

THE FUTURE OF DOCTORATES IN DESIGN

Dr Kev Hilton

School of Design, Northumbria University

ABSTRACT

This paper describes the options for practical approaches towards making ‘an original contribution to knowledge and its understanding’ within professional design practice. It also examines the values that may be brought to bear by the acquisition of Doctoral level thinking and research skills. In differentiating the range of Doctoral ‘products’ available this paper goes on to describe the development of the Professional Doctorate for Design with its portfolio approach to evidencing and defending the practitioner’s Thesis.

The paper concludes that internationally there is an increasing move towards provision of, and engagement with, Professional Doctorate programmes in the drive to sustain economic competitiveness in the global marketplace. However, to develop concerted engagement with Doctoral education and then practice, it needs a clearer appreciation and promotion of how such experience continues to make practical contributions to the design economy.

Keywords: Needs, Action Research, Portfolio, Experience, Recognition

1 INTRODUCTION

The design profession is not known so much for its authorship in text but in form and function, in a wide range of products, processes and services. It often values the practical over the theoretical in its thirst for solutions today rather than tomorrow. From this perspective the profession often finds it difficult to value the PhD as a practical qualification for a career in design practice, viewing it more as an academic qualification for a career in lecturing and institutional management.

There needs to be a clearer understanding of what Doctoral programmes involve and achieve [1]. A Doctorate programme differs from an undergraduate programme in that it is defined largely by the student/researcher rather than by the institution as a set package. While an undergraduate programme provides technical and contextual knowledge skills, postgraduate experiences focus more on the development of research and thinking skills relating to a chosen field of study. The development of doctoral experience is intellectually more demanding but results in more individual expertise and a greater potential for contribution to economic development.

There are differences between disciplines in their expectations and requirements of experience development. Design is very practice-oriented with the direct practices of design development, but there are also indirect practices informing the development process, for example ethnography. As much design work is team-based, and because team members are not typically acknowledged for their contributions or experience, other than by their associates, the only effective option for recognition is publication of project case studies describing the individual’s contribution to thinking and practices.

Some of these practices might be described adequately in text, while others might require the inclusion of visual communication and so a portfolio approach to case studies may prove the most effective.

There are a number of forms of Doctoral programme and award enabling development and recognition of thinking and research skills which have led to contributions to new theory and or practice in design. These roughly involve:

1. An Honorary Doctorate, awarded for recognised intellectual contribution to a profession.
2. University based PhD study, developing theory to inform new practice.
3. Work based PhD study, developing new practices by action research.
4. PhD by publication, involving work based publication of a number of papers, informing of insights in theory and/or practice.
5. Work based DProf study, supported by taught and accredited modules, recognising and developing new professional practice by means of a thesis which may be in the form of a portfolio with support documentation.
6. EngD, the engineering route to a design Doctorate.
7. The Higher Doctorate which is awarded to academic staff, for post-doctoral contributions to research within, and awarded by, their academic institution.

Northumbria University's Professional Doctorate Standing Group Framework has required that its Professional Doctorates be recognised by three letters, for example DDP for Doctorate of Design Practice, while its Higher Doctorates are to be D followed by the subject abbreviation, for example DDes.

Regardless of type of Doctorate, or subject, there are some fundamental experiences required to support ongoing development of Doctoral experience. It has been proposed that there is a need to provide four modes of knowledge, as described by Scott, et al. [2]

- Mode 1. Disciplinary Knowledge
- Mode 2. Technical Rationality
- Mode 3. Dispositional and Transdisciplinary Knowledge
- Mode 4. Critical Knowledge [2]

The practitioner must understand the concepts within their discipline, how these may be applied technically, how this knowledge may be transferred to other disciplines, and how to develop effective solutions through critical review.

2 CONTEXT

There has been much debate about developing and running Professional Doctorates in the various subject areas with concerns over parity of merit and regulations because of the different needs of the various professions. In 2006 a two-day Professional Doctorate workshop organised by the UK Council for Graduate Education was delivered in Nottingham. Much of the workshop proved discussion provoking rather than simply informative and led to a perception of infancy of Professional Doctorates. What follows in this section are the more important points raised.

Comment was passed on the down side of referring to a DProf as a 'Taught Course', when differentiating from a PhD. This labelling was seen to undermine the value of supporting professional practice research with taught elements. DProf programmes are, by and large, still designed by the researcher, but the first years taught material enables more effective engagement with research thinking and practices. However, the majority of universities do provide for key training needs. The difference is that DProfs generally credit their taught modules as part of progression assessment.

