Revisiting search and review for Work-Based Projects

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Abstract

The search and review of literature is a vital process for many higher education studies

and often, an essential part of the research process. This paper focuses on the

requirements of students based in the workplace who are doing work-based projects.

Practitioner Researchers (PRs) use an iterative process that looks at the context and

theories in use being explored as well as utilising expertise and professionally-generated

materials in their field. This approach, discussed with academic and professional team

members, favours a transdisciplinary structuring of knowledge that does not privilege

academic sources but also recognises the importance of innovation based in the

workplace. The authors argue that as more programmes are developing resources and

strategies for PRs, there is a need to accommodate a redefined boundary for the search and review of literature, knowledge and information for higher education work-based

research projects.

Keywords: literature

review,

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projects,

practitioner-research,

transdisciplinary, higher education

Introduction

A search and review of literature is generally a demonstration of existing knowledge for

a topic that is being researched where the practice is to identify a 'knowledge gap' in

the academic literature. The areas in need of further research are identified and students

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base their dissertations or theses upon this, often pre-existing information. A literature search usually defines the boundaries and the scope of the research topic chosen.

A critical feature of higher education work-based, practitioner-led projects is a search and review that includes works that are not in academic literature and reviews a broad selection of knowledge and information throughout the research project. Additionally, the 'voice' of the insider-researcher is often the main authority within the particular context of the research and there is likely to be inclusion of professionally-based knowledge and information found in work-related sources. Work-based projects seek to give high priority to professional knowledge as well as to communicate research and scholarly ideas found in academic literature.

This paper clarifies and rationalises issues encountered in the search and review of knowledge and information for work-based projects from Diploma to Doctorate level. The practitioner-researchers (PRs) we are concerned with are experienced professionals involved in research. The topic of the research is a specific change or innovation to a work related practice. As part of their higher education award PRs learn how to enquire using research techniques, drawing upon literature, artefacts from the wider body of knowledge within and outside of their context, and their own and their colleagues' experiential knowledge. In relation to their level of experience, they are usually knowledgeable about their workplace role, study on a part-time basis in a particular professional field and have a differing profile that is recognised in the workbased curriculum. However, work-based projects are increasingly being used for full time students on placements and within curriculum that focuses on employability. Toledano O'Farrill (2017) discusses projects in organisations as a mandatory part of the curriculum for all undergraduates that has two main aims: to develop workbased professional skills in students and to deliver services to organisations and

communities of diverse types. There are some ramifications from our findings for this group of learners.

Research design

The purpose for the research was to extend the authors' understanding and experience of facilitating literature reviews for PRs who carry out live projects in the workplace. Fifteen academic tutors responsible for the design and delivery of work-based programmes and with expertise in supervising work-based projects were invited to participate in three discussion sessions to share and debate their various points of view regarding the search and review of literature. The research questions focused on the purposes and nature of the literature review in this context, and were thematically analysed, with the permission of the participants, to add to this position paper. Responses were also gathered from specialist work-based learning librarians who worked with the academic tutors at the university, through oral discussions and email exchange, to relate to what the academic tutors had introduced and from experience of working with both academics and PRs. The researchers undertaking the sessions are also experienced supervisors of work-based projects. Furthermore, relevant academic literature was examined to inform the study and develop a greater appreciation of practitioner-research practice.

With expertise in sectors as well as disciplines, the curriculum approach we examine contributes to debates on literature reviews for higher education studies. Like any research, the search for knowledge and information for work-based projects depends on the kind of project being undertaken, the purpose of the project and in turn, the purposes of those undertaking the project. Algers, Lindström and Svensson (2016)

suggest that the purposes of work-based projects lead to more collaborative and open learning models as part of the paradigm shift in the way knowledge is produced, distributed, and used. They construct this as boundary activity based on systemic negotiations between actors from three parties: the academy, industry, and students. For work-based projects, a search and review of relevant knowledge includes networking with colleagues, professional organisations or sectors and inevitably focusing on a particular context.

