2016 cohort

Patrick Cottam – Physics Teacher

Teachers as researchers: In what ways can developing skills for critical engagement with educational research help trainee teachers improve their practice?

The teaching profession has a poorly-formed, but improving, relationship with educational research. Communication between researchers and practitioners has not always been strong, and needs to be exceptionally secure to avoid miscommunication and ensure the implementation of successful strategies at all levels in schools. Teacher training programmes afford little time to teach trainees how to engage with academic literature. Such engagement would be beneficial not only for PGCE assignments, but also for their teaching practice and their career development.

This intervention aims to strengthen trainees' research skills, enabling them to engage more effectively with research and draw guidance from evidence-based publications to help them develop their practice. The intervention consists of two research skills workshops. The first introduces the concept of peer-reviewed research and the peer review process, as well as identifying a range of research types, their strengths and their weaknesses. It also introduces strategies for reading research papers quickly, enabling time-poor teachers to extract useful information in a timely manner. The trainees are set a piece of homework to find and read a research paper relevant to an area of their practice and implement a small change to their practice based on that research. The trainees bring their observations to the second workshop, which consists of a review of the trainees' experiences and the introduction of a few tools to enable trainees to critically assess the quality of the research they read (e.g. Lincoln & Guba's concept of trustworthiness (1985). It finishes with an exploration of a strong disagreement about an educational issue between two respected academics (e.g. Hattie (2008) vs. Slavin (2016)), enabling the trainees to use these new tools to come to their own reasoned judgment.

The experiences resulting from this project are determined by the trainees themselves in their choice of research papers and areas of teaching practice, and as such they vary widely. However, I am interested in how engaging with research has helped the trainees to reflect upon and improve their practice. I will ask the trainees to complete questionnaires before and after the workshops, gathering their thoughts on the utility of educational research for classroom practitioners, their own personal aims for the intervention, and the nature of any successes or frustrations they have encountered during these workshops. Based on their responses, I will invite several trainees to attend a focus group to discuss a particular aspect of their experiences. It may be that more than one aspect merits attention, in which case I will hold more than one focus group. The resulting data will be coded and the themes analysed in the manner outlined by Holliday (2007) to develop insights into the role of research in developing teacher trainees' practice and later career development.

Currently, the secondary trainees have completed the first workshop. The second workshop, originally scheduled for 5th April, has now been re-scheduled to 26th May and has yet to take place. I ran a pilot project with the primary trainees (holding workshops without subsequent focus groups), gathering feedback on the project. I have adapted the workshops as a result, increasing

the emphasis on confidence-building and adding a few activities to maintain pace. The workshops delivered so far have been very well received. The trainees have commented that they find the content useful and they appreciate the opportunity to step back and discuss the big themes that underlie their practice (pedagogy, societal disadvantage and fairness, etc). The trainees think deeply about these topics and present a range of views. I intend to investigate whether these workshops have developed their self-image as capable consumers of academic educational research, equipping them with skills which will complement their developing identities as reflective practitioners of teaching.

Thus far it is hard to say what the outcomes will be, as the second questionnaire will indicate the most suitable topics for the subsequent focus groups. There has been an emerging theme of taking the "fear" out of engaging with research and changing the mindset which says "I am not qualified to critique this work". For example, a participant commented: "There seems to be an issue with this research, I must have read it wrong," when in fact they had identified a valid criticism of the work presented. As such, I believe that this research will focus on developing teachers' identities as researchers and critical consumers of research, and exploring the benefits for teaching practice that accrue as a result.

References

Cheung, A., & Slavin, R. (2016). How methodological features affect effect sizes in education. Educational Researcher, 45 (5), 283-292.

Hattie, J. (2008). *Visible Learning* (1st Ed). DOI: https://doi.org/10.4324/9780203887332

Holliday, A. (2007). *Doing and Writing Qualitative Research* (2nd Ed). DOI: https://dx-doi-org.hallam.idm.oclc.org/10.4135/9781446287958

Lincoln, Y. S., & Guba, E. G. (1985). *Naturalistic Inquiry* (1st Ed). Sage Publications, London.