Teachers and the academic disciplines

Mr Michael Fordham

University of Cambridge
maf44@cam.ac.uk
MacIntyre’s proposition – that teaching is not a social practice – has attracted a great deal of commentary in recent years (MacIntyre & Dunne, 2002). The subsequent debate within the philosophy of education has focused primarily, if not solely, on the extent to which this proposition might stand up to closer scrutiny (Dunne, 2003; Dunne & Hogan, 2004; Higgins, 2010; Davies, 2013). Little attention, however, has been given to MacIntyre’s associated proposition that teachers are engaged in the practice that they are teaching. Indeed, MacIntyre explicitly stated that the ‘teacher should think of her or himself as a mathematician, a reader of poetry, an historian or whatever, engaged in communicating craft and knowledge to apprentices (MacIntyre & Dunne, 5).’ This argument is interesting for it situates subject expertise at the heart of the activity of teaching. Furthermore, it does not reduce subject expertise to a simplistic conception of subject knowledge: rather, it requires us to see teachers as members of an active and developing tradition that continues to negotiate notions of excellence and the goods that are internal to the practice.

It is my intention here to argue that this is a line of inquiry worthy of further pursuit. I wish to challenge the argument that teachers of school subjects, such as chemistry, physics and history, cannot be understood as being members of the academic discipline they teach as teaching itself is a form of disciplinary activity. In doing so, I seek to argue that insufficient attention has been given to the distinction between a ‘discipline’ and a ‘profession’, and that confusion over these terms has muddied our understanding of what it means to teach academic disciplines in schools. Drawing on this distinction, I propose that teachers can be understood as engaged in the practice of an academic discipline because the projected telos towards which they are directed and direct their pupils, and the means by which they set out in pursuit of that telos, are those of the academic discipline. Having established that it is possible to make a distinction between profession and discipline and understand teachers as members of both former and latter, I conclude, by drawing on a framing of disciplinary knowledge derived from social epistemology, that it is necessary to understand teachers as engaged in the practice of the discipline they teach.

Teaching as a practice

MacIntyre’s account of practice is teleological in character. In Aristotelian terms, ‘every art and every investigation, and similarly ever action and pursuit, is considered to aim at some good (Aristotle, 2004: 1094a).’ A practice, for MacIntyre, has goods internal to itself – in contradistinction to, for example, the making of money or achievement of status, both of which can be achieved by numerous means – and strives towards a necessarily negotiated notion of excellence that serves as the telos of the practice. A practice can thus be defined as any coherent and complex form of socially established cooperative human activity through which goods internal to that form of activity are realised in the course of trying to achieve those standards of excellence which are appropriate to, and partially definitive of that form of activity, with the result that human powers to achieve
excellence, and human conceptions to the ends and goods involved, are systematically extended (MacIntyre 1985: 187).

MacIntyre provides us with a number of examples of practices such as farming, music and chess; he also understands the academic disciplines – such as chemistry, history and geology – as practices. Teaching, however, is not understood by MacIntyre to be a practice.

To understand this distinction, it is worth distinguishing between a practice and the sets of activities that contribute towards a practice. All practices consist of technical skills which are necessary for the practice, yet do not of themselves constitute that practice. For MacIntyre (1985: 225), 'what is distinctive in a practice is in part the way in which conceptions of the relevant goods and ends which the technical skills serve – and every practice does require the exercise of technical skills – are transformed and enriched by these extensions of human powers and by that regard for its own internal goods which are partially definitive of each particular practice or type of practice.' In the practice of chemistry, for example, technical skills such as titration, using a microscope or operating statistical software might contribute to the practice. What is distinctive to chemistry, however, is a concern for knowledge about reality at the molecular and atomic scale; it is under the auspices of this telos that the activities and techniques that constitute the practice are united. It is from this position that MacIntyre proposed that teaching should not be understood as a practice. Teaching does not have ends beyond those of the practice that is being taught: one is not a teacher, but a teacher of chess, or history, or chemistry. A chemistry teacher, for MacIntyre, is not engaged in a practice of teaching, but rather is teaching the practice of chemistry. 'All teaching', argued MacItyre (MacIntyre & Dunne, 2004: 8), 'is for the sake of something else .'