The purpose of work-based projects, in our experience, is to achieve the objectives of 'real life', often 'real time' areas of practice within an organisational setting that can be quite specific to the services or products within that organisation. They establish the familiarity and awareness of other practitioners' current thinking on the subject area by means of collected knowledge and information so their expertise and awareness in the project area is evident. Researchers need to show a working knowledge of current practice and conceptual professional understanding that demonstrates practice-based knowledge and involves the individual's professional growth.

To gain a theoretical understanding of the topic, a search and review of relevant academic literature develops a framework of how theory relates to practice. Given that practice is highly relevant for work-based projects, Brodie, Reeve and Whittaker (1995) found that rather than imposing an adaptation of an existing institutional programme, a work-based programme makes sense in the workplace with learning outcomes that are derived from real work situations and assessment mechanisms that are flexible enough to accommodate the individual's experience whilst being rigorous enough to ensure academic and professional confidence.

Review of literature

There is much existing scholarship about reviewing literature e.g. Dunne (2011), Wisker (2015) and guidance in textbooks for students undertaking research e.g. Hart (2014), Fink (2014). This paper has sought to point to a different order of importance in relation to the search and review for work-based projects that require knowledge and information to create new practices or solve practical problems.

Pure and applied approaches to knowledge have been a standard feature for research and within many academic fields of practice, literature has been constructed for the purposes of distinct academic disciplines, where knowledge is codified within the academy. However, this does not necessarily provide effective and appropriate approaches to generate and codify a practice-oriented production of knowledge embraced by work-based research projects because work-based research projects are not an applied version of an existing theory and warrant a particular consideration Costley and Abukari (2015).

There is a connection between a search and review and the generation of knowledge in that those who prioritise knowledge for its own sake will start with what is already framed within theoretical schema and then proceed to fill a gap in the literature whereas work-based projects primarily offer value to the advancement of practical knowledge that starts with what is already known i.e. the problems that are being experienced (Drake & Heath, 2011, p. 78). Addressing this knowledge paradigm perspective, Nowotny, Scott and Gibbons (2003) relate that knowledge-seekers have to reach out and anticipate reflexively within the implications of research processes.

Hart (1998) helps explain some of the different implications for search and review by examining not only the logistics of what is required for searching but also the

philosophy and rationale for reviewing literature. The review's purpose 'distinguishing what has been done from what needs to be done' (Hart, 1998, p. 27) is highly relevant to the process. Boote and Beile (2005), for example, demonstrate the standards and criteria used to assess the literature review within doctoral education using Hart's criteria.

Saunders and Rojon (2011) emphasise the need to contextualise the research project with what is known and not known by looking at previous research undertaken and the importance of criticality within the review. The processes within the review might differ in how knowledge is considered. For example, Jaidka, Khoo, and Na (2013) write about the researchers' selection process and distinguish between integrative critical summaries that highlight the relationships between pieces of literature or descriptive approaches that focus on the sources examined.

Academic peer-review represents a standard way of legitimising knowledge but it too is in a state of change leading to divergent practices. For example contributions by the editor-in-chief, the editorial committee, outside reviewers, and readers might be 'subject to local conventions, at a journal, discipline, or historical level, and they are marked by profound divergences due to distinct issues in manuscript evaluation and valuation' (Pontille & Torny, 2015, p. 74).

The need for more purposeful search and review strategies for PRs is growing within work-based and disciplinary programmes that have work-based elements. For example, Werr and Strannegård note for work-based managers that 'new insights and models and frameworks found in the literature were helpful in generating new and deeper communication with both colleagues and clients' (2013, p. 415). Also, reviews can be more widely linked to existing bodies of professional knowledge for a variety of purposes including funded research and evidence-based practice (Fink, 2014).

