

Investigating the Praxis of Evaluating
Small-Scale Learning and Teaching
Projects in Higher Education

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Abstract

Small-scale learning and teaching projects in higher education have the potential to drive innovation. However, a lack of systemic evaluation can inhibit the realisation and sustainability of these innovations and there is limited literature available to illuminate these evaluation practices. The broad aim of this study was to investigate the praxis of evaluating small-scale learning and teaching projects in higher education.

A pragmatic, multiphase research design, underpinned by action research and case study methodologies was used for the study, drawing on reflection to understand what works and what does not work in small-scale project evaluation practice. The study was undertaken in three-phases across two Australian metropolitan universities using primary data. These data include the project documentation, reflective field notes, one-on-one interviews, and focus group discussions with university staff responsible for leading small-scale learning and teaching projects.

My research reveals that a project leader's perception and conceptualisation of evaluation have important implications for practice. The research also highlights the need for an approach to the evaluation of small-scale learning and teaching projects that requires tailored resources including evidence-based frameworks to enable praxis.

Outputs from this research include a new evidence-based evaluation-planning framework, SPELT (Small Project Evaluation in Learning and Teaching), and a set of recommendations for effective evaluation strategies for small-scale learning and teaching projects in higher education.

Declaration

I hereby declare that this thesis is my own work and that, to the best of my knowledge, it does not contain any unattributed material previously published or written by any other person. I also declare that the work in this thesis has not been previously submitted to any other institution for, or as a part of, a degree.

This study was granted approval by Macquarie University Human Research Ethics Review Committee (reference: 5201100805) and conducted in accordance with the guidelines stipulated.

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This thesis was professionally copy edited by Dr Robert Trevethan in accordance with the Australian Standards for Editing Practice.

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I was fortunate to have a number of academic colleagues participate in my research and I sincerely appreciate the time they gave willingly to help me in the data collection phases. Thanks also to the many academic colleagues who listened to my presentations at conferences, read my posters, asked challenging questions and gave me ideas to pursue. I would like to thank the anonymous reviewers of my published manuscripts and editors of associated journals for their insightful feedback that ultimately helped shape the direction of this thesis.

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Abbreviations

Abbreviation	Full version
ALTC	Australian Learning and Teaching Committee
CAUT	Committee for the Advancement of University Teaching
CIT	Communications and Information Technologies
CoP	Community of Practice
ECB	Evaluation Capacity Building
ICT	Information and Communication Technologies
JISC	Joint Information Systems Committee (UK)
NSF	National Science Foundation
OLT	(Australian Government) Office for Learning and Teaching
PL	Project Leader
PM	Project Manager
SoTL	Scholarship of Learning and Teaching
SPELT	Small Project Evaluation in Learning and Teaching (framework)

Prologue

A guide to this thesis

This thesis by publication consists of eight chapters that include four peer reviewed, published journal papers and two refereed papers published in conference proceedings. All are hereafter referred to as papers and numbered in chronological order. Chapters 2, 4, 5, and 6 begin with a short contextual overview of the associated papers (Papers 2, 3, 4, and 5) and then the original full paper is reproduced. The conference papers aligned with Chapter 1 and Chapter 3 (Paper 1), and with Chapter 7 (Paper 6), are provided in the appendices because these chapters were further developed after the conference publications.

In Chapter 1, the context for this study is described by defining project evaluation and the supporting funding mechanisms. The early literature that helped develop the thinking behind and development of the six research questions is also presented. This chapter informs Paper 1 which I presented at the *AACE Global TIME 2012* online conference and was published in the proceedings. This publication can be viewed as an appendix (Appendix V) because the content was further developed after completion of Chapter 2.

Chapter 2 provides an introduction to the critical review of the literature that was conducted and through which I identified a knowledge gap, namely that there is little extant literature about the praxis of small-scale project evaluation in higher education. This review formed the basis of Paper 2 and was based on the identified research issues and implications. A set of recommendations were presented in Paper 2 to enable effective evaluation strategies for small-scale learning and teaching projects in higher education. Paper 2 was published in the journal *Studies of Educational Evaluation*.

In Chapter 3 I describe the methodologies used in this study, including the theoretical framework of pragmatism that underpins the research questions and the research design. A combination of action research and case study research methodologies were used. The participants, data collection and analysis methods for each of the three phases are described, and this information forms the second part of Paper 1.

In Chapters 4, 5, and 6 I introduce each of the three phases of this study. In Phase 1, I investigated 15 completed small-scale projects through an examination of project documentation alongside interviews with the project leaders. Three research questions informed this phase:

1. What evaluation forms and approaches have been used in one university's funded learning and teaching projects?
2. Is there alignment between evaluation theory and practice?
3. What is understood by evaluation?

The findings from this first phase of the research indicated that a person's perception of evaluation can inhibit their praxis. These findings and accompanying recommendations about how to overcome these perceptions informed Paper 3 which was published in the *International Journal of Educational Management*.

Phase 2 of the study built on the findings from Phase 1 and takes a deeper look at the context and the factors that influence a person's evaluation praxis. This phase forms the content of Chapter 5 and the following two research questions underpinned the investigations.

4. How does project leaders' perception of evaluation affect their praxis?
5. What can be done to overcome barriers to successful project evaluation praxis?

Using three projects (as cases) from one university, over an 18-month period, the project leaders and project managers were interviewed and these interview data were analysed along with the project documentation and researcher's field notes to produce the findings. A disjunct was found in how the two project roles of project leader and project manager value evaluation. Informed by these findings, I developed four strategies to enhance the adoption of systematic evaluation in small-scale learning and teaching projects. This phase of the study informed Paper 4 and was published in the *Evaluation Journal of Australasia*.

In Chapter 6 I report on the third and final phase of this study. Phase 3, was designed based on the combined findings of Phase 1 and 2, namely that evaluation capability in the higher education small-scale project space was lacking and that further, targeted support mechanisms were required. The research question used in the investigation for Phase 3 was:

6. What is required to develop a framework to support the evaluation of small-scale, internally funded learning and teaching projects?

Through an action research approach, a targeted support mechanism in the form of a framework for evaluation planning was trialled, tested, and modified through two action research cycles. I developed and delivered a combined workshop and focus group with two separate cohorts ($N = 7$ each), integrating the literature and reflective observations to produce the final framework. A

series of recommendations to help with developing such frameworks are also presented in this chapter. The details of this phase informed Paper 5 and were published in the *Journal of University Learning and Teaching Practice*.

A discussion of the findings from across the three phases is presented in Chapter 7. To frame the discussion, I used a conceptual model (Bergman, 2010) which relates the tensions that occur in evaluation practice when one attempts to make an objective evaluative judgment. Three major tensions are discussed. These are expectations, resources, and capabilities, along with how each tension overlaps with the other. The evidence from this study is mapped to Bergman's conceptual model and is supported by the literature. The conceptual model is depicted in the form of a Venn diagram (see Figure 7.2, Chapter 7) and I have named the point that all three tensions intersect as conceptualisation. This is a key contribution of this study.

Chapter 7 is completed by presenting a set of 11 recommendations that were developed through the discussion of the findings from across the three phases. I then synthesised the recommendations into two categories, one for the small-grant funding bodies and one for the project leaders. An earlier version of this chapter was presented and published as a full paper in the proceedings of *EduLearn, the 9th annual International Conference on Education and New Learning Technologies*. This is Paper 6 of this thesis (see Appendix XI).

The thesis is completed with Chapter 8 which contains the conclusion, a summary of the contributions this study has made, limitations to the study and areas for further research.

Table I on the following page contains a summary of how each of the chapters is structured and how each of the published papers aligns with the key questions and aims of the study. The table also provides information about the data that each paper drew upon and how each paper contributed to the overall thesis.

Table I
Summary of Chapters, Research Questions, Published Papers, Data, and Contributions

Chapter	Key questions / content	Paper	Data	Contribution
1	Introduction	1		Background to the study, aims and terminology
2	Literature review	2	24 peer reviewed journal articles	Identified knowledge gap – little extant literature on the praxis of project evaluation in higher education
3	Methods and design	1		Use of two methodologies, action research and case study research
4	Phase 1 1. What evaluation forms and approaches have been used in one university's funded learning and teaching projects? 2. Is there alignment between evaluation theory and practice? 3. What is understood by evaluation?	3	15 projects 15 interviews Project documentation	Perception of evaluation inhibits praxis
5	Phase 2 4. How does a project leader's perception of evaluation affect their praxis? 5. What can be done to overcome barriers to successful project evaluation praxis?	4	Three projects 11 interviews Project documentation	Disjunct in how members of a project team perceive the value of evaluation
6	Phase 3 6. What is required to develop a framework to support the evaluation of small, internally funded learning and teaching projects?	5	Two guided workshops Two focus groups 14 participants	An evaluation planning framework for small learning and teaching projects (SPELT)
7	Discussion	6	Findings mapped to a conceptual model of tensions in evaluation practice	Recommendations for good evaluation practice
8	Conclusion			Suggestions for future research directions

Publications

The following six papers constitute this thesis.

Paper 1

Huber, E., & Harvey, M. (2012). The design of a meta-evaluation study of learning and teaching projects in higher education. In *Global TIME 2012* (pp. 71–77). Association for the Advancement of Computing in Education (AACE). Retrieved from <http://www.learntechlib.org/p/39399>

Paper 2

Huber, E., & Harvey, M. (2013). Time to participate: Lessons from the literature for learning and teaching project evaluation in higher education. *Studies in Educational Evaluation*, 39, 240–249. <https://doi.org/10.1016/j.stueduc.2013.10.004>

Paper 3

Huber, E., & Harvey, M. (2016a). An analysis of locally funded learning and teaching project evaluation in higher education. *International Journal of Educational Management*, 30, 606–621. <https://doi.org/10.1108/IJEM-08-2014-0108>

Paper 4

Huber, E., & Harvey, M. (2016b). Project evaluation in higher education: A study of contextual issues. *Evaluation Journal of Australasia*, 16, 19–37.

Paper 5

Huber, E. (2017a). Introducing a new learning and teaching evaluation planning framework for small internally funded projects in higher education. *Journal of University Teaching & Learning Practice*, 14. Retrieved from <http://ro.uow.edu.au/jutlp/vol14/iss1/9>

Paper 6

Huber, E. (2017b). Addressing the tensions that exist when making objective evaluative judgements in small learning and teaching projects in higher education. In *EDULEARN17 Proceedings*, Barcelona. <https://doi.org/10.21125/edulearn.2017>

Contribution

I undertook this research study, including administration and management, under the guidance of my principal supervisor, Marina Harvey. I designed the research questions, data collection and methods, and obtained ethics approval, all in consultation with my supervisor. Harvey provided expertise in relation to the higher education sector, the methodology of action research and the evaluation of learning and teaching projects at both local and national levels.

The first four papers were co-authored with my principal supervisor. For Paper 1, the design of the study, we discussed the content at length and Harvey provided guidance on the structure along with written editorial comments. I presented the paper at the conference.

For Paper 2, the literature review, I interrogated the literature, wrote the annotated bibliographies and analysed the content for themes. The method of analysis and synthesis of the findings was discussed with Harvey who provided similar guidance as in Paper 1.

For Papers 3, and 4, I carried out the data collection (interviews, reflective field notes and project documentation), interrogated the data, conducted the thematic analyses and formulated the first drafts of the discussion sections. The findings were reviewed in detail with Harvey and I then synthesised recommendations. Harvey also provided guidance and editorial comments to the write-up of the papers. I presented Paper 4 as a poster at an international conference.

I was the sole author on Paper 5. I discussed the research design with Harvey and received minor editorial feedback on the structure of the final draft before publication. Ambler also provided structural comments on the paper. I presented an earlier version of this paper at an international conference.

I was also sole author on Paper 6 of the thesis. Harvey and I discussed how to structure the paper and I synthesised the findings from across all three phases of this research study. I wrote the discussion and produced the final set of recommendations. I presented this paper at an international conference.

Writing style

This thesis contains two different styles of writing. The publications are written in a more formal academic style as required by peer reviewed journals. Such a style is relevant as it conveys information and messages that are “about logic and argument, and are structured around a move from premises to conclusions” (Miller-Day & Hecht, 2013, p. 659). This style is also used in the introductory chapter.

The second style used in this thesis is a less formal, narrative style. Narrative is a way of thinking (White, 1980) as well as a means of communicating or enunciating those thoughts. Some call the communication aspect, discourse (Bruner, 1991), a logical progression of facts and information that join to tell the account (White, 1980). Narrative identifies an “ego”, and is subjective. There is a large body of work on narrative enquiry as a research methodology and although this thesis does not use it per se, its value is noted because “it is important as researchers to stay awake to the multiple ways to tell and live experiences” (Clandinin & Caine, 2013, p. 272).

First-person narratives have been found to be more effective than third-person or non-narrative approaches in terms of conducting a message, in the field of health, (Winterbottom, Bekker, Connera, & Mooney, 2008). According to Miller-Day and Hecht (2013), personal narratives can take various forms such as testimonials (stories illustrating firