7STEPS WITH PLYMOUTH UNIVERSITY

7 Steps to:
Pedagogic Research

Overview

The term pedagogy is widely used to describe the art and science of teaching (Cannon, 2001). The pedagogy of HE has been the focus of researchers, lecturers and policy-makers, as they responded to the diversification of the undergraduate population. However the credibility of pedagogic research has typically been low, perceived as a soft-discipline, undervalued by mechanisms of research assessment (Yorke, 2000).

Despite this, pedagogic research is of growing importance within HE, indicating the contribution it can make to the enhancement of teaching processes and the student experience. It is also perceived as a mechanism by which lecturers can reflect on practice and gain an understanding of the contemporary teaching environment. The unifying feature of pedagogic research is a desire to improve practice (Stierer & Antoniou, 2004). This may be from the perspective of a lecturer who seeks to develop, and reflect on, their own practice to enhance the quality of student learning e.g. action research (Carr & Kemmis, 1986). Equally pedagogic researchers can operate publically, reflecting a desire to contribute to theoretical debates and influence policy nationally, demonstrating the different auspices and audiences for pedagogic research (Stierer & Antoniou, 2004).

Plymouth University has a significant record in pedagogic research across all faculties, and this has been recognised by the designation of a Pedagogic Research Institute and Observatory (PedRIO) (see http://www.plymouth.ac.uk/research/pedrio for further information). This leaflet is designed to help those with an interest in pedagogic research to undertake high quality, rigorous research with a view to improving practice and contributing to debates taking place in the wider teaching and learning community.

1. Identify a research question

It is common for inquiries to originate from the concerns of daily life, with many researchers problematising everyday situations to form questions (Lofland & Lofland, 1995). At the individual level, therefore, many research questions originate from situations associated with common experiences within the lecture room or from interactions with students. This is also true of the sector-wide level, where researchers may examine national policy initiatives relevant to HE. If possible, look beyond your own immediate context and try to focus on these wider, generic issues. Similarly, if funding allows, do not focus solely on Plymouth, but select a range of different contexts to ensure that your research goes beyond a narrow case study. The availability of free online survey software such as googledocs and surveymonkey makes this a more practical proposition even without funding. Keep a list of questions / ideas as they come to you, as you may be well placed to respond to a funding call when it comes in.

2. Consider theoretical underpinnings

Situating pedagogic research within theoretical and conceptual frameworks provides the rationale and justification for the methodology employed. It also serves to demonstrate a wider understanding of the research process and contextualises findings (Cohen et al., 2000). Pedagogic research that is focused on a specific context is commonly criticised for a lack of attention to theoretical positions, which can undermine the wider relevance of the work as it is then seen to be driven by personal or collective interests (Stierer & Antoniou, 2004). At the planning stage it is important to identity a framework on which to build the research questions and frame your methodology.

3. Formulate a research methodology

The majority of pedagogic research is undertaken by researchers who are working outside their home discipline, who are typically adopting methods informed by existing disciplinary or professional practices. This is not necessarily a problem and it can be a useful way of capitalising on disciplinary perspectives (Stierer & Antoniou, 2004). Pedagogic researchers may also draw heavily on research conducted within the schools sector or other social-science disciplines to inform their research design (Canning, 2007). It is important to ensure that these "borrowed" methods are appropriate to the research question. Pedagogic research can be based on qualitative and / or quantitative data that can be collected using a range of techniques. Where possible, triangulate your methods (e.g. collect data from a number of sources) as this helps to validate the findings. When planning data collection it is important to consider issues such as timing (e.g. availability of students out of term time); data preparation for analysis (e.g. transcription) and resource availability. See Bryman (2008) or Cousin (2009) for advice on research methods and data collection. Keep a research journal as you undertake your work to capture your progress and thoughts as that will assist with the analysis and write up.

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4. Obtain ethical approval

Cousin (2009) identifies two reasons why pedagogic research should have a strong ethical framework; i) it has a protective function for the researcher and the researched and ii) it supports the professional conduct of research endeavours. Ethical clearance is obtained at the beginning of a study, however, as Miller & Bell (2002: 53) emphasised "ethical considerations should form an ongoing part of the research". Any research involving human participants must go through a Faculty Research Ethics Committee (http://www.glos.ac.uk/research/prsi/Documents/SOTLJournalslist.doc). Ethical guidance nationally is available from the British Education Research Association (http://bera.dialsolutions.net/system/files/3/BERA-Ethical-Guidelines-2011.pdf). Each Faculty's ethics committee operates slightly differently, so it is worth checking the details with the Committee's administrator, especially if you are working in a multi-disciplinary team.

5. Analyse data appropriately

Analysis is a process of transformation whereby data are sorted, retrieved and indexed to generate analytical ideas (Gibbs, 2007). It is important to be aware that data may represent the meanings people attribute to their experiences and social worlds (Miller & Glassner, 2004). The researcher also needs to consider their own positions, values and beliefs and how these inform their interpretations. Quantitative data can be analysed to establish relationships or correlations, and can provide statistical generalisations. Qualitative data analyses involve a range of processes, e.g. familiarisation, sorting, coding and indexing, which allow organisation of the text to aid development of concepts or theories. Software (e.g. Nvivo / SPSS), supported by the University, is available to assist with the sorting and management processes. You should plan your data analysis as you formulate your research design as this can determine the data collected.

6. Disseminate your findings

Pedagogic research may be included in the REF, either through discipline-based units or through the Education Unit of Assessment. There has been a growth of pedagogic research journals and a list of generic and discipline based journal can be found at Deliberations (http://www.sussex.ac.uk/tldu/resources/journals). Equally there are many national and international conferences dedicated to pedagogic research. Annually organisations such as HEA, ISSOTL and SRHE hold conferences that are generic in their focus, addressing a range of issues relating to pedagogic research (e.g. students, staff or policy developments). Identify a critical-friend who can act as a reader for articles and abstracts since they can provide useful feedback to clarify your writing.

7. Collaborate

In pedagogic research, there are significant advantages of collaborating with others. Some of the most successful collaborations involve the combination of a researcher with an education background (who can contribute theoretical perspectives and draw on the education literature), and a researcher from another discipline (who can contribute the knowledge and perspectives from their home discipline as well as the first hand knowledge of teaching and learning in that discipline). A good collaborator helps keep you motivated and encourages you to write up your research, as well as making the whole experience more enjoyable. There are a considerable number of staff across the University working on pedagogic research projects. If you have an idea, but are unsure who to collaborate with, talk to the PedRIO team, as they will be able to suggest potential collaborators.