PRs are commonly 'insiders' in a particular work situation. The power of the insider's authoritative voice is derived from professional knowledge and the understanding of both the wider context and nuanced understanding of the immediate context including the micro politics and social situatedness. These multiple perspectives are needed for a contextual understanding of a particular community (Lave & Wenger, 1991). There is an interplay for the PR between the organisational/professional context (where, when and background), the situation (the particular set of circumstances) and within these, the PR's position; for example that '... insiders ... observe and question the relationship between the formal and informal organization' (Coghlan, 2016, p. 2). Understanding of the situational knowledge in sourcing relevant knowledge and information provides a particular significance to the power of the authorial voice, such as '.... experience and enquiry from the perspective of being insiders creates the potential of developing critical thinking skills...' (Coghlan, 2016, p. 6) and has relevance for the kind of research project that work-based learners often undertake i.e. a situated project that seeks to improve or create an immediate practice such as systems, services and policies in real world contexts. 'Insider inquiry involves being immersed in local situations and generating contextually embedded knowledge which emerges from direct experience' (Coghlan & Cagney, 2013, p. 1). The content and style of the search and review therefore rests with the researcher, as the expert in the particular work area; the authoritative voice of the insider-researcher drawing upon other authoritative voices, for example by referring to 'expert' voices to support lines of argument.

Dunne (2011) discusses the problems with gathering literature sources in the initial stages of qualitative research citing authors like Glaser (1998) who argues that literature could be gathered in the later stages of grounded research in order to focus on theory development during the research. At doctoral level, Wisker (2015) supports an

iterative review of literature that gives students support with: conceptual threshold crossings, writing that defines theory and theorists, overcoming blockage and breakthrough moments, using writing to enable the development of ideas and arguments, using the literature review as a stepping-stone to undertaking research, and the development and articulation of engagement with theory.

Related and widespread issues that may creatively inform work-based projects can be considered in a search and review strategy, including ideas that lay across and outside of subject discipline areas. Modes of discourse in academic writing can involve abstraction and complexity, but these are often subject or discipline specific. In professional areas they are more often succinct, technical, serve a practical purpose and based on experience. PR projects may take place in a situation that is inter-professional with a trans/cross-disciplinary focus arising from the nature of 'work' and the solutions seeking, practice centred focus of work-based projects (Costley, Elliott & Gibbs, 2010). Work-based projects therefore require more flexible designs (Robson, 2016) that in turn require flexible researchers to challenge their existing knowledge. This kind of search and review is a wide and diffused journey towards a project outcome where practical application is usually paramount.

Discussion and analysis of findings

Discussion with the academic tutors revealed a broad agreement regarding the search and review of work-based projects. Nearly all PRs started with scoping the project to be undertaken for associated knowledge to determine a feasible strategy. The considerations made in scoping any work-based project involve a national or international search. Screening was through the lens of the researcher, an insider,

looking for a wide accuracy of fact, reality and value implications with integrity and care for truth.

When structuring the review the tutors found that a starting point for the work-based projects was looking at context and theories in use. The focal point or issue upon which the project centred had come out of the PRs' pre-understanding of the particular area of practice. The project topic was frequently identified in consultation with stakeholders such as employers' or professional networks and material was often sought towards enhancing a particular aspect of this practice. Usually, an informed and up-to-date discussion will have taken place on issues relevant to the context of the project, so that a complex and sometimes specialised area of practice could be considered in a concise and accessible manner. The knowledge and information provided up-to-date guidance in the field, appropriate and useful to the PR and in most cases, at the forefront of current thinking.

Equally challenging to include in the review were the discussions about approaches and ideas that are contrary to the PRs' own perspectives in order to look outwards from their own positioning, or that of their organisations, and enable them to link other perspectives to their current sphere of knowing and engage with relevant academic sources. The wider implications of a contextualised project were found to be relevant within the PR's sector and, in some cases, could be included as generalisable qualities or informing at a meta level.

Academic tutors advised on how to search in academically-focused areas that complemented the problem-centred (Leavy, 2011) project topic. The ability to provide this advice was often crucial because knowledge generated in work-based projects has a distinct purpose and use outside of academic purposes. Ability was also needed in making judgements regarding the credibility of sources that do not have an academic

ranking and how to reconcile data needed to resolve the exigencies of work (Boud & Costley, 2007).

The PRs use of an evaluative review protocol in many instances provided a way for them to comment on their credibility and positioning, allowed them to consolidate their contribution to knowledge and information used in practice and to engage with other stakeholders in discussion of ideas for practice. PRs made careful judgments about sources, needed heightened awareness about making assumptions, provided discussion and rationales for conclusive comments and developed innovative ways to critique existing models in the workplace.