The economics of PhD delivery was called into question since reviews have confirmed that they run at a loss, in part because their fees are capped. However, it was noted that there is no such fee cap on DProfs. If DProfs are charged at a similar level to PhDs they would require large numbers before they could become 'profitable'. There is a perception that programmes with heavy taught elements both demand and provide more so they ought to cost more. This suggests that the fee for a DProf should at least equate to a Doctorate+Masters.

It was proposed that Government should financially support DProfs to back up their 'economic objectives', as DProfs were seen to support these objectives more effectively than non-practice-based PhDs, but there was no belief that this would happen in the UK.

3 PORTFOLIO

Carroll and Kellogg [3] discuss the benefits of artifact interpretation as a means of understanding design practices through functions and features embodied in artifacts. In addition to which Morley and Priest [4] and Usher [5] have supported the use of portfolios as an effective means of gathering together different pieces of work with different styles and intended audiences for assessment and accreditation. The support document ties these works together by a commentary that may be chronological, autobiographical, conceptual or developmental. However, it is also noted that because of the 5+ years 'experience and recognition' approach to portfolio development a Professional Doctoral student would be expected to operate at a Doctoral level from the beginning of their programme. [6].

In terms of the DDP, a portfolio would enable a designer or design manager for example, to visually evidence a range of products from the individual's design practice, where they had made key intellectual contributions. As design is typically a team-based practice it is expected that the support document would describe the individual's approach that led to these intellectual contributions. The portfolio would then serve to engage the examiner and audience with aesthetic and functional developments through visual communication, while the textual communication would serve to develop the understanding of the practitioners Doctoral level thinking.

4 MARKET

There are an increasing number of Professional Doctorate awards being developed in the UK [7] and a developing international market, with governmental strategies in various countries towards developing economic gain from Doctoral thinking and research skills. This evidences a growing economic opportunity in the education sector for provision of, and engagement with, such programmes of study. The development of Doctoral programmes can be aided by a number of educational practitioner accounts and research body references. For example, according to the joint statement from the Research Councils and Arts and Humanities research Board in: *Skills Training Requirements for Research Students* [8] researchers broader needs include:

- Research skills and techniques
- Research environment
- Research management
- Personal effectiveness
- Communication skills
- Networking and team-working
- Career management

In addition to market needs, consideration must be given to market perceptions. PhD practitioners, though still the minority within the design profession have made the following comments, in terms of perceived benefits of Doctoral experience:

- Seeing things differently and identifying opportunities
- Developing novel and more effective approaches to challenges
- Understanding appropriate selection and application of research methods
- Managing projects with high levels of complexity and ambiguity
- Confidence in written, visual and verbal communication for different audiences

An action research approach to PhD study has proven effective for practice-based learning, yet there is a common perception in the market that a PhD is typically a theory-based award, so there is an argued need for titled recognition of practice based Doctorates. Though there are some universities offering the award of DProf most universities make the practice more apparent by qualifying it specifically, such as the award of DDP. However, there will remain the need for clearer market differentiation to appreciate the merits of all titles of award and options of approach in order that candidates can chose which is the most supportive Doctoral route for them.

An action research Doctorate would involve a researcher working as a function of their method of study, gathering case material and investigating it as evidence for or against their research hypothesis. The research theme of interest may have initially developed at university, perhaps recently graduating with a Degree or preferably Masters, or developed after some years of practice. PhD researchers seek to generate contribution(s) to new knowledge investigating the practices of their subject area, described and published through their thesis document.

A professional practice Doctorate would involve a researcher who had already gained 5+ years experience in the practice of their profession. They would typically create case material to evidence their contribution(s) to new knowledge, which some may already have developed. Alternatively, through study of the case material of practice they would be expected to develop the contribution(s) to new knowledge by the conclusion of their Doctorate. As part of the evidencing of practice the DDP would produce a Portfolio with written support documentation as the thesis.

Using Masters Alumni as a common marketing approach for Professional Doctorates [2], a survey was carried out from the School of Design. These were a mixture of national and international graduates. They were surveyed for a number of reasons:

1. Masters graduates are typically considered to be a key source of Doctoral programme candidates, as well as being indirect sources by word of mouth.
2. The material delivered in the first two semesters of the DDP were to be provided by the Design MA, meaning that interested MA Design Alumni could consider an APEL route to reduce study time.
3. Many MA Design graduates would be practicing as senior designers and design managers and so provide a more informed perspective on the value of a DDP.

