Title: A self-study of teaching teachers using Epistemic Insight.

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Abstract

Epistemic Insight (EI), defined as knowledge about knowledge (Billingsley et al, 2018) examines how distinctive forms of disciplinary knowledge can interact providing solutions to real world problems Utilising an interdisciplinary approach EI seeks to critically examine the current subject compartmentalization in the school curriculum, which leads to a siloed nature of school education within the UK and as a consequence a siloed education for preservice teachers (Billingsley et al, 2024). In introducing EI to preservice science teachers, we have identified the need to examine our practice as science teacher educators by refining views on the nature of science. Adopting EI within our teaching challenged us as teacher educators to re-examine the structure of our programmes. By adopting EI's framework of examining questions with an interdisciplinary focus, we identified that our views on the foundations of scientific knowledge are not aligned despite the experience of the authors in science teacher education. This finding is illuminating given recent neoliberal shifts to standardise teacher education in England as implemented through the market review of ITT that is currently scrutinising curriculum providers curriculum materials (Mutton & Burn, 2024).

Thus, in this paper, we seek to problematise the nature of teaching teachers about EI. Berry (2008) reminds us that efforts to address problems using self-study do not lead to simple solutions. Introducing a self-study model that draws on the idea of the tension between the actions and intent of teaching about EI, we examine our practice as teacher educators critically to explore the differences in understanding the nature of science. Our self-study is framed by analysing podcasts that discussed the dissemination of EI across distinct initial teacher education courses. Triangulating this with lesson studies enabled us to examine how our views of the nature science manifest in teaching practices and illuminate the tension between actions and intent. This paper, therefore, examines how we use our engagement with EI as a research - informed pedagogic framework to prompt pedagogic practice as science teacher educators. We argue adopting EI as a pedagogic framework not only supports preservice teachers to critically examine the compartmentalisation of Education, but further promotes deeper epistemically insightful understanding of how individual disciplines are distinctive. This in turn refines the practice of teachers and teacher educators alike.

References

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