

# **The Impact of a Professional Doctorate centred on the Candidates' Work**

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## **Introduction**

There is now a substantial demand for doctoral qualifications that are related to the actual work activities and circumstances of people engaged in high-level professional practice. This demand has encouraged universities to make suitable provision, leading to an increase in the number and variety of professional doctorate schemes available. These professional doctorates attract senior professionals from a wide range of work scenarios into study that is based in their current work and leads to academic recognition at the highest level (Tenant 2004).

Current debates about this phenomenon have largely been about the balance of activity, focus and control between the academic and the professional environments. Scott et al's (2004) studies of twelve UK professional doctorates in the fields of Engineering, Business and Education, chart the shift in balance from university to the work-place, show varying modes of knowledge and knowledge construction that have arisen as a consequence of this shift and explore implications for the university for their approaches to research methods, quality assurance, programme focus, programme impacts and final assessments. This paper moves the focus from institutional concerns towards the experiences of the participants themselves. We present tentative propositions derived from a review of ten candidates who have completed the professional doctorate at Middlesex University, a doctorate that approaches learning from a transdisciplinary perspective and enrolls candidates from an extensive and varied range of backgrounds.

The cases reviewed in this article are part of a longer-term grounded theory study of the Middlesex work-based learning programme that covers a wide range of awards, including doctorates. The approach to work-based learning requires the learners themselves to define the scope and focus of their programmes in the context of their particular organization or professional area in which they are able to make a significant impact on practice. We formulate the possibility of a new generation of professional doctorates in which control of content and methodology lies with the candidate within a framework of procedures and support offered by the University. The candidates, already 'experts' within their own working environment can make significant high level innovations in their organizations or professional spheres and this is commensurate with a high level contribution to knowledge.

An important aspect of the Doctorate in Professional Studies (DProf) presented here, is the learners' situatedness outside the academic sphere (Lave and Wenger 1991). The

programme provides candidates with the opportunity to self-manage their learning and make an impact in their organization or professional field through a carefully structured programme that is relatively free of much of the constraining impositions that academics frequently employ. Significantly, the programme also shows that the *process* of being responsible for the scope and direction of their own programme, setting up and justifying partnerships between the university and their professional field, demonstrating the 'doctorateness' of their previous experience, and contributing to their professional practice at the highest level, leads to the enhancement of a range of high level personal skills and qualities in addition to the specific knowledge and impact of their final piece of work.

The DProf 's generic criteria and flexible structure that make it appropriate for candidates from a wide variety of professional fields provide similarities to Scott et al's (2004) dispositional mode, which is 'essentially concerned with the individual and their own practice' (p51). The diversity of specialisms within the DProf, represented by the cohort of learners in our study, does not allow an imposition by academics based on pre-defined contexts or methodologies. For example, there are no special modules containing that which academics might believe to be important information about Engineering, Education, or in whatever field the Candidate's doctoral project may be considered to be based. Candidates already have considerable expertise in their work and their work-based projects are likely to draw upon knowledge from a range of fields and also on tacit and professional knowledge. The Middlesex DProf has allowed candidates to develop a range of high level abilities by being able to take responsibility for their own programme of study within a flexible structure. We show how this works and we resolve to consider these aspects of the programme further in our future research and programme developments.

## **The Operation of the Doctorate in Professional Studies (DProf)**

### ***Context and Candidates***

The managing agency of the generic DProf programme at Middlesex University is The National Centre for Work Based Learning Partnerships (NCWBLP, 2005). The programme is currently one of the fastest growing professional doctorates in the UK with over 170 enrolments and 45 successful completions on the generic scheme since its inception in 1998. Candidates on the DProf programme are usually at senior manager level or equivalent, have high level professional expertise and usually hold a masters degree. They have sufficient authority and leadership in their work to undertake doctoral level research and development projects that can have a wide-ranging impact on their community/community or professional field (Portwood and Thorne 2000).

### ***Flexible and supported programme***

The supportive framework of the DProf enables individuals or groups, in association with their organization or professional area, to design a customized programme of study. All candidates (UK and International) study in a flexible learning mode, supported by handbooks, access to a Virtual Learning Environment and an option to visit the university or international centre for seminars and briefing sessions. The generic M/DProf programme is able to draw on expertise from across the university and from senior professionals outside the university in its provision of subject-specific and real world consultancy to candidates. There is also support by an academic programme

adviser who guides and works alongside the candidate throughout their programme, ensuring both academic standards and practical effectiveness. By this means, the programme is able to accommodate candidates from a wide range of professional areas in the public, private and voluntary sectors. Its generic form has application to any field and is predicated on a form of transdisciplinarity that has been evolved and researched within the community of work based learning academics over the last ten years (Costley, 2000).

### ***The Programme***

Features of the programme that facilitate the development of high level personal qualities and skills include the following:

- a) formal recognition of, and academic credit for, the candidates' critical reviews of their existing professional experience and achievements before planning the next stage of their development,
- b) the acceptance of a wide variety of final outcomes proposed by the candidates themselves as the basis for final assessment, such as professional project reports, book, policy documents, sets of guidelines and regulations describing programmes of action designed to achieve significant impact in the professional context, (the modular structure of the programme allows candidates to negotiate their preferred balance of weighting between credits for the recognition of their current professional learning and credit for their final doctoral projects),
- c) involvement of representatives of the candidate's professional field in the university's decision to approve the proposed final products for assessment,
- d) a critical commentary embracing the candidate's professional achievements as a whole, the methodology and the specifics of the final outcomes that defines how candidates have played a unique role in implementing change, developing innovative approaches and creating sustainable solutions to complex issues,
- e) assessment criteria that are generic rather than prescriptive and applicable to contexts appropriate to the candidate's distinctive programme. The learning outcomes and assessment criteria relate specifically to work-based practice. Criteria fall into three categories: within knowledge and understanding are knowledge, research and development capability and ethical understanding, within cognitive abilities are analysis and synthesis, self appraisal/ reflection on practice, planning/ management of learning and evaluation and within practical abilities are the criteria of awareness of operational context and application of learning, use of resources, communication/ presentation skills and responsibility and leadership. The DProf doctoral project was originally designed to be equal in level and rigor to a doctoral thesis (Thorne 2001) and develop the practice of people at work. It did not borrow from existing curricula within the university.

### **The Study**

After six years of operating the DProf programme, a significant research programme in the form of a review was initiated by the programme team to understand and articulate participants' experiences in order to gain insights into: the motivation of senior professionals to engage in mid-career doctoral level work; the key processes involved in institutionally supported work-based learning; and the impact of work-based doctoral

work on candidates and their professional activity.

The aim was to make informed contributions, based on research evidence, to the development of theories about work-based learning and personal, professional and organizational development. The intention was to gain an insight into what the candidates considered to be the most valuable aspects of the doctorate in order to make suggestions for the further development of doctoral level provision for senior professionals. This article emerges from that work and focuses on the third area of the impact of the doctoral work on the Candidate's professional activity which is usually a project undertaken within a particular organization but can be a project that impacts upon the professional field.

We also considered that we would add to debates on the nature of different models of professorial doctorates especially relating to further emphasis to the pedagogical aspects of doctorate level work-based learning and particularly in the context of reflective practice (Schon, 1983), meta-cognition (Biggs, 1985; Jackson, 2004), tacit knowledge and tacit learning (Polanyi, 1967), self-regulation (Zimmerman, (1994)), communities of practice (Wenger, 1998), the development of personal and professional capability (Stephenson and Yorke, 1998) and learner-centeredness and valuing of previous experience (Boud and Solomon 2001).

