

The importance of knowledge for teaching

Graeme Aitken

The University of Auckland

Imagine for a moment that someone has challenged you at the end of a lesson with the questions:

- Why did you teach that to those students? and
- Why did you teach it that way?

Seemingly simple enough questions. To the first you might respond that it is where you were up to from the previous lesson, or where the students were up to, or what came next in the curriculum. To the second you might say that it is the way you have always taught this; that it is how the students like learning; or that you heard about the approach from others. While such answers are legitimate, they are far from satisfactory or complete, especially if we want to think of teaching as a profession. And that is precisely the way we should be thinking – in the same way that we think of medicine, law, engineering and architecture as professions. But thinking of teaching as a profession means more than just making the claim for this status. It means commitment to and enactment of a set of ideas with knowledge and ethics at the heart. The Australian Council of Professions defines a profession as:

a disciplined group of individuals who adhere to ethical standards and who hold themselves out as, and are accepted by the public as possessing special knowledge and skills in a widely recognised body of learning derived from research, education and training at a high level, and who are prepared to apply this knowledge and exercise these skills in the interest of others.¹

It follows from this that teaching's claim to be a profession rests on decision-making and action that is informed by 'special knowledge . . . derived from research, education and training at a high level' and applied 'in the interests of others'.

The answers proffered to the two questions at the start of this chapter hardly amount to specialist knowledge, and it is doubtful given the diverse nature of students that the answers serve the interests of students. They are in essence practical, routine responses. Not wrong, not irrelevant and not thoughtless – but limited. Something better and more informed – more knowledgeable – needs to be offered in response to questions about what is being taught and why. Not just because we want to justify the status claim that teaching is a profession but, more importantly, because of the adherence to 'ethical standards' and advancing the 'interests of others' – our students – that directs the need for and use of specialist knowledge.

We could get away with limited responses to questions about what and how to teach if we accepted limited or no responsibility for the outcomes of those decisions. But teaching, like medicine, aims to make lives better. Just as we would not want a doctor to treat based on limited knowledge of diagnoses and possible treatments, we would not want a teacher to teach based on limited knowledge of what they are teaching, of students, of learning and of possible strategies to improve learning. This is especially the case when teachers are working with the most disadvantaged and underserved. As George Beaton explains, 'The power that . . . knowledge gives [professionals], and the trust that society reposes in their conduct [means that] professionals have the special obligation to share their knowledge and expertise appropriately – that is, ethically – with the world and to its benefit.'² So knowledge matters. Not only because its specialist nature accords status to the profession but because it enables better decision-making which in turn brings greater advantage to those it serves.

With this in mind let us return to the questions posed at the start of this chapter and consider what more knowledgeable and complete responses might look like.

First, the question of justifying (perhaps even defending) *what* you teach. This is probably the more challenging of the questions because there are few limits on the options and, if the response is to speak to *each* student (rather than all students in general), then it needs to be nuanced according to ability and interest. Part of the justification of what to teach rests in the teacher's knowledge of the subject. This is not to suggest that the teacher needs to know everything, nor that they should position themselves as the font, and communicator, of all knowledge. Rather it is to suggest that the teacher needs to be accurate and

confident in what they are teaching and to be secure enough in their knowledge to be able to respond flexibly to students. We don't always have this accuracy and security at the outset of considering what to teach. We have all experienced teaching in an area that is new to us. But our curiosity for the content needs to be such that we are eager to learn, to get ourselves more than one page ahead, and thus be a resource and inspiration for student learning.

Knowing the content only gets us so far. As Lee Shulman pointed out many years ago, 'Mere content knowledge is likely to be as useless pedagogically as content free skill.'³ It needs to be accompanied by pedagogical understanding and skill. National curriculum and assessment policies inform entitlements, aspirations and expectations for learning and provide one source for narrowing down the possibilities of what to teach. So being knowledgeable about these policies (the New Zealand Curriculum, NCEA) is a fundamental pedagogical requirement. Where this narrowing occurs, for example in senior external assessments, content selection needs to be guided by an analysis of past assessments and examiners reports so that teaching is responsive to expected outcomes. This is not 'teaching to the test'. It is being responsible about determining the direction of learning and making decisions about priorities and emphasis.

