53 Powerful Ideas All Teachers Should Know About

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It is difficult to demonstrate that students benefit from their teachers also being researchers

Most academics claim that research benefits students, in the sense that teachers ought to be researchers and that the best researchers are the best teachers. Vice Chancellors of élite universities often state that it is essential that all teachers in their institutions are researchers. In some ways, institutional policies reflect this belief. Many institutions pay teachers less, and give them lower status titles and worse conditions of work, if they are not also first rate researchers. Promotion is still dominated by research achievements, even at supposedly teaching-oriented institutions. In other ways policies seem contradictory, at best. In the USA, for example, there is an almost perfect negative correlation between academics' salaries and the number of hours they spend teaching. This is because as academics get promoted for their research, they usually run away from teaching undergraduate students and are helped and encouraged to do so. If the best researchers were really the best teachers then policies would ensure that successful, well paid, researchers would also teach longer hours, so as to benefit the students most, and students would be protected from spending many hours with teachers who were weak at research. I know of no institution in the world where this actually happens. Instead it is the top research universities in the UK that have much the highest proportion of all small group teaching undertaken by research novices: PhD students. And for those who might argue that a PhD confers teaching benefits: the evidence is that it doesn't. However the proportion of teaching undertaken by anyone other than full academics is known to reduce student performance, retention and learning gains. But at least it protects the researchers from pesky students.

The issues underlying such beliefs and practices about the importance of research for teaching are complex, but can be unpacked with the help of research evidence.

First, is it the case that those academics with the strongest research record are the best teachers? Many studies have constructed measures of individual academics' research and teaching (and most of the teaching measures have been reliable and valid) - and found no relationship. Some good researchers are good teachers and some are bad. Some good teachers are good researchers and some don't do any research at all. The majority of academics are a bit rubbish at both research and teaching. About eighty studies, with varied methodologies and measures, have collected data on this question and none have found any convincing evidence that research is necessary in order to be a good teacher or even that it confers any consistent benefits of any kind. And there have been some

imaginative attempts to find a measure of benefits, any measure of any benefits, so long as it shows some kind of positive relationship between research and teaching. But studies have found nothing.

This seems so counter-intuitive that it requires some exploration. I used to meet academics at Oxford who told me that never, in their entire teaching career at Oxford, had they taught what they researched into – it was simply too esoteric or advanced to be on the curriculum at undergraduate level. In some subjects most academics are expected to be able to teach a wide range of courses, and are rotated round them on a regular basis – specialist knowledge is not considered important or even helpful. "Introduction to.." courses are likely to benefit from broad scholarship and good teaching rather than narrow research expertise....and so on. The circumstances in which it is possible that research expertise and specialist knowledge would be likely to be of value to undergraduates are not as common as is often assumed. But despite all these practical matters, the reality is that it is not necessary to be a top researcher to be a top teacher – these are largely unrelated domains of endeavour.

Part of the problem here is not in measuring teaching but in measuring 'research'. I have known wonderful scholars, widely read, totally immersed in developments in their discipline, passionate about their subject, who nevertheless did not publish enough to be even entered into research assessment exercises. They were fantastic teachers and often the highest ranked in their department by their students. They were scholarly, but did not engage much in the scholarship of discovery, which is all that was measured.

Moving on, neither is it the case that within a University the strong research departments are also the strong teaching departments. Again studies have consistently found no relationship. It is not the same at graduate level, where the richest departmental research environments help doctoral students to complete their theses successfully and on time. But for undergraduates there is no measurable benefit to the quality of teaching, or to the quality of student learning, or to their performance, of the department being a strong research department. A number of studies have shown that undergraduates may be almost completely unaware of the research going on in their own department – after all it is often organised as a separate enterprise, even undertaken in different buildings than students frequent and undertaken by different people than they meet from day to day, and on topics that are not even taught.

At the level of whole universities, those that are strongest at research have been found to be those that pay least attention to teaching and its improvement – national scale studies have reported strong negative correlations between measures of research and of attention to teaching. However there has been weak comparative evidence about whether it is the teaching that is weaker in strong research universities, or just that the attention to teaching is weaker. In the UK the use of the

National Student Survey, and other national surveys producing student ratings of teaching, have helped to illuminate this issue as they provide comparative institutional data about teaching. There are some small institutions with almost no research that have done increasingly well, and who outperform many 'Russell Group' élite research universities on teaching measures. The Open University – middle-ranked on research and clearly a teaching-oriented university - has consistently been top or nearly top of teaching rankings. Oxford has also been at or near the top of rankings – but possibly as a result of its very small group teaching, copious formative assessment, and other pedagogic practices that are part of their system, experienced by all students, and which have been shown by extensive studies to be pedagogically effective, rather than because of its research. Amongst the 'Russell Group' of research universities there is no clear relationship between their research ranking and their teaching ranking, with some world famous institutions hammered by students in 'Which?' and other surveys, while new members of the group, with lesser research performance, are doing rather well on teaching rankings. There are some 'teaching focussed' institutions, mainly large inner city ex-Polytechnics, that are consistently ranked poorly for teaching, but they face challenges others do not. It would be difficult to argue, on the basis of UK evidence, that institutional research prowess plays a large part in determining institutional teaching performance (independent of other variables, such as the quality of the students, spending on libraries and so on).

If you ask students what they would prefer then some, a minority, tend to say they would prefer their teachers to be active researchers – but there is no evidence that this actually benefits them. This minority of students probably have aspirations to become researchers while others, who do not express a preference for being taught by researchers, have other aspirations, and might prefer to be taught by professionals in their field of study (e.g. Doctors, Lawyers) or by those who are simply good teachers, whether or not they are also successful researchers.

I have spent my academic life believing that I kept intellectually vibrant by always undertaking research alongside my teaching, consultancy and service work, and that this benefitted those I have worked with. However some educational developers I have known have worked very effectively by using the research findings of others and have never done any research themselves. Others have emphasised their own research career and have become increasingly ineffective as change agents as their focus of attention has narrowed and their time has been squeezed. Even for educational developers, despite the strong current emphasis on the scholarship of teaching and the scholarship of educational development, it would be hard to find evidence that individuals doing research, in general, improves their personal impact on those they work with. Sometimes it does, and sometimes it doesn't. Many other factors

come into play. The same is true for teachers and their usefulness to students: there are many other factors that have more impact than teachers' research performance. The teaching practices that are known to have most impact on student learning, such as the provision of plentiful prompt feedback, surely cannot be argued to have anything to do with whether the teacher is also a researcher.

This is not to argue that research cannot help students' learning experience. It is simply that, given the way things are usually currently configured, on average it does not. The next '53' item will discuss how research can help undergraduate learning.

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