## **Methodology**

A grounded theory approach (Glaser & Strauss, 1967 and Strauss & Corbin, 1997) was chosen for two main reasons. First the researchers wished to begin the process by engaging directly with candidates' experience and to centre on this exclusively at this particular stage of the research. Secondly, some of the research group members were involved as programme managers and wished to distance themselves as much as possible from their own perceptions, particularly in the initial data gathering and analyses phases. The sequence of activities was;

- 10 graduates of the scheme were helped to articulate their 'reflections on their personal learning histories' covering their times before, during and after the programme.
- Analyses, based on multi-level coding of data from open-ended interview transcripts, were used to allow tentative issues and agenda to emerge from the experience itself.
- Emerging issues were checked for fit with the complete data gathered (as opposed to the researcher setting out the issues).
- Themes relevant to the emerging issues were identified for exposure to the wider field to encourage debate on their wider applicability.

All graduates of the programme were invited to participate in the interview process. The cases were chosen on an opportunity basis of availability and willingness and ten came forward. Lengthy open-ended interviews were conducted by someone who had not been personally involved with the cases. Respondents were encouraged to talk freely within a chronological sequence covering the period before they applied, their experience of the programme and the period after graduation. This autobiographical quasi-structure allowed respondents to make their own connections and construct a personally coherent

account of the experience as a whole. All interviews were recorded and professionally transcribed, with the final text approved by the subjects. All texts were disaggregated into numbered bite-sized components. Initial coding was based on the loose interview structure, i.e. why they joined the programme (motivation), what happened on the programme (process) and what happened afterwards (impact). Coding was checked with the small team of co-researchers consisting of staff who teach on the doctorate, visiting academics and other staff in the university who were considering instituting a similar doctoral programme. They checked for appropriateness and consistency and the text components were sorted accordingly.

Subsequent levels of coding and sorting were carried out within each of the initial coding areas motivation, process and impact derived by the lead researcher from experience of this type of approach. Second and third level coding broke down each of these areas into issues specifically raised by the subjects. Final coding and sorting at levels four and five were used to synthesize generic issues arising from the details. Finally, general propositions about the candidates' experiences of the DProf arising from the analyses were checked by others for consistency with the original transcripts as a whole.

### **Profile of the cases**

All ten graduates were in senior positions of responsibility with an ongoing or emerging real-time work project capable of development into a doctorate programme. The generic nature of the programme is illustrated by the specialisms of the sample: a head teacher, a senior internment manager for a major city, administrative head of a national religious group, an architect / lawyer, physiotherapist, vocational qualification consultant, psychotherapist, senior researcher for national assessments of school pupils, government advisor on special care services, and a university quality assurance manager. Two were close to the end of their careers, the rest were in mid-career. Unsurprisingly all ten graduates were attracted by the relevance of the programme to their work and the extent to which they could fit it round their personal and working time frames. Seven of the 10 had explicitly rejected the idea of pursuing a conventional PhD as being inappropriate to their needs, being attracted by the DProf's work-based framework, the opportunity to gain recognition and accreditation for learning already achieved and the opportunity to take responsibility for their own development.

### **Motivation for and experience of the programme**

Because of the autobiographical nature of the open-ended interviews, candidates presented coherent accounts emphasizing personal themes common to their motivation, experience of the programme and post-programme impact. These themes were their personal credibility, the development of their personal capability and the reinforcement of their commitment to further learning and development. For the purposes of this paper we give particular attention to the impact the doctoral project had on both the candidates and their work situation. Factors relating to motivation can be found in (REF) and factors relating to the process can be found in (REF).

### **Impact of the programme**

In all cases the DProf experience had significant impact on themselves and their work. This is expressed in four dimensions that incorporate the important perceptions that the

candidates had of themselves and their work, and also tangible measurable outcomes of their doctoral work.

### **1. Direct impact of Doctoral work on an organization or professional area**

Direct impact on the candidates' organization or professional area came from work activity contained within their specific projects that made real impact on professional situations. The products that emerged from the programmes varied widely: for example, a developed policy statement for a national organization, a book on good professional practice with researched contents, a staff development programme for a public service organization and so on. They also varied widely in subject area, for example, sustainable development, healthcare, franchising, curriculum innovation, burial and cremation. One commented. Direct engagement with the specific field is shown by the following candidate who said "*I wasn't interested in doing a piece of research with no practical application whatsoever which seemed to me what a lot of doctoral programmes were about*" and another who said, "*the benefits (for the field) actually far exceeded what I expected them to be*" and another said, "*it was very much grounded in my day to day work anyway and did facilitate that reflective process*".

One candidate was repeatedly asked for copies of his project - an innovation in his field - and commented that, as a consequence, he recently did a joint article with a well-known academic and practitioner in the field.

*One of the impacts is that quite a lot of them [his community within his professional area] say to me "I regularly turn to it..." Its on their reference shelf... they say to me that there has never been anything like it. There have been some good reviews.*

It's not just the final project that has the impact. One Candidate who had written a book as the outcome of her final project said "*I kept on wanting to say to people "That wasn't just it you know. It was a whole host of other stuff that isn't in this book"*".

Each professional area presents a unique context and in one particular profession the idea of revolutionary impact was seen as undesirable so the DProf Candidate designed a research outcome that was constructed as what s/he described as evolutionary, commenting that *if you add up a lot of evolutionary developments the sum total can be revolutionary*. The project is comprised of *a collection of major reforms and developments which are very exciting and encouraging .....*

The products from the 10 candidates included in our research study illustrating the direct impact on their professional practice are as follows:

- distinctive and innovative educational curriculum in a new primary school;
- the development of a new professional service in the legal profession;
- a new approach to the educational development of physiotherapists;
- the codification of professional practice in a major national organization;

- models of national audit in a major area of government policy;
- national policies for the education and assessment of pupils;
- rationalization of interment practice and policy in a major metropolitan area;
- development of a framework of recognition for professional practice in an emerging field;
- developing and operating quality assurance procedures in a rapidly changing environment;
- Establishing opportunities for practicing psychotherapists to secure DProf status.

Each of the above outcomes, on which the candidates were assessed, advanced the professional fields in which they were engaged. However, this research suggests that the impact of the programme went beyond the above specific areas, and significantly enhanced personal attributes and skills in ways that made a further contribution to each candidate's professional effectiveness as shown in the following three sections.

## **2. Candidates' enhanced credibility provided impact**

Candidates recorded a perceived greater status with clients and colleagues and recognition from professional groups for the doctorate level of their achievements and significantly increased self-confidence in themselves as individuals and as professionals. One stated, "*It's nice to know that you are, you're considered the sort of expert, in this particular territory of the profession*".

Enhanced credibility could be seen for the candidates' professional community as well as for them personally in some cases. One said of the professional community,

*They also felt that the [professional community] deserved it and that it was probably going to enhance some sort of standing in terms of the various negotiations we continue to have in terms of finding our place in the world of academic courses.*

*People take more notice of you- Papers that had been written before getting the doctorate now have more impact when you have the 'Dr' attached to it; they prompt even more response.*

The DProf however does demand that candidates have a certain positionality before they are allowed on the programme in terms of experience and status within their organizations or professional area, i.e., they have to be in a position to be able to impact on change. One Candidate observed that we

*have an experience which younger people simply could not have and that's where the action-reflection element..... people in their twenties simply could not do that, because you wouldn't have reached the level of your professional life that would give you the contacts and the standing.*

There was significant impact from the DProf experience relating to the Candidates' enhanced credibility (real or perceived) in the eyes of others in their field who engaged more readily with their work once they had achieved doctoral status. Here again we have noted that it is the change in the Candidates themselves that has provided the impact of the Doctorate.