The argument that teaching is not a practice has received a great deal of critique. Dunne (MacIntyre & Dunne, 2004: 6-7), through his discussion with MacIntyre, proposed that MacIntyre's account of practice might 'very comfortably' include teaching. Teaching, according to Dunne, has its own internal specific goods, standards of excellence and supporting institutions. Further, teaching has 'a history of its own, not only in the lives of individual teachers but also in a wider tradition of exemplary figures and achievements and indeed of fundamental debate (MacIntyre & Dunne, 2004: 7).'

This argument can be pushed even further by reflection on those ends towards which teachers are directed. Teachers might be understood to operate with a telos such as 'educating children in the liberal arts', 'preparing children for employment' or 'helping children become good citizens.' The aims of an education and schooling are contested, but MacIntyre's account of practice is sufficiently robust to compensate for this debate: these concerns can be characterised as 'continuities of conflict' (1985: 242) in which those engaged in the practice continue to negotiate its ends and direct the tradition towards a shifting notion of excellence.

Recent responses to MacIntyre’s account of practice have gone further in steering the argument away from too narrow a notion of practice. One approach is to argue that a number of different kinds of individual collectively contribute to a practice. Hager (2011: 550), for example, argued that 'farmers are obviously central to the practice of farming, but we might wonder about those who assist
them with various aspects of farming, such as shepherds, fruit pickers or fencers.’ Such an account is fully in keeping with MacIntyre’s account of practice, yet can be used – contra MacIntyre – to see teaching as a practice. On such an argument, teaching might be a practice to which numerous individuals – including chemistry teachers, teaching assistants and school librarians – all contribute. A complex notion of practice – as advanced by Hager – offers a means by which we can begin to resolve the quandary as to whether teachers are practising a discipline, not least because it removes the restriction that one might not be practising both. Such a position makes it possible to argue that teachers are engaged in multiple practices including the practice of teaching and, as MacIntyre argued, the practice of the discipline they teach.

**Teaching and the disciplines**

Having established that teachers can be understood to be engaged in multiple practices, it is now possible to turn to the question as to whether teachers are members of the practice of the academic discipline they teach. The proposition that teachers are involved in the practice of the discipline they teach has received less attention than the corollary claim that teaching itself is not a practice. Some arguments have already been constructed to challenge the idea that teachers are members of an academic discipline, with Noddings (2003) perhaps making this case most powerfully in her consideration of mathematics teachers. Her argument proceeds by setting out what constitutes mathematics as a practice including, importantly, that ‘those who “do” mathematics continually extend the body of what is known (that is, of what has already been concluded) by drawing new conclusions and by introducing new hypotheses or changing old ones (Noddings, 2003: 248-9).’ On such a criterion, Noddings argued, the majority of teachers teaching mathematics cannot be understood to be engaged in the practice of mathematics. Kindergarten and primary school teachers, for example, ‘are not recognised by mathematicians as members of that profession... They do not produce new mathematics, nor do they spend large parts of their working day doing mathematics (Noddings: 2003: 248).’ It is only at university level, Noddings argued, that one might find individuals who both teach mathematics and practice it, though she does concede that the ‘best high school teachers of mathematics also meet some of the criteria of excellence in mathematics as they demonstrate how mathematics is done (Noddings: 2003: 249).’ School teachers, on this argument, cannot generally be understood to be engaged in the practice of a discipline such as mathematics as the ends to which they direct themselves are not those that are recognised within the community of mathematicians.

Much existing work on academic communities would support the conclusions that Noddings drew. This position is articulated most clearly in Popper’s example of Robinson Crusoe. Even if, Popper argued, Crusoe spent his time marooned in the study of reality and derived from this the laws of nature, his knowledge would not count as knowledge until it had been subject to the scrutiny of an academic community (Popper, 2003: 243). On such a line, one cannot be understood to be engaged in the practice of a discipline unless one is able to submit the new knowledge that one produces to the critique of an extant community of recognised experts. Bourdieu, similarly, saw academic disciplines as
fields, the membership of which was restricted and dependent on the acquisition of cultural capital such as qualifications and research publications. Bourdieu (1993: 73) identified the struggle ‘between the newcomer who tries to break through the entry barrier [to a field] and the dominant agent who will try to defend the monopoly and keep out competition’. This construal of academic disciplines poses a significant challenge to MacIntyre’s argument that teachers can be understood as participating in the practice of the discipline they teach, as, in almost all cases, teachers will not be recognised as members of that practice by those within the field.

I concede that, if a discipline is understood as correlate with the academic profession, then clearly teachers, in nearly all cases, cannot be understood as practising a discipline. History teachers, for example, generally do not conduct archival research, participate in seminars and conferences or produce research publications that expand the boundaries of historical knowledge. MacIntyre did, of course, pre-empt some of these responses when he argued that, for teachers to be understood as being participants in a disciplinary practice, it is necessary to broaden what the practice is understood as entailing. He argued

‘Of course this requires a conception of mathematics, literary scholars, historians and others that does not make it a requirement of being such that one should do or have done original work in one’s discipline. But such a conception is needed anyway. Specialist researchers make notable contributions to their disciplines, but they are only one section of the community that engages in and with any particular discipline. Specialists need to make themselves intelligible to and to engage in discourse with all the members of the community of their discipline (MacIntyre & Dunne, 5).’

The shift made by MacIntyre here is significant and offers an escape from the criticism advanced by Noddings: teachers can be understood to be part of the practice of an academic discipline provided that the creation of original research is not understood as being a necessary condition of engagement in that practice. MacIntyre does not, however, elaborate further as to what the practice of an academic discipline might entail once the creation of new knowledge is removed. A more sophisticated account is needed as to how this might be understood.

**Discipline and profession: the case of history**

This more sophisticated account, I suggest here, requires that one distinguishes between a ‘discipline’ and a ‘profession’. This distinction has recently been developed in the discipline of history. Banner, for example, argued that a distinction needs to be made between ‘a discipline’ and a ‘profession’, suggesting that

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1 I am here using the terms ‘profession’ and ‘occupation’ interchangeably, though the argument I advance would not in any sense be undermined by questions about the extent to which teaching is a profession.
The collapse of the terms "discipline" and "profession" into each other mirrors the realities of a passing era in which a professional historian could with some accuracy be assumed to be an academic. Although this is no longer the case, almost all scholarly works and professional commentaries about history still refer to the "history profession" or the "historical profession" as if there were a single one. In such instances, those who employ the term are alluding either to the academic profession in which the largest single group of historians continues to work or to the body of knowledge that composes the entire discipline of history. They have confused profession with discipline (Banner, 2012: 2).

Academic historians, on this argument, carry out a number of tasks as professionals. These activities include conducting original research, participating in conferences and writing publications that expand knowledge, as well as giving lectures, sitting on examination boards and participating in processes of peer review.

Not all historians, however, are academics. Academic historians are certainly historians, and may even serve as a kind of prima inter pares for the discipline, but, on Banner’s argument, there are numerous other professions who work in the same discipline. As he argued, ‘multiple individuals participate in the same community of thought, in the same parent discipline, as academic and public historians do. Because they dedicate their labours to the same ends, they are entitled to bear the title of historian (Banner, 2012: 4).’ This argument, interestingly, is couched in Aristotelian terms that MacIntyre would recognise. The professional activities of academics are not those of teachers, museum curators or documentary producers, but all are united in the pursuit of some common telos that makes history a distinct discipline. For Banner (2012:3-4)

Historians are defined as historians not by the kind or location of their work or by the audiences they address but rather by holding themselves out as people who seek to know what happened in the past and why it did so and then to present that knowledge to others in the formats – whether articles, books, films, radio transmissions, Web sites, or museum exhibits – of their choice. Historical knowledge is the coinage of their authority (Banner, 2012: 3-4).

It is here that we are provided with an alternative way of understanding what ‘discipline’ means. Rather than define discipline by the activities of university academics, it is perhaps better to define a discipline by the knowledge with which the discipline concerns itself. An individual can be understood to be engaged in the practice of history is which one seeks knowledge of the past and attempts to communicate this to others.

This framing posits the telos of an academic discipline as knowledge. What might it mean for a discipline to concern itself with knowledge? Four characteristics can be distilled from this position. First, a discipline must concern itself with a particular object of study. Secondly, a discipline at any one point must
represent the present culmination of a tradition of studying this object of study. Thirdly, that tradition must provide the present discipline with a set of questions which it has sought and seeks to address. Finally, the discipline must provide a set of rules, methods or approaches by which those questions might be answered. The example of history is again illustrative. History, as a discipline, is concerned with the human past as an object of study. The discipline has developed over time and exists today as a product of its development, the study of which is known by historians as ‘historiography.’ Those practising history are concerned with particular questions about, for example, the causes of events, their consequences and the extent to which things changed over time. Finally, beliefs about the past must be justified by the deployment of sources as evidence in a rational process of argument. Although historians continue to disagree as to the precise nature of their discipline – MacIntyre would argue necessarily so – these four criteria would probably be recognised by most as being in some sense essential to the discipline at it currently stands (Carr, 1990; Evans, 2000; Cannadine, 2002; Elton, 2002).

In what ways might history teachers be understood to be practising this discipline? There is, first, no doubt that they concern themselves with the human past as an object of study. Every lesson taught by a history teacher has knowledge of the human past as its overriding objective. The questions history teachers set their pupils are the questions of the discipline: why did the First World War begin? How far did England change during the Industrial Revolution? What were the consequences of the Treaty of Westphalia? History teachers are likely to teach the historical method to pupils, but also to assess the conclusions those pupils make against a set of criteria that are historical in character. A pupil who concludes, for example, that the First World War occurred due only to an assassination in Sarajevo might well be taken to task for providing a simple mono-causal explanation, or perhaps for not sufficiently accounting for the long-term causes of the conflict. It should be noted that the ‘rules of the game’ in a history classroom differ significantly from those in, for example, a chemistry class. A history teacher would not ask a pupil to justify their beliefs about the causes of the First World War by re-creating it in a controlled environment. History teachers, in this sense, hold pupils to account using the authority of the discipline.

This is a notion that seems more widely accepted beyond the academic disciplines. A volunteer, village cricket coach – for example – who teaches the junior team is certainly not a professional cricketer: it is highly unlikely that he is pushing furthering notions of excellence within the practice by, for example, developing new shots or spin deliveries. Our coach would not ask a pupil to justify their beliefs about the causes of the First World War by re-creating it in a controlled environment. History teachers, in this sense, hold pupils to account using the authority of the discipline.

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Disciplinary justification in the classroom
The argument thus far offers a development of MacIntyre’s recognition that it is necessary to adopt a more inclusive definition of discipline if we are to accept that teachers are engaged in the practice of the thing they teach. Clarity as to the distinction between ‘discipline’ and ‘profession’ provides the means by which this redefinition might be effected. The fact that it is possible to make this distinction, however, does not necessarily imply that we should. I shall argue in the last part of this paper that there are, however, good reasons for making this distinction, particularly in considering the way in which claims to knowledge within academic disciplines are justified. In particular, I want to draw here on a transcendental argument, derived from the field of social epistemology, to suggest that understanding a teacher to be part of a discipline is a necessary condition of pupils in schools learning that discipline.

My argument here cannot advance further without a more considered account of what constitutes disciplinary knowledge. Why, for example, is a chemist justified in holding a set of beliefs about the way molecules exist to be true? Why is a historian justified in holding a belief about the causes of the Peasants’ Revolt to be true? Within epistemology, simple propositions – such as ‘the cow is on the hill’, ‘Smith has coins in his pocket’ or ‘the current king of France is bald’ – are typically up for consideration. Disciplinary knowledge, however, tends to concern itself with more complex propositions about phenomena that are not immediately accessible to perception or memory, such as the structure of ethane or the motivations of Wat Tyler in 1381. These propositions are not easy to prove by everyday means (I cannot look at the molecular structure of ethane with the naked eye nor can I speak to Tyler); instead, we rely on a process of disciplinary justification. In chemistry, for example, disciplinary justification is provided by means of experimentation and statistical induction. In history, justification is made by reference to source material that can be deployed as evidence in support of a particular claim.

Importantly, these mechanisms are not arbitrary and nor are they created by each individual ab initio. Rather, processes of disciplinary justification have developed within a tradition over time. Extant justificatory mechanisms may well in future prove to be flawed, yet they represent at any given moment the best available means by which claims within a particular disciplinary domain might be justified. Progress is made within disciplines by considering justificatory mechanisms against the internal standards of the practice that have themselves developed over time, meaning that ‘all reasoning takes place within the context of some traditional mode of thought, transcending through criticism and invention the limitations of what had hitherto been reasoned in that tradition (MacIntyre, 1985: 221).’

During their education, however, it is not possible for pupils to justify propositions by calling upon the internal mechanisms of the discipline, as these are not available to them, or at least not without significant guidance. Pupils are, instead, dependent on the testimony of their teachers. Anscombe (1979: 143)

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2 The obvious starting points on the growth of knowledge within disciplines are Popper (1959), Kuhn (1962) and Feyerarbend (1975). More recently the growing field of social epistemology has provided insights into the nature of knowledge within academic disciplines. See Fuller (1988), Goldman (1999) and Kusch (2002).
reminded us that ‘the greater part of our knowledge of reality rests upon the belief that we repose in things we have been taught or told.’ Most of the knowledge that pupils gain from their schooling comes from the testimony of their teachers; whilst it is true that pupils will conduct experiments in chemistry and read source material in history, these activities provide only a small proportion of the knowledge that pupils learn. Bakhurt (2013: 49) did not see this as problematical, accepting as he did that teachers (and the authors of textbooks) ‘will be scarcely less dependent upon testimony than [the pupil] is.’ Bakhurt sees the teacher in this model as a mediator whose role ‘is to direct students to the subject-matter so that they hold beliefs about it in recognition of the truth and not because they have been told what to believe.’

This problem with this argument is that it neither explains why a pupil might be justified in believing what her teacher tells her, nor why the teacher might be justified in holding those beliefs to be true in the first place. This matter has, however, been addressed more thoroughly within the sociology of knowledge (Muller, 2007; Young, 2008) and social epistemology (Fricker, 1998). Drawing on Bernstein’s (1971) notion of ‘strong internal grammar subjects’, Muller argued that

‘the condition for a teacher being an authoritative pedagogical agent is, at the minimum, an internalised map of the conceptual structure of the subject, acquired through disciplinary training… In other words, the conditions for teachers to be able to induct pupils into strong internal grammar subjects [such as the academic disciplines] is that they themselves already stand on the shoulders of giants, that they can speak with a disciplinary grammar (Muller, 2007: 82-3).’

On such an argument, an individual engaged in a disciplinary practice, such as chemistry or history, is justified in holding a proposition \( p \) to be true if and only if they can judge \( p \) against recognised disciplinary standards that have developed over time. A pupil, outside of the practice of the discipline, knows \( p \) only by the testimony of one who is engaged in the practice of the discipline. It follows that, if it desired that a pupil learns \( p \) in the school classroom, then this can be achieved if and only if the teacher is a member of the practice that constitutes the academic discipline. It is a necessary condition of pupils knowing \( p \) that teachers are understood as being members of the practice of the discipline they teach.

