did a quick skim first to see if it was worthwhile – and it was – it had several sections on exactly what I was looking for. So I then started taking notes on the three things I had spotted. I read those sections carefully and went back over bits I had not grasped properly the first time, and wrote some notes that will help with the sentences I need to write on that. Then finally I had a quick scan forwards to see if there was anything else I had missed."

Learners with good metacognitive awareness and control are aware of what is going on and can tell you about it. They spot differences in demands and can explain why some things they might do are likely to be more effective than others – and they have the repertoire so that they can choose quite flexibly to do different things once that they have spotted what kind of studying would suit different contexts and purposes better. They can tell if it has 'worked' for them or if they need to do more or try something else, and so on...

Successful students who use feedback differently than unsuccessful students can tell you why they do it, how they do it and what they get out of it.

This is not about following tips as described in most 'how to study' books. Students with excellent metacognitive awareness may do quite different things from each other – but they are aware of what works for them.

Developing metacognitive awareness involves discussing study behaviour with other students, keeping a diary on study habits, experimenting with different methods to see what happens, and generally being reflective about process and not just about content.

Conceptions of learning and of knowledge

Student develop over time, through encountering challenging educational experiences and reflecting on them, in terms of what they think learning itself consists of, and what they think knowledge is. There are other items amongst the '53 ideas' on this issue of 'student thinking about learning' so all I will say here is that unsophisticated students tend to see learning as acquiring isolated facts or ideas that others consider to be 'right', while more sophisticated students attempt to 'understand reality' and have developed a flexible commitment to a way of seeing things, understanding that there are alternative explanations and perspectives with varying degrees of usefulness or truth. These profoundly different underlying student conceptions of learning and knowledge have huge implications for how students study and,

as a consequence, for what and how much they learn. It is possible to greatly accelerate the development of the sophistication of their understanding about learning and knowledge and so change how they learn and how effectively.

Self-efficacy

Someone is described as having high 'self-efficacy' when they have a confident belief that they can do something, and do it well, and as having low self-efficacy when they think that they cannot do something or that they are likely to fail if they try. To illustrate this notion in practice, an Open University Science foundation course found that many students (who often had weak Maths backgrounds) dropped out as soon as they saw the first assignment on the course. They did not even tackle it – they just gave up. The course was changed so that the first four assignments were of graded difficulty, starting at a very introductory level and building up to the same level as previously by assignment five. These first four assignments were now 'formative-only' – they had feedback but no marks that counted towards the course grade. And tutors were told to concentrate, in their feedback, on being encouraging rather than on pointing out deficiencies. These changes were designed to increase self-efficacy, and it worked: the effect on retention and then exam performance was very marked.

Self efficacy may not be much of an issue for more than a small minority of students at Oxford but is likely to be a significant issue for

students with below average educational levels of achievement at other types of institution who perceive themselves as 'out of their league' and who are anxious about whether they will cope. Improving self-efficacy can be a pre-condition of students actually coping and progressing at all.

Implications for educational developers

Efforts directed at changing students tend to be organised within universities by Study Skills Centres or Student Services. There are a few examples where improving teaching and improving learning are seen as symbiotic and are housed under one roof, as at Stanford University, but in such cases the central function tends to work directly with students. This is seldom very successful. Instead, educational developers need to work with teachers to build the development of students as learners into teaching, into curricula and into assignments and feedback.

Some teachers believe that such efforts are not their responsibility. This issue, of what teachers believe teaching to consist of, is addressed in another of the 53 ideas.

Suggested reading

Gibbs, G. (1981) Teaching students to Learn. Open University Press

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Habeshaw, T., Gibbs, G. & Habeshaw, S. (2102) 53 Interesting ways of helping your students to study. Updated by Hannah Strawson. The Professional and Higher Partnership: Ely.

http://53interesting.wordpress.com/

F.Marton, D.Hounsell & N.Entwistle (Eds) (2005)The experience of learning: implications for teaching and studying in higher education. Chap 6 Säljö, R. Reading and everyday conceptions of knowledge. Chap 7 Hounsell, D. Contrasting conceptions of essay writing

http://www.ed.ac.uk/schools-departments/institute-academic-development/learning-teaching/staff/advice/researching/publications/experience-of-learning

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