

A pilot exploration of doctoral students' conceptions of research

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Abstract

There is a limited literature on students' conceptions of research; the earliest reported work on this topic is believed to be the study by Meyer, Shanahan and Laugksch (2005). This two-part study, embracing both a qualitative and a quantitative methodological component, established the existence of inter-individual differences in postgraduate students' conceptions of research thus laying a foundation for subsequent comparative work by Meyer, Shanahan and Laugksch (2007). In essence these two studies consolidate findings in terms of five conceptually discrete dimensions of variation: 1) discovering the truth, 2) insightful exploration and discovery, 3) re-examining existing knowledge, 4) problem-based activity, and 5) a set of misconceptions.

The present study (Meyer and Halliday 2007) extends this earlier work in the important respect of focussing on a sample of doctoral students in a research intensive university. Initial findings support the existence of the five previously mentioned dimensions of variation and further extend them in terms of 6) research as information gathering and 7) a scientific process. Variation within these seven conceptually discrete dimensions is explored in the doctoral student sample according to broad disciplinary field of study (Science and Engineering, Arts and Humanities, Social Sciences and Health), gender, and status in terms of being an overseas student with English as a first language. Field and status, but not gender, exhibit a statistically significant overall effect. Analyses of structural (covariance) differences according to field are presently underway and findings will be reported.

Although work of this nature is still in its infancy, it is clear from the findings of the present and earlier studies that there is multivariate complexity in the manner in which postgraduate students differ in their conceptions of research. The theoretical significance of the present work lies in the capacity of qualitative and quantitative modelling of postgraduate students' conceptions of research to deepen our understanding of research as learning as seen from the internal perspectives of research students themselves. The educational significance of the present work is grounded on the premise that a knowledge of variation in the manner in which students engage in research as learning can inform the pedagogy of postgraduate programmes and supervisory practice. This, in turn, has the potential to develop more effective cohorts of researchers.

References

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