An example here is illustrative. I know that the petrol that powers my car contains carbon and hydrogen held together in a molecular structure. My only justification for holding this to be true, however, is that a chemistry teacher at school told me this. I could look up this piece of knowledge in a book, but again my justification would be based on the authority of the author. I have no means other than testimony on which to base my belief, and I do not know how I might go about proving these propositions beyond testimony. I am dependent on testimony for my knowledge; as such, I would not think of myself as being part of the practice of the discipline of chemistry. In contrast, I recently attended a lecture in which I was told that religious conviction played a significant role in the actions of Oliver Cromwell. I could rely on the testimony of the lecturer who said this, yet, as a trained historian, I can go further. As I know the internal mechanisms by which historical knowledge is justified, I could trace this claim back to the source material
and weigh up the evidence this provides for the claim made. From this, I could enter into the same rational process by which other members of the discipline hold the lecturer's claim to knowledge to account. As a consequence of my knowledge of the practice of history, I am no longer dependent on the testimony of teachers alone. This change of status – away from being dependent on testimony – characterises the learning process in the academic disciplines.

One possible objection to the model being presented here might call upon a notion of distance: does it matter if the teacher is engaged in practice of what they teach, provided they themselves are justified in calling upon the testimony of someone who is. For example, I might read the New Scientist in which a journalist has interviewed a leading physicist working at the Large Hadron Collider. Neither I nor the journalist are engaged in the practice of physics yet, provided the journalist accurately represents the testimony of the physicist, I am likely to be justified in believing what I read. In classrooms, however, this model cannot stand. One role of the teacher might be understood to involve the transmission of knowledge, yet it is also the case that teachers have, by virtue of being teachers, to evaluate any claims to knowledge that pupils make. Even formative assessment depends on an initial summative judgement. These summative judgements require teachers to evaluate a pupil’s claim to knowledge against some yardstick, and it is here that the discipline plays its role. A teacher who is not engaged in the practice of the discipline they teach is not able to evaluate pupil work by the internal standards of excellence of a discipline, and as such they are unable to make an authoritative evaluation of the claims pupils make to knowledge.

A further objection might be that my argument here places too much emphasis on the authority of the teacher and not on the individual agency of the pupil. Two responses can be made to this. It should be noted, first, that the authority of the teacher in this model is not a matter of personal authority; instead, this authority comes as a consequence of the teacher’s membership of a wider practice. Secondly, the teacher’s authority is here enabling rather than limiting. The teacher’s purpose is to induct a pupil into the tradition of the discipline, allowing the pupil, should they pursue the practice long enough, to escape dependence on teacher testimony. This is perhaps what Gadamer (2004: 282) meant when he wrote that ‘the educator loses his function when his charge comes of age and sets his own insight and decisions in the place of the authority of the educator... [though] becoming mature does not mean that a person becomes his own master in the sense that he is freed from all tradition.’ Once a pupil has gained induction into the discipline by coming to learn the internal goods and standards of excellence that constitute the practice, she can enter into the rational process of justification by which members of that practice concern themselves with the knowledge that is their telos.

