Design and Technology Practitioner Based Research; An Emergent Study.

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Introduction

This work presents the preliminary findings of the third phase of a small scale research study conducted by the authors with a small number of serving secondary school teachers of design and technology based in the North West of England.

The work originates from a study designed to improve the ability of Flexible PGCE design and technology trainee teachers to gain a 'Level 7' in the submission of their research assignments utilising a classroom evidence based approach (Bell et al. 2011). It was during this study that unanticipated findings emerged, which set a new course of enquiry; to explore the potential to support teachers in the generation of evidence based classroom practitioner research, of which the preliminary 'pilot' work is reported here.





Results and Discussion

Early findings of this small pilot study illustrate how this emergent research programme is facilitating design and technology teachers' in the production, promotion and validation of their classroom based practice.

Thus far research participants have reported a range of positive outcomes which have arisen as a direct result of engagement with the study. Selected findings in the form of abridged interview transcripts, presented in the form of vignettes, are offered below:

Vignette One:

Darren is a teacher of design and technology in a technology college and is new curriculum mentor. As a Newly Qualified Teacher (NQT) Darren was eligible to access the North West consortium's Masters in Teaching and Learning (MTL) programme and as such is aware of the (previous) government's desire to make teaching a masters profession. Darren is an enthusiastic teacher with an interest in continuing his professional development. Due to the demise of MTL, he has withdrawn and is in the process of transferring onto a University based Masters Programme. Darren teaches a single gender group of underachieving pupils. The trainee teacher he worked with expressed an interest in working with this particular group for his research project and as Darren explains *"as a result of sharing ideas, after talking to my trainee I* began to adapt my own teaching". As a result Darren developed new strategies and radically revised the scheme to improve the design and technology delivered, which included off site teaching. He intends to write his findings up for his own masters and is keen to share his findings with others "the research experience reminded me that the work I do in school does matter and what I do can really make a difference".

Vignette Two:

Recently published practice based work by research participants

Methodological Approach

The methodological approach adopted throughout this research programme has been constructivist grounded theory (Charmaz, 2005; 2006). This approach allows the simultaneous gathering of data which, following analysis, allows the findings to enter the research field to inform and help set the direction of subsequent phases of enquiry. The pilot findings presented here draw upon empirical data which was gathered during focus group work, a series of semi-structured interviews and private email correspondence with the research participants (n=6).

All research conducted has been in accordance with the ethical guidance provided by the British Educational Research Association (BERA) (2004). Participants were assured that all discourse would remain anonymous and where appropriate the names of respondents and institutions have been changed. The rights of participants to either withdraw from the study or to refuse to allow materials to be used at any stage of the work was made clear.

"I didn't think the work I competed was anything particularly new or special, but writing about it raised my profile within school and I've no doubt it helped me to

Sally is a teacher of food technology. She holds pastoral responsibilities within her school and is a curriculum mentor. She organises many extracurricular activities, including the schools summer academy for gifted pupils. She recognises the impact her work has on the children but does not consider it to be research, "to be of any real significance or interest to others". During the summer academy trainee teachers supported the activity. One trainee decided to explore the potential of extended learning as the basis for their Level 7 research. It was only then that Sally recognised the potential of her own work. By Sally's own admission this was "something of a revelation". The school is earmarked for potential closure and is making staff redundant. Sally is acutely aware of the need to enhance her Curriculum Vitae (CV) in the event that she needs to apply for other positions. As a result of her engagement with this study, Sally's work has been published. This has helped raise not only the profile of design and technology, but also her profile within the school. Should she have to apply for her own teaching position or one outside of her current institution Sally says that she "feels more confident" and believes she will be "in a stronger position".

Vignette Three:

Carla works in a school with a *"nonexistent staff development budget"*. Coupled with rarely cover (William 2009) she finds it difficult to update her subject specific skills. She feels that the head teacher is not always supportive of design and technology and she feels that investment in new equipment restricts what is offered. Textiles is no longer taught and she is aware that as an area, design and technology is not developing. Carla enjoys working with trainees teachers "because of the new ideas they bring". The research project developed by her trainee is something the staff have continued to use within the department. Aspects of the work have been highlighted as 'good practice' by the schools' senior management which is deemed to be of particular importance, especially given the uncertainty surrounding the future of design and technology because "it has helped raise the profile of the department amongst colleagues across the school".

"Writing up what I do has helped me reflect upon the work I do in school. It has given me more confidence and I've just applied to begin a Masters degree"

Teacher research participant 3

Potential Areas of Future Study

Given the positive outcomes from the pilot work the authors envisage that subsequent study will investigate which 'vehicles' are most appropriate in supporting practitioners in the creation and corroboration of practice based research.

The intrinsic 'value' of this research will also be explored. Not only in terms of the potential to improve learning and teaching in the classroom, but given the current uncertainly surrounding education within the UK; cuts in teacher training numbers, introduction of training schools, the populous dip in secondary school age students and the introduction of the English Baccalaureate, it is intended that future study will also investigate the impact that engagement with research activity of this kind has on the teacher participants, in retaining current or securing new employment, gaining promotion or enhancing CPD.

secure my recent promotion."

Teacher research participant 1

Creative and Applied Technologies Faculty of Education Template created by Dawne Bell (belld@edgehill.ac.uk) and David Wooff (wooffd@edgehill.ac.uk) The Design and Technology Association (DATA) Education and International Research Conference, Keele University, 2011