Some of the impact, as one candidate stated, engenders....*the confidence I feel in all sorts of areas .....because of the way its changed me it gives you that extra bit of metal in the new field.*

Another stated that,

*There is absolutely no way that I would be doing what I am doing now unless I had done this programme.*

### **3. Impact on their capability**

Enhanced personal capability was expressed mainly in terms of proven high-level intellectual skills, usually wrapped up in skills of synthesis, better judgement of levels of achievement and 'seeing the broader picture'. Their prowess as self-motivated learners was also confirmed.

Candidates acknowledged the difficulties and self-drive necessary to develop themselves to doctorate level, based on generic work-based criteria.

*I found that the reflectiveness was about me and you know that's quite a hard thing for some people to do because they take comfort from that academic distance and that is not what it is about. You have to be really interested in your work as well.*

*I know I have worked at that level (doctorates) and have the ability to co-ordinate, to analyze material at that Level and reflect on it and affect the big picture in a whole world of concerns.*

Capabilities such as synthesizing, reflecting, focus on actual work were seen as important impacts on self provided by the programme.

*The ability to see connections between different pieces of work and draw lessons over and above that are greater than the sum of the parts.  
The programme enabled me to focus on the work I was actually doing.*

Candidates are working within complex and sensitive social and political environments that often have constraints and tight schedules that require the use of a rare combination of skills, knowledge, personal qualities and concern for values. One commented that the programme was about,

*.. how to pull together the threads to make something new... and it's the thread that stayed with me...*



This last comment in this section demonstrates how the Candidate realized that she had developed a new capability that enabled her to synthesize a whole range of contextual issues. The Candidates in our sample expressed their new found capabilities and attributed them to the autonomy they had on the programme to use a range of higher education approaches in the context of their actual work.

#### **4. Continuing development**

Impact on continuing development shows itself in the continuation of the Candidates' doctorate projects as real-time ongoing activities at work, positive yet unforeseen effects on colleagues and clients, renewed interest in further learning, and productive engagement in debates relevant to the professional wider field. One stated that

*Doing advanced work in the second half of one's professional life, that's very good, because the idea of continually learning in an academically credited context is very good for people in their fifties.*

Another said,

*Once you finish the programme, it's meant to be only the start of the next phase or the next series of projects.*

Other comments were,

*"The programme has finished but it's not left me" and "In every sphere of activity it's been a real help" and "Things continue to come out of the research project".*

The real time real world doctoral projects often have a time limit in terms of their timeliness for impact and one Candidate noted that

*since the project was done... things have really changed very, very dramatically.*

The DProf can bring about a Transdisciplinary and professional approach to continuing professional development rather than a subject-oriented approach as one Candidate pointed out.

*This is difficult to assess but I think if I look at responses to the papers (products of the programme) I think the best ones, in a sense, the ones that have been very insightful, have been more from the non- [professional area] rather than the [professional area]*

The following extracts touch on all four dimensions of impact:

*It matured greatly, my thinking and my approach and it has actually influenced my style of management at work. I give a great deal more thought and planning to what I'm doing and it's widened my focus really. I take much more of a wider view now than I did before. It does actually seem to raise people's expectations of you though and it hasn't done me any harm. It clearly has (pause) it achieved what I wanted it to achieve and it did actually raise debate and awareness of the subject matter I'd studied and I think it's one that's going to keep popping up.*

*(Other) things are coming out of it. You see in my approach I decided that the way ..... XX of this size are managed needs far greater care and long term planning than has been applied in the past. And that came out of my thinking for the doctoral programme ... and ... I have realized, as a result of my work that this place needs the benefits of specialists in certain fields....*

Their enhanced capability and the renewed trajectory to continue to develop the self were probably the two most enduring findings in terms of significant and lasting impact that the DProf provides for professional learning. Both these findings link to the huge impact the DProf had on the Candidates themselves which in turn led to an enhanced practice which as eight of them said was still unfolding and emergent.