The other pedagogical element in deciding what to teach lies in knowledge of the students – their abilities and their interests. While curriculum with its typical focus on levelling and progression guides what the next steps for learning might be, it does not answer the question about the next steps for *particular* learners. That requires teachers to know about and use formal and informal diagnostic assessments. What experiences do the students bring? How can those experiences be accessed to optimise connections to, and relevance of, new learning? What are the expectations of family, whānau and community? What do students already know? How does this knowledge vary among students? The assessment and pedagogical literature offers reliable ways of answering these questions. Being knowledgeable about this literature informs the design of more focused teaching and more personalised learning.

The combined knowledge of the subject matter, of curriculum and assessment, and of students is a specialist resource that enables the teacher to defend what they are teaching at any particular time. And it is a defence that they must be able to mount because in teaching time is a scarce resource. There is only so much available in a school day, term and year. There is so much of importance that could go into that time. But the issue is not one of importance; it is one of *relative* importance – why this content with these students on this day at this time? This cannot be well answered from everyday, common knowledge. It can only be answered from a commitment to deep and specialist knowledge.

Second, the question of justifying *how* you are teaching. Our own experience as learners, and the research literature on teaching, tell us that there is no one right way to teach. But this is not to say some ways of teaching are not better than others. Knowledge of these better ways comes from the research literature and from practice. The research literature offers insights into general pedagogy (use of advance organisers, clarity of explanations and instruction, maintenance of order, use of formative assessment and feedback) that are *likely* to be effective in most instructional settings. But there is also a subject-specific pedagogical literature (pedagogical content knowledge) that suggests approaches, and sequences, that are most likely to be effective in the teaching of particular concepts and ideas. Practice – the teacher's own past experience and colleagues – is also an instructive source for selecting approaches to teaching especially where that practice is based on an honest appraisal of impact. Just as the focus of teaching needs to take account of student abilities and interests, so does the approach to teaching. Knowing what helps learning for *particular* students alongside a well-developed understanding of the literature on motivation helps find ways of generating greater interest and engagement – not merely for its own sake, but for advancing learning. Knowing how *individual* students respond to the management of their behaviour alongside the literature on classroom management helps generate practical and respectful strategies for maintaining an orderly environment. The defence of the second questions lies very much in the combined wisdom of practice and specialist knowledge of the research and theoretical literature on general and subject-specific pedagogy.

Underlying both questions is another knowledge base that cannot be ignored: knowing yourself as a teacher. A defence of what you are teaching and how you are teaching it must be embedded in a commitment to setting expectations high and to avoiding deficit-thinking decision-making. We need to know ourselves well enough to avoid self-fulfilling negative prophecies and to be optimistic with and for each of those we teach. We need to know our blind-spots and biases – pedagogical and personal – and to seek to overcome them through persistence and tolerance. But just as importantly, we need to know ourselves well enough to preserve our own sense of sanity and health. As Beaton notes, the professions are distinguished by selfless service and altruism.⁴ Nowhere is that more the case than in teaching, but it does no one any good for this to overwhelm our own health and well-being.

In summary, knowledge matters in teaching because it is the hallmark of a profession. Because its specialist nature informs decisions that are more reliable than everyday or common knowledge. Because informed decisions lie at the heart of the social justice mission of teaching. And because knowing ourselves helps us behave in ways that both serve this mission and protect our personal well-being.

Graeme Aitken

Professor Graeme Aitken has a long history in education. For 14 years he taught geography, history and social studies teacher at Waitakere College, followed by 10 years as a secondary teacher educator. He was appointed inaugural Director of Secondary Teacher Education at the University of Auckland in 1996, and subsequently as Dean of the Faculty of Education and Social Work from 2008-2017. He is currently the Director of Educational Initiatives in the Office of the Vice Chancellor where he oversees the STEM Online NZ resource development. Graeme co-developed the Teaching as Inquiry model that underpins the pedagogical approach of the New Zealand Curriculum and is the co-author of the Best Evidence Synthesis for Social Sciences.

1. Australian Council of Professions. (n.d.). What is a profession? Retrieved from <http://www.professions.com.au/about-us/what-is-a-professional>
2. Beaton, G. R. (2010, January 31). *Why professionalism is still relevant*. University of Melbourne Legal Studies Research Paper No. 445. Retrieved from <https://ssrn.com/abstract=1545509>
3. Shulman, L. (1986). Those who understand: Knowledge growth in teaching. *Educational Researcher*, 15(2), p. 8.
4. Beaton (2010), p. 6.