As well as the variety of judgments in relation to peer-reviewed sources, literature that was not peer-reviewed could be used; although regarded as having a differing status, these sources were subjected to an evaluation process for the purposes of the review. PRs referred to a range of materials to critique practice. The types of knowledge and information might be internal policy documents, professional journals, books, government documents, popular media, web-based materials, reports, informational brochures, teaching materials, newsletters, posters, minutes of meetings, visual and audio-visual materials and multimodal artefacts. The work-based projects required this eclectic search for use in development that took place in specific contexts.

Academic tutors thought there were choices to be made in conceptualising knowledge and information that was more inclusive in terms of ranking sources and the legitimacy of professional conversations and practice literature. The resulting review might act to address issues of currency and the inclusion of knowledge sources that work against expectations from a more conventional approach to seminal sources. It was said that the search for and use of literature within practitioner-research differs from gathering literature at the beginning of a project as its emergence underpins later

enabling stages. There was an element of 'mapping' as described by Cooper (2016) that related to the activity of the project, such as where it occurred, that helped PRs contextualise their need for literature.

Including workplace artefacts that can also be understood as research objects, gave workplace objectives equal priority in the resolution of change-making for the work-based projects. A good review protocol could be adopted that outlines the review methodology then locates, evaluates and uses knowledge and information effectively. The review can report on how the procedure and process of the search took place, can assess the validity of the knowledge and information being used and provide a rationale to the choice of literature, its quality and how the judgement is made about its validity and derivation.

As insiders, in a role related to the research project, the PRs positionality may determine the readily available sources of knowledge and information. They had access to information and may or may not have had power and control over its use. It was often the case that senior workers have wider access to sources and accessibility of sources can be a pivotal aspect of a work-based project.

Discussion with the academic tutors revealed the PRs' understanding of the area was likely to be affected by a number of different social interactions mostly with colleagues and others in their professional networks. The knowledge and information they found reflected what was available in the context of the project's partners and stakeholders. PRs could draw from related areas as particular topics were not always available for one area specifically. In some cases there was little to find, especially if the project was particularly innovative. Some information was 'coded' in a way only insiders could understand and meaning could be attributed because they had unique

perspectives and brought together various pieces of codified knowledge, drawing on aspects from a broad range of sources to produce new knowledge.

The PRs used insider knowledge, academic approaches and professional networks to make a critical evaluation of the knowledge and information they had searched from their insider perspective but taking other perspectives into account keeping their projects' original objectives and purposes in mind. The review of academic and professional sources plus insider knowledge allowed them to create unique conceptual frameworks that because of their complexity may have more layers of risk for the research approach.

Areas of high risk for PRs needed specific ethical considerations regarding access to knowledge and information through colleagues as subjects of their research who, along with the PRs, were likely to have a vested interest in the process and outcomes of the research. The values, statements and codes of conduct in their organisations or communities of practice needed to support their ethical conduct as well as University ethical approval that negotiates permissions as a part of the process of the project.

In our interview sample, it was established that specialist librarians for work-based studies liaised with PRs to develop an overview of the quality aspects of the provision and gave advice on recent developments for searching and reviewing literature. The Librarians worked with individuals who were undertaking research using a more transdisciplinary approach to contextualise their projects. They found that PRs coming through a practice route were less familiar with academic referencing and needed to acquire this skill-set rapidly. Library workshops were often provided to help evaluate the quality of academic and professional sources. An important outcome was that when selecting and accessing sources, there was consideration of how theoretical

sources were relevant to the practice project they were undertaking. Searching in the digital age was facilitated by online published and open resources and PRs needed to understand the role of internet sources, such as online professional forums, that raised awareness of current debates that have not yet been published.

Academic tutors found it advisable for PRs to read various reviews of knowledge and information that relate to a project area to understand its purpose and function. While this relates to the advice to 'read around' a topic, the scope of what to look at is sometimes more difficult to advise on until the project gets underway. This is because the purpose of the project can develop as the research project is undertaken, from a problem-solving aim to a transformative aim and can alter the need for or nature of the knowledge and information required. The need for a continuous review process is supported by Dunne (2011).