### **Emerging proposition**

The tentative proposition that is emerging from this study, for further testing with other candidates and other studies is that the learner-managed features of the learning process contribute significantly to the candidate's professionalism, over and above that which is gained from the specialist activities on which they are formally assessed. Having to a) evaluate their own previous experience against doctorate level criteria, b) build effective working relationships between themselves their professional area and the University and c) justify their work, achievements and intentions to critical audiences in work and academe, promotes greater self-belief, wider acceptance amongst peers, intellectual skills and a commitment to continuing self development in the context of their work. The actual process on which the professional doctorate is built, is as worthy of debate and further research as is its structure and place in the continuum of examples.

Debate about the learning process itself is of particular importance because of the growing awareness of the role of high-level personal or 'soft' skills and qualities in high-level professional importance (Eraut 2004).

There is clear evidence from the ten cases in this study of the richness of work as a source of learning. Senior professionals are able to generate new knowledge using research approaches appropriate to higher level learning. The new knowledge, because it is situated in a 'real time', 'real world' context is able to impact positively on organizations and other communities. Their existing situatedness within their area of professional expertise gives them a position from which significant progression can be made.

They are able to do this because the DProf requires candidates to engage personal skills that are paramount to being such a knowledge-generating practitioner. Candidates have to reflect meaningfully upon their current practice and also adopt a reflexive approach their work. Development requires a blend of the professional and the personal where self-understanding is central to self-development. The self-management of the programme itself is a prime means of inducing self-managed learning.

The direct impact that candidates' projects can have in their organization or professional area can make the kind of difference that is distinguished by peers in their field. The importance of peer recognition is further noted through the enhanced credibility candidates can gain through undertaking their doctoral projects. Additionally,

Candidates are able to develop themselves to a doctoral level of thinking and performing in their professional spheres thus meeting the assessment requirements of the DProf in the broad areas of Cognition, Transferable Skills and Operational Context. Finally, the self esteem and motivating thrust of developing oneself further (often during middle age) inspires candidates to continue to develop and engage at work at doctoral level.

The limitations of the study hinge mainly around the size of the sample, which although representative was quite small. The emerging propositions will now need to be tested and this will be a focus of future research using larger and different samples. Now we have discovered the potential importance of the learner-managed aspects of the programme, we can review our processes and how they work to support the candidates.

### **Implications**

The DProf programme gives candidates the opportunity to manage research and development projects within their own organizations or professional areas. The evidence of this research from the candidates themselves, suggests that high level abilities can be developed by self-management of the doctoral work as they act as insider-researchers. It is the impact of the self-development process itself, that takes place in the practitioner's (candidate's) familiar context that has a major impact on practice (Bourner et al 2000, Doncaster and Lester 2002).

The support provided by the DProf framework enabled candidates to meet challenges by making an impact with their doctoral projects (Osborne et al 1998, Usher 2002). Eraut et al (2004) found the importance of having confidence for mid-career learners and that confidence arose from meeting challenges at work, while the confidence to take on challenges depended on the support that was received. In the case of the Middlesex DProf, those challenges are set in the demanding context of having to justify achievement and progress to critical partners in the wider profession and the less familiar world of academe.

An implication of this study is the role of the university as knowledge producer (Barnett and Griffin 1997, Boud and Solomon 2001), reasserting it through reliance on critical thinking leading to critical action and critical self-reflection (Barnett 1997) and how the University is repositioning and restructuring to meet the needs of the age of "supercomplexity" (Barnett 2000).

### ***What mode?***

So where, on the basis of this evidence, does the Middlesex DProf fit on the scale of professional doctorates? Gibbons et al's (1994) distinction between Mode One and Mode Two knowledge, Scott et al (2004) argue, is limited. Much more important, they argue, is "the way universities understand and in the process construct relationships between academic and professional knowledge" (p42). On the evidence gathered from this study, the relationships between the professional context and the university are forged by candidates themselves within a general framework established by the university to assure the level of the final academic award. The candidates are able to forge such a relationship because they have to justify their individual programmes to

both the university and their organisation or professional group through the use of a learning agreement.

