

Learning to Teach First

Participant Perceptions

Mark Hardman & Andrew Carroll

With acknowledgement to Jen Balanck, Lyn Haynes, Colm Connolly and Cheryl Periton

Canterbury Christ Church University

mark.hardman@canterbury.ac.uk

andrew.carroll@canterbury.ac.uk

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Background to topic

The current focus on Teach First within the Schools White Paper (DfE, 2010) combined with the very positive Ofsted (2008, 2011) reports shows that the programme is highly successful in recruiting and training graduates who go on to be effective in schools. The ability of these participants to learn to teach with reduced university sessions compared to other initial teacher education routes seems to be at odds with recent findings that university based provision prepares teachers better (Ofsted, 2010), although university tutors play a key role in supporting Teach First participants in schools.

Whilst there is ongoing research into the success and efficacy of the programme there has to date been no research into how the participants learn to teach in the challenging environments in which they are placed. As tutors working on the programme we feel well placed to investigate the processes by which Teach First participants learn to teach and have conducted a small pilot study into the learning strategies they use over the initial training period.

Teach First is an educational charity which places participants in 'Urban Complex Schools' (Teach First, 2009) following 6 weeks of initial training and with intensive support from school-based mentors, university tutors and colleagues within the charity throughout the training year. The focus on urban complex schools implicitly relates to the specific focus on areas of educational disadvantage¹ but for us as tutors and researchers the use of this terminology links Teach First directly to the growing field of complexity theory within education. Elsewhere we have discussed the utility of complexity theory in describing learning within teacher education (Hardman, 2010; 2011). For the sake of brevity we shall here outline a simplistic sketch of how Teach First participants might be seen to learn within a complex dynamic system.

There is a range of simplistic models of teacher development employed within teacher education. Educational Effectiveness research for example, advocates the measurement of what is effective in classrooms and seeks to replicate these variables (Creemer & Kyriakides, 2008). In schools this manifests as target setting in which specific outputs are linked with specific inputs and actions based upon models of 'best practice'. Alternatively models of reflective practice such as Kolb's (1984) cycle of experiencing, reflecting, generalising and applying, are presented to student teachers and related to such practices as Action Research, which are often embedded in teacher education programmes.

However those of us involved in teacher education recognise that there is a multiplicity of additional influences upon the student teacher as they learn to teach, and that these influences all interact in a way that makes them mutually sensitive. Davis and Sumara (2006) use complexity theory to argue that effective teachers simultaneously consider individual pupils, the classroom, the curriculum and the subject matter as they teach, each of which might be considered a complex system. However, this model does not account for other influences upon the student teacher. Student teacher motivation (Ashton, 1984), the relationship between pedagogy and andragogy (Light, 1996), the history and background of the student teacher and the specific nature of the schools in which they are placed (Hall et al., 2005) are all categories of influences which interact. Osberg, Biesta and Cillers (2008) suggest that pupil learning emerges from the interaction of a range of factors within schools, rather than being delivered through a system of representing facts. Similarly for teacher education we cannot ignore the dynamic nature of the influences upon the classroom and student teacher by

¹ Teach First use 50% of pupils in bottom 30% of Income Deprivation Affecting Children Index, low attainment at GCSE grades A*-C and 'Challenge Status' to define the schools it works with.

simply presenting 'best practice' with targets to achieve it, nor can we leave student teachers to reflect upon what has happened in the classroom whilst ignoring the influences of the world outside.

Complexity theory highlights the sensitive, dynamic and 'non-linear' nature of the influences upon learning. Learning emerges in an unpredictable way because we cannot fully understand the influences upon it or the interaction of those influences. As a research team we are therefore striving to understand the way influences on the student teachers interact, whilst recognising that this will not produce a conclusive picture of development within the Teach First programme.

With the long term goal of considering the dynamic interactions of influences on Teach First participants we first need to establish what those influences are. We report here on the pilot study to establish the categories of influences that participants report are important in learning to teach. These categories will form the basis of longitudinal research in the future as well as providing immediate preliminary insight.

Research questions

As tutors on the programme we have our own ideas about the influences on Teach First participants as they learn to teach, however if we were to impose our own conceptions on the investigation we would be likely to miss the aspects of learning to teach which we are not directly engaged in. As such we sought the participants' report of what is involved in learning to teach through the following two research questions:

1. What do participants report is involved in learning to teach through the Teach First programme in London?
2. Which strategies do participants report are the most effective in learning to teach and how does this relate to the programme structure?

The first question seeks to categorise the influences that Teach First participants report are important in learning to teach whereas the second question provides a snapshot of the relative importance of these influences at the particular point at which the study was conducted (March 2011).

Research methods

80 participants took part in the study, all from the 2010 science and maths cohorts of Teach First within London. These participants self-selected groups of 5 such that there were 7 groups of student teachers of mathematics and 9 groups of student teachers of science.

Following Grundy, Pollon, and McGinn (2003) we developed an approach of 'the participant as transcriptionist' in giving each group a large sheet of paper and a pen, as well as a sound recorder. The groups were then asked "What is involved in learning to teach?" and recorded their discussion for 15 minutes. After 10 minutes they were then asked "Please rank the learning strategies you have discussed, with one being the most useful to you in learning to teach" and given a further 10 minutes.

This approach was adopted in order to provide a richness of qualitative data around the influences on learning to teach and some immediate quantitative data around what they felt most important at that moment in time.

We were mindful of the power relationships involved in research with student teachers (Bravo-Moreno, 2003; Carter & Doyle, 1995) and especially aware that we are tutors on the programme under investigation. To minimise the effects of these relationships the research was introduced to the maths participants by science tutors and vice versa, such that tutees and tutors were separated during the study. The voice recordings and drawings were produced with tutors outside the room and anonymised through participants adopting a letter to identify themselves. The transcription of the recordings was outsourced so tutors did not hear voices.

Nevertheless in being informed about and consenting to take part in the study participants became collaborators who were aware of the aims of the investigation. As such the power relationships, although mediated, may still result in them reporting what they feel tutors wanted to hear. Furthermore, as Carter and Doyle (1995) note they may not see the direct relevance to them and thus not engage fully in considering the influences. Beyond these factors we must also consider the dynamics of the group interaction in producing the responses. Kitzinger (1994: 108) argues that “Group work is invaluable for grounded theory development – focusing on the generation rather than the testing of theory and exploring the categories which participants use to order their experience.” However our conclusions must recognise that in obtaining a peer group response to the posed questions we may mask the diversity of influences that would be reported by individuals.

Analytical framework

We took a grounded theory approach to analysis of the rich data we obtained (Corbin & Strauss, 1998). We further followed others’ work in utilising the NVIVO 9 software package to enable development of a model from qualitative data (Bringer, Johnston & Brackenridge, 2004; Hutchinson, Johnston & Breckon, 2010).

There were particular methodological difficulties associated with working as a team with a grounded research approach. Weiner (2010: 301) argues that working as a group is useful in initial coding as it allows confidence in defining initial categories and it allows the more easy movement from specific concepts to abstract categories. As such we initially met as a research team to develop categories from the diagrams. This initial coding tree was entered into NVIVO and we thereafter coded the transcript data. As we did so we continued to develop the categorisation and utilised the functionality of NVIVO in comparing the coding practices of different members of the research team. Finally we together developed a model of influences from the categories and coding and utilised the ranking data to give a snapshot of the relative importance of each influence at the time of the research.

As Kirchhoff and Lawrenz (2011) note in their recent study of STEM student teachers, defining the relationships and categories within grounded theory coding requires abstract thought and raises the issue of bias. Through working as a group we were able to abstract from data more confidently but being tutors on the Teach First programme there would necessarily be bias in our approach to categorising the influences upon our tutees. As Radford (2006, 2007) notes, there are limitations to

what we can understand about complex systems from the inside, but we can never truly be outside these systems. In line with Kirchhoff and Lawrenz’s (2011) findings, we found that being immersed in the programme made us sensitive to the data and capable of understanding the nuances of what participants reported. Conversely, there is potential for researcher-tutors to categorise familiar aspects of the programme from qualitative data and overlook subtle differences in how these influences are being reported.

There will always be bias in grounded theory research and whilst mindful of this and resistant to letting prior experience determine findings this will also have been the case within this study. Firstly however, grounded theory advocates the recognition of these biases through careful recording and examination of the processes through which the research proceeds and models are developed from data. Secondly, by recognising that a primary aim of this research is to inform the tutors within the Teach First programme we feel it justified that the framework of understand overlaps with the existing understanding of the tutors who conducted the research.

Preliminary Findings

The below node diagram represents the model of categorisation that developed through the grounded coding process.

Figure 1 – Node Diagram of Influences Reported by Teach First Participants

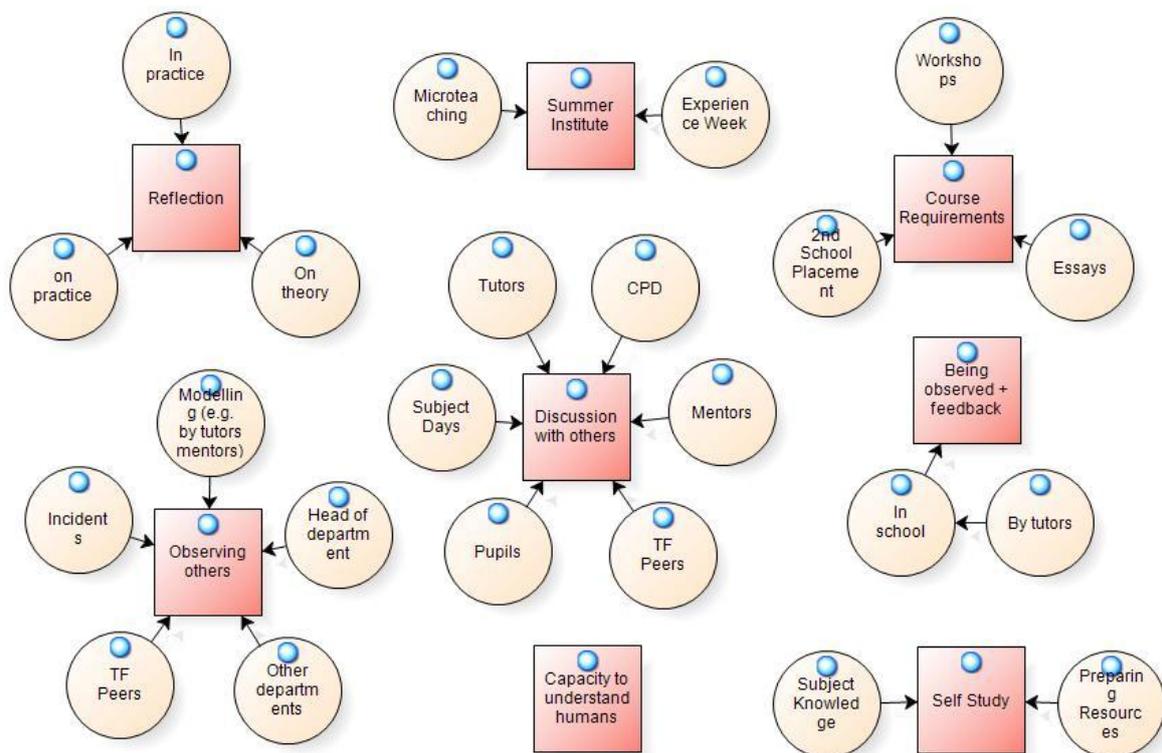


Figure 2 – Cumulative Rank Score by Coding Category

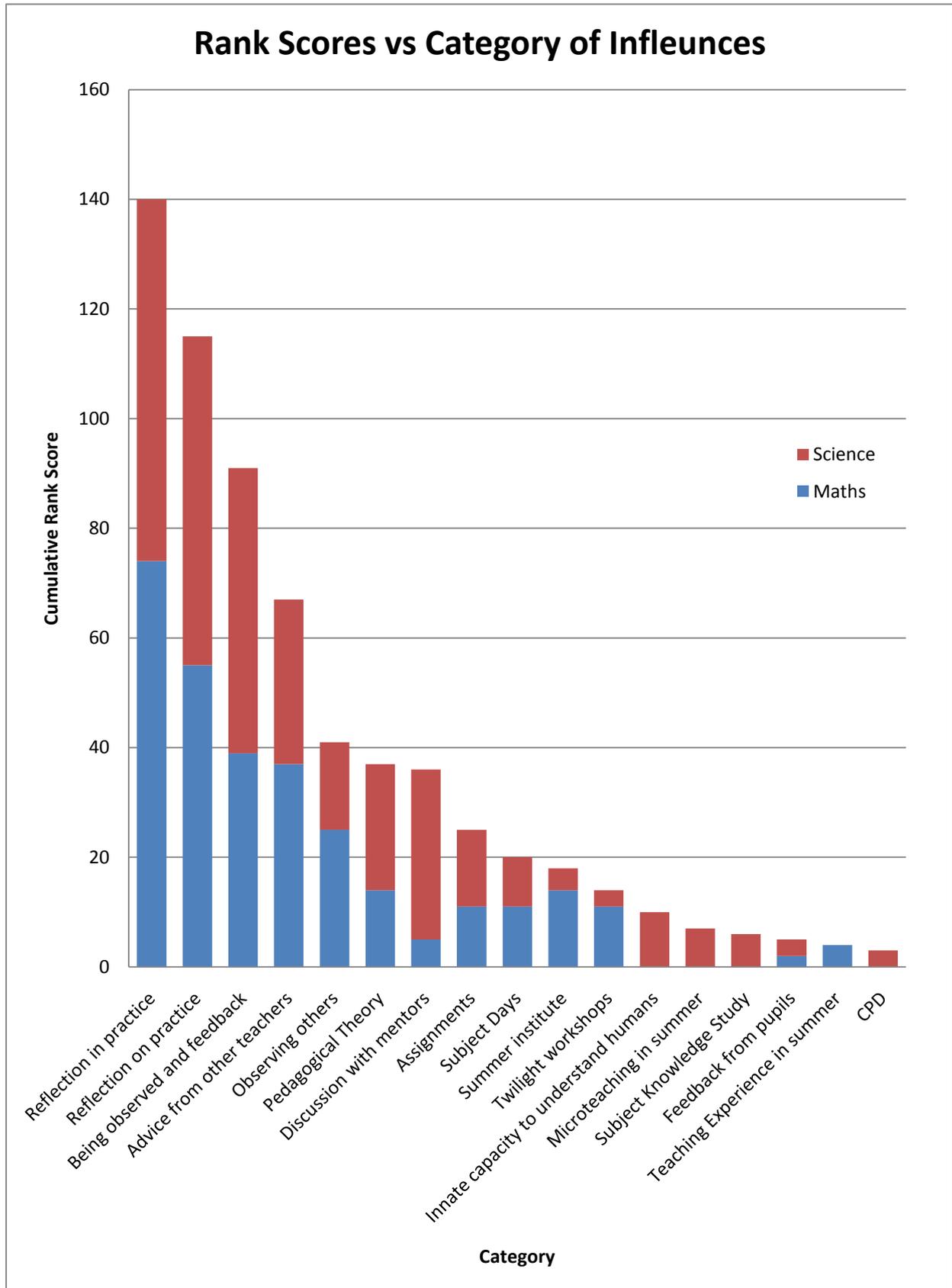
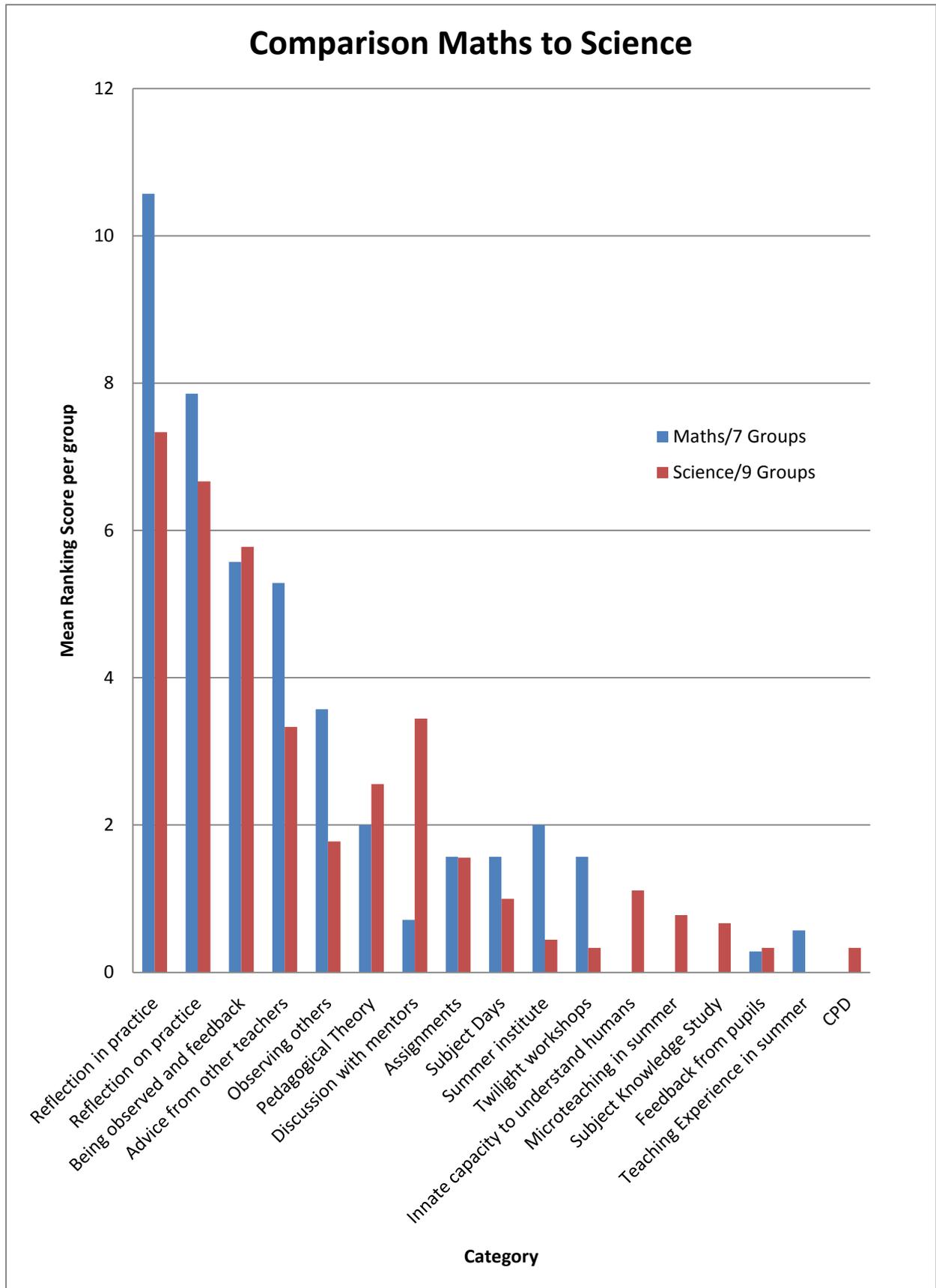


Figure 3 – Mean Rank Score per Group vs. Coding Category for Maths and Science Participants



Discussion – Experiential Learning

The emphasis that participants place on reflection is striking. The Teach First programme is both vocational and academic and so the participants' learning processes can be described as experiential. The process elements of 'Do, Review, Apply, Learn' derived by Dennison and Kirk (1990) from Kolb's original model resonates with the data collected from this pilot study and is indeed a model that we present to the student teachers within the programme. However it would appear that there is little separation (either temporal or spatial) between the 'learning' and the 'doing' processes described by this model. The data suggest that the learning and the doing are not part of a continuous and predictable cycle but can be spatially and temporally separated. Reflection in practice is simultaneously learning and doing and was reported to be most important, followed closely by reflecting on practice, which primarily relates to lesson evaluation, weekly meetings around a journal and discussions with mentors. Also recognised is the role of tutors and mentors in the 'validation' and 'improvement' of their classroom practice, through coaching and observation. Opportunities to learn to teach through the Summer Institute and Subject Development Days are mentioned but prioritised less, perhaps suggesting a relationship between the perceived importance of the learning strategy and how often they engage with it.

Here then there is certainly an aspect of reporting the programme structure as the best way to learn, which makes sense given that this is how they are encouraged to learn. This in itself rejoins with a discussion about bias in their reporting, although this may not be due to tutor influence on the study. The complexity of learning to teach through the Teach First programme contains both 'private' and 'public' dimensions of this learning. Their learning is very much carried out in public, with participants being assessed by colleagues, tutors and themselves, leaving very little time for what could be considered as 'private' learning. The fact that our participants are strategic and able to learn privately and publically, raises the question how do they learn to learn publically, when often their prior experience of learning in school and university has had a greater private dimension?

The emphasis on experiential learning is related to the fact that this is how participants learn most of the time, and they value this form of learning. In order for this to be possible Teach First participants must be motivated to learn in this way. These participants have actively chosen a difficult route into teaching which necessitates experiential learning as a primary strategy. Teach First is perhaps unique in that everybody involved in the programme is driven by the mission to break the link between parental income and educational disadvantage in the UK. This mission and the energy that surrounds it from within the Teach First organisation makes experiential learning highly valued as a means by which change is effected in schools. However, it must be recognised that participants are selected for resilience and specifically informed of the challenges they face from the outset. Nor should it be forgotten that the support from tutors, mentors and Teach First staff is greater than in many teacher education routes and provides timely interjection to this experiential learning.

Ideas for longitudinal study

In illustrating conceptions of learning Marton et al (1993) make the clear distinction between 'reproducing' conceptions (quantitative increases in knowledge and acquisition of methods etc) and 'transforming' conceptions, involving the abstraction of meaning and 'developing as a person.' It is expected that Teach First participants will first and foremost 'transform' the life chances of their

pupils as well as ‘transforming’ themselves and their own learning. Given that this happens and happens in a very short amount of time, how this happens is fascinating, and worthy of further longitudinal study.