However, of the 40+ contacts remaining on the Northumbria Alumni database approached by mailed descriptor of the DDP with a questionnaire few responses were received. It was concluded that design practice is typically all consuming, and so finding time for further study, never mind responding to questionnaires, is a challenge. Some Masters graduates may find it difficult to express exactly how their study experience benefited their work because these experiences may have become an implicit part of their being and merged into the whole of their lifelong learning.

Design practitioners with Doctorates do not explicitly communicate that their successfulness is attributable to their Doctoral experiences. Without such references

being made commonly, these thinking and practice skills might simply be put down to the 'black art' that designers are believed to practice 'naturally'.

5 DEVELOPMENT

Regardless of present need to improve market perceptions of Doctoral experience there is an argument for the immediate development of Professional Practice Doctorates in Design to prepare for changes in those perceptions. The development of these skills will be depended upon to provide the competitive edge to meet increasing economic challenge. It is proposed that the most effective way to engage with economic challenge is through application of systems thinking developed through years of practice or effective doctoral programmes. Northumbria's DDP aims to provide for a market of design and business management professionals. Such a market source would include some MA Design graduates, now in commercial or academic practice. It therefore made sense that the taught material from which the first year of the DDP was to be composed should come from the MA. Northumbria guidance for development of DProfs made the requirements clear on taught material. Two semesters of MA Design Management (level 7) were to be used for the DDP while the third semester was to be composed of level 8 material. These level 8 'bridging' modules placed the focus on higher level thinking, management and communication skills. Candidates would be applying their experience, using both Reflective and Reflexive practices to: *'Evidence original contribution to knowledge and its understanding'*.

The aim and objectives of the DDP then became:

To enable experienced design practitioners and academics to evidence their Doctoral level of subject engagement and development through:

- A significant and original contribution to new knowledge and its understanding in both personal and professional practice, leading to the application and development of their theoretical frameworks within design and research practice both local and global.
- To develop appropriate research skills through an in-depth programme of personal research and scholarship to apply to design practice.
- The 'publication' of high quality research outputs: refereed papers, products, processes and/or services, which demonstrate in a meaningful way, both creative inspiration and critical judgment to the profession.

Academic benefits included the advantages of greater intellectual engagement with:

- Responsible design practice and innovation.
- Systems-thinking approaches to design practice.
- Re-designing design processes.
- Improving critical and creative thinking skills.
- Creating new and inclusive perspectives on design.
- Developing research and practice project communities.
- Creating and communicating positive change and diversity.

6 CONCLUSION

It is concluded that internationally there is an increasing move towards provision of, and engagement with, Professional Doctorate programmes in the drive to sustain economic competitiveness in the global marketplace. Design, as a cross-disciplinary subject, with its ability to enable the creation and organisation of value, is crucial to economic success. It is therefore argued, despite a possible 'slow to engage' market, that it is

imperative that provision for Professional Practice Doctorates in Design be developed immediately.

However, the most important observation from this investigation of the Future of Doctorates in Design is that the economic value of Doctoral study must be acknowledgement for its contribution to thinking and practice through explicit reference. If Doctoral practitioners do not enable others to appreciate the origin of these experiences it may be assumed that these individuals are just naturally gifted with the 'black art' and that their studies had contributed little more than contextual knowledge.

REFERENCES

- [1] Neumann, R. (2005) *Doctoral Differences: Professional Doctorates and PhDs compared*. Journal of Higher Education Policy and Management. Vol.27 No.2 pp173-188.
- [2] Scott, D., Brown, A., Lunt, I. and Thorne L. (2004) *Professional Doctorates. Integrating Professional and Academic Knowledge*. Maidenhead: SRHE & OU.
- [2] Carroll, J. M. and Kellogg, W. A. (1989) *Artifact as Theory-Nexus: Hermeneutics Meets Theory-Based Design*. CHI'89 Proceedings.
- [3] Morley, C. and Priest, J. (1998) *RMIT reflects on its doctor of business administration program*. In T. Maxwell and P. Shanahan (Eds.) *Professional Doctorates: Innovations in Teaching and Research*. Conference proceedings
- [4] Usher, R. (2002) *A Diversity of Doctorates: Fitness for the knowledge economy*. Higher Education Research and Development. 21(2): 143-53.
- [5] Bernstein, B. (1990) *The Structure of Pedagogic Discourse*. London: Routledge.
- [6] Powell, S. and Long, E. (2005) *Professional Doctorate Awards in the UK*. Lichfield: UKCGE.
- [7] Research Councils and Arts and Humanities research Board (2002) *Skills Training Requirements for Research Students*. London: RC and AHRB.

Dr Kev HILTON
Northumbria University
School of Design, Squires Building
k.hilton@northumbria.ac.uk
0191 243 7340