Of the five modes of knowledge presented by Scott et al (2004) the closest to the MU DProf is the dispositional and trans-disciplinary model in that it is 'essentially concerned with the individual and their own practice' (p51). The DProf programme resists 'methodological imperialism' (p48) in that each programme is distinctive in field and method (p48). As with Scott et al (2004), credibility in the DProf model comes from recognition amongst professional colleagues as much as academe. The evidence is also consistent with the observation that the programme's structure, the basis of assessment and tutorial support is the most important way in which the university directly impacts on participant benefit.

However, the pivotal role of learner control is underplayed in Scott et al's dispositional model. The evidence gathered for this study shows that greatest benefit for the candidate derives from the exercise of the candidate's sense of agency within critical environments and comes as much from the structure that supports and tests the exercise and outcomes of that agency. Payoffs to the field come from greater self confidence, intellectual development and commitment to further development of the candidates themselves as well as significant 'new' professional impact on practice.

Finally Scott et al's claim that 'co-production of knowledge has the potential to enrich the workplace' (P158) is vindicated; the candidates were able to make a direct impact in their organization or professional area. They then continued to make an impact because they had gained doctoral level abilities, were perceived by colleagues as more credible and were more self assured in their abilities to work at a very high level commensurate with the work they did for the doctorate. We have shown that there were four aspects of impact that the candidates were able to make having completed the doctoral programme. They were able to make a direct impact in their organizations or professional area. They then continued to make an impact because they had gained doctoral level abilities, were perceived by colleagues as more credible and were more self-assured in their abilities to work at the highest level. The candidates were able to make an impact because they were in control of the process within a demanding and relevant environment. The mode, therefore might well be described as work-based, self-managed and developmental, a kind of self-actualization for a learned worker.

## **Conclusions**

This article was drawn from a study of candidate experience of a generic professional doctorate. It has focused attention on how the doctorate impacts on the Candidates' sphere of work and on how the Candidates themselves found a new 'impacting self'. This adds a particular slant to current debates about professional doctorates. The doctorate work involves processes that develop the practitioner, enhancing their abilities to manage and produce projects that can have potential impact on their organization or professional area. Added to this, the Candidates' doctoral work including their projects involves not just seeking to find out what works in what circumstances, as are often the goals of some management researchers, but how to develop themselves as practitioners. Successful substantiation of capacity at doctorate level in both academic ability and professional expertise is therefore a benchmark of this doctorate.

Evidence from the cases included in this study suggest that a DProf Candidate is someone who is prepared to work independently, be self-critical and put themselves into their professional work and the academic work needed for the doctorate. The candidate is the primary agent of control and the exercise of this agency within critical academic and professional environments is the basis of the impacts that the doctorate has upon both the individual and their work place or professional area. The 'Project of Self' is therefore also seen as a necessary undertaking for candidates and the success of that project takes place in a localized setting which is visible and tangible and where Candidates have a certain positionality.

The programme is characterized by a number of features such as gaining self-knowledge, and working collaboratively with others in an intricate and dynamic community of practice to create new learning and thus increase the essential resources of that community. We have seen engagement with abstract, human-related, previously undervalued knowledge. The knowledge created by synthesizing diverse information has led to outcomes of real-time projects with tangible results that have a useful purpose within a responsible set of values and ethical considerations. Such diverse and critical thinking, group knowledge building and open-ended processes where everything that will happen cannot be planned, has resulted in profound, high-value learning.

The research demonstrates some of the contributions that higher education can make to knowledge debates about higher level learning at work and the development of key professionals. Higher Education has valuable resources that can be utilized to engage fruitfully with practitioners in every field. The DProf seeks to help them to innovate and become creators and critical users of knowledge and thus to bring about change and make positive impact on professional practice. The DProf does this by locating focusing its programme within the context of work, external to the university whilst recognizing and linking the critical thinking of academia with real-world issues confronting communities and professional areas.

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