Given that our participants begin the programme with a rich reservoir of past experiences, that their learning is characterised by a need to know and do and that the participants show a task and problem centred orientation to their own learning, it is quite clear that the process of their learning is an andragogical one as defined by Knowles (1984). A further example of the complexity involved in learning to become a teacher via the Teach First route comes from the fact that they are learning pedagogical skills through an andragogical process. The data gathered through this pilot study will help us to longitudinally ascertain when and how this happens.

The data collected to date do highlight the importance the participants themselves place in the process of *learning through experience or learning by doing*. In developing a theory of experience in education, Dewey (1938) highlighted the ‘organic connection’ between education and personal experience, also recognising the fact that there is not always a direct correlation between experience and education and that some experiences can be ‘mis-educative’ as well as ‘educative’. The question which interests us here is how our participants, with often only their own experience of being taught, make the decision as to what experiences are educative or non-educative? Dewey described the problems of mis-educative experiences as those that engenders callousness, a lack of sensitivity and place a restriction on having richer experiences in the future. There is perhaps a danger that any mis-educative experiences gathered andragogically will be reflected in the participants’ pedagogy. Discovering how the participants actually judge an experience as either valuable or otherwise is vital in helping the participants turn mis-educative experiences into educative ones.

The dichotomy between andragogy and pedagogy is also illustrated when the role of reflection and experience in learning to teach is considered. Responses to experiences may well result in reflective as well as non reflective forms of learning (Jarvis 1987). It could be argued that at the onset of their teaching careers, our participants employ an ‘espoused theory’ (Argyris & Schon, 1978) of action when it comes to managing the learning environment in the classrooms of the schools in challenging circumstances, in which our participants are gaining their experience. The programme structure places an emphasis on managing the classroom environment initially. This is perhaps reflected in the data collected in this pilot, which places emphasis on the value of observing others. This is particularly interesting as this is not a key feature of the programme structure. Again the complexity of the learning process is illustrated as our participants bring their own ideas and experiences of what ‘effective teaching and learning’ actually is. Given the emphasis the programme places on raising the attainment and aspirations of pupils in the most challenging circumstances, the participants move from employing ‘espoused’ theories of action, to a more ‘in-situ’ based use of ‘theory in action’. Our participants undoubtedly do develop a ‘reflection in action’ (Schon, 1983) as opposed to the ‘reflection-on-action’ as suggested by the Kolb’s model. Reflection in action allows our participants to respond quickly and effectively to the learning needs of the pupils with which they are working, in experiential environments in which the pupils’ learning needs and the barriers to learning can be complex and varied. The question raised by this pilot data is again ‘when’ and ‘how’ does this happen, when and how do our participants move on from ‘managing’ the learning in their classrooms to ‘leading’ the learning? Perhaps this shift could also be described as bringing an

andragogical approach to their pedagogical practice? In defining the characteristics of effective teaching and learning Gibbs (1992) suggests that it is best characterised by independent and problem based, group and project based learning: all features of 'andragogical' learning.

Conclusion

This pilot study has had two key outcomes. Firstly, it has highlighted the need to understand the experiential learning that is reported to be the primary driver of learning to teach within the Teach First programme. This experiential learning contains a number of processes of reflection, all operating on different timescales. It furthermore raises questions about the relationship between pedagogy and andragogy, between educative and non-educative experience and between the unique motivating factors within this programme and the focus on learning through doing. Understanding the interaction of these factors over time will begin to make clear the complexity of learning within the programme.

Secondly the coding has enabled us to formulate categories of influences from which we can consider learning to emerge. Whilst this snapshot has provided us with a focus on experiential learning it has also introduced a number of surprising influences, such as the need to observe others, the incorporation of feedback from pupils and even one group reporting the innate capacity to understand others as important. The differences between the maths and science groups within the pilot are not statistically significant but they do highlight a variety in cohorts that must also be considered and is heightened by the richness of the transcript data. Whilst this snapshot suggests that experiential learning is key, this may not be the case at all stages of the initial training year.

In ascertaining how influences interact the categories arising from the pilot data should not be rigorously specified but recognised as dynamic and complex as is the learning which is taking place in learning to teach. Through recognising this we hope to gain a greater understanding of how participants are learning to teach.

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