A final – and important – objection to my argument is offered by the case of the supply teacher, called upon in a single day to teach French, chemistry, history and mathematics. The case of the supply teacher is an interesting one in that, in everyday parlance, such teachers are understood to be teaching an academic subject, and as such might be candidates to be considered part of the practice of the discipline they teach. Indeed, a good supply teacher who has built a strong relationship with pupils might well be in a position to serve as a supportive guide, in the same way as a parent who helps a child read and understand the signs in a
museum or some text in a magazine. Here, crucially, it is the materials being accessed (the museum signs, the magazine) that are written by individuals in the discipline; the expertise comes not from the supply teacher or supportive parent, but from the author of the materials. Pupils understand in this way that a supply teacher is not an expert in the subject being taught. It would, for example, be perfectly legitimate for a supply teacher to respond to a pupil’s question with the response ‘I’m afraid I don’t know – you’ll have to ask that to your normal teacher when she returns.’ A supply teacher might be able to help pupils uncover further testimony – in the form of textbooks or information on the internet – which might satisfy an immediate question, but there is no sense in this, or indeed a need for any pretence, that the supply teacher is engaged in the practice in question; at best, a supply teacher can be another outsider, helping pupils as best as possible yet without the guiding light of a disciplinary telos towards which the subject specialist teacher is directed. A supply teacher might temporarily serve as a proxy for the normal teacher, but – without some form of disciplinary training – will not be in a position to justify claims to knowledge within that discipline nor assess the pupils against the discipline’s own internal goods and standards of excellence.

Conclusion

For the reasons I have here set out, there is much to be gained from further reflection on MacIntyre’s proposition that teachers can be understood as participants in the practice of the discipline they teach. If the academic profession is understood as being the same as the discipline, then MacIntyre’s proposition cannot stand, for it is clear that teachers do not produce new knowledge as a consequence of their activity. If, however, a distinction is made between ‘profession’ and ‘discipline’ then this problem evaporates, though it does leave one requiring an alternative account of discipline that is distinct from that practice of a professional academic. I have suggested here that a discipline can best be understood as having a concern for knowledge. This knowledge is the telos towards which those who participate in the practice of the discipline direct themselves. As teachers direct themselves towards this end, I conclude that teachers are engaged in the practice of the discipline they teach. Indeed, drawing on arguments from social epistemology and the sociology of knowledge, I would suggest that a teacher being engaged in the practice of a discipline is a necessary condition of pupils learning that discipline.

The argument advanced here is that teaching is a form of disciplinary activity and the implications of this for how teachers are trained and evaluated are significant. It is now common in a number of countries for teacher competence to be measured against a set of ‘standards’ that are broadly generic in character. In the UK, for example, a mathematics teacher is trained to and evaluated against the same set of competences as a teacher of history or German. Although the importance of subject knowledge has been recognised in teacher standards (Shulman, 1986), this too has tended to be reduced to an attribute a teacher has rather than an end towards which she is directed. In terms of training, my argument here raises questions about the use of providing teachers with generic pedagogical tools and techniques that are divorced from a disciplinary context, for the discipline being taught determines the ends towards which those tools are
utilised. Teachers need to know, for example, not just how to incorporate ‘formative feedback’ into their lessons, but rather how specific forms of feedback can direct pupils towards the ends of the discipline being taught. Similarly, my argument here raises some concerns about how teachers might be evaluated: if teaching is understood as being disciplinary in character, then an evaluation of a teacher can be made only by judging the extent to which the practices of a teacher are in keeping with the ends towards which her discipline is directed. It is, on this argument, not sufficient for a manager or inspector to say 'the pupils were engaged'; instead, teachers need to be evaluated based on the extent to which their pupils were engaged in some activity that is directed towards the telos of the discipline.

Modern parlance has tended to shift the status of the teacher away from that of an authoritative expert, and instead towards that of a helpful guide. The mantra that a teacher is ‘a facilitator’ or ‘a guide by the side and not a sage on the stage’ will be familiar to all who have been members of the profession in recent years. As argued, it is not my intention here to challenge the view that teaching can itself be understood as a practice, nor that there is nothing to gain by explicit reflection on what is generic to all teachers. I do, however, wish to argue that a more detailed consideration of MacIntyre’s proposition that teachers are involved in the practices they teach might further illuminate a number of important questions about teaching. Discussions about teacher training, development, appraisal, professionalism or identity rarely prioritise the discipline that the teacher practices. As McEwan and Bull (1991) argued, the relationship between disciplinary knowledge and pedagogy is deep, complex and in need of elucidation. An important component in this project, as I have argued in this paper, is a reconceptualisation of what it means to be the teacher of an academic discipline.
References


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