In terms of the work-based purposes of the project, it may be less relevant whether or not the proposed project corresponds with a gap in the academic literature. Many different types of review acknowledge that the approach to research needs to fit the purpose. More recently Hart (2014; 2016) has developed the notion of the literature review as 'scholastic', focusing on either a more traditional academic approach, or 'interventionist', where the purpose is to provide valid and reliable evidence to make quick decisions in response to existing practice/policy needs or conditions. The 'interventionist' approach is suitable for an experienced researcher undertaking the search and review for a client who requires the literature to solve a practical problem. This approach, however, has resonance with the requirements of the PRs, who are less experienced researchers but are required to respond to existing, practical work-based issues.

The stages of a search for knowledge and information for a work-based project were seen by academic staff as often being iterative (Wisker, 2015), frequently looping back and moving from practice to theory and from theory to practice. The search is therefore likely to be ongoing, and in this sense a comprehensive search and review may not be conducted only before starting the primary data-gathering stage of the project. It is more likely that the researcher will need to continuously refer back to literature as the project progresses. The on-going needs of the project are better served like this rather than treating the search and review primarily as something at the outset to scope and focus the project to be part of the continuing process of data collection, conceptualising and analysis.

Within the work-based project report, a search and review can be presented in a way that reviews both published work and professional sources that provide rigour and appropriate scholarship. Unpublished knowledge and information can also be evaluated as part of the research methodology, as needed, to present a comprehensive report of both the literature and project research. A continuous search is factored into the study as the research takes place and a continuous review can thus take place whilst data are being collected and evaluated when conclusions are being drawn.

Conclusion

We have discussed the way in which work-based PRs undertook search and review for work-based projects using discussions with academic tutors responsible for work-based programmes and librarians at our institution. For this type of higher education study, projects were developments within the PRs' own workplace contexts where consideration from the outset was through the lens of an insider. The findings from this

study showed that academic tutors working with PRs acknowledged that an expansive search for the project would include both academic literature as well as practice-based sources that were professionally oriented because a widening of thinking around a particular context is required for a work-based project. As more programmes are developing resources and strategies for PRs, work-based academic tutors at our institution clearly endorsed broader approaches to reviewing knowledge that accommodate a redefined boundary for the search and review of literature, knowledge and information within work-based research.

Academic tutors indicated that spheres of knowledge drawn from the professional, the personal and the academic were connected and enhanced confidence, awareness and ability to manage the PRs' learning. Similarly, PRs writing started to develop using existing expertise to create a basis for reviewing knowledge and information that can be refined as the project progresses. All three spheres inform and underpin their situated practice as PRs encompassed the whole context of a situation taking expert opinion and common sense matters into account.

Discussions amongst academic tutors and professional staff have underpinned the importance in facilitating a broader approach to the review of literature within work-based study. Academic tutors who advised PRs felt strongly that they were helping to develop work that was not restricted to an academic peer perspective but also respected professional peers outside of university and contend that this forward looking perspective relates to a greater cohesion with work contexts. This stance revisits the purpose of the review of literature as more of a positioning statement that denotes quality, rigour and appropriate scholarship that is not boundaried and can contribute to the advancement of practice in practitioner fields.

The growth in programmes of study that use a work-based approach require that the issues involving this kind of research need to be addressed by universities from all perspectives. This paper raises alternative perceptions and relates to the nature of the research itself, the methodologies PRs are likely to use, the way the research is conducted, the analyses of the research, the range of stakeholders and the research outcomes.

It is significant that PRs use their own experience when selecting what to review. They know where to look and who to ask and have a detailed understanding of the context in which the work-based project is to take place. Many of them are also able to place the project in the context of national and international spheres because it is purposeful and has immediate relevance. It is the particular context of the project and the individual's propensity to undertake it that makes the project unique. The PR's standpoint within a particular context on the kinds and sources of knowledge and information that are used is a key element for the success of the research project.

In terms of university quality for PR work there should be equivalency that includes: good protocols for searching and structuring the review with a rationale provided; the nature of literature, whether it has been peer reviewed and, if not, how it is justified; the balance between academic literature and other sources; plus the checks and balances, in terms of a reflexive approach and considerations around subjectivity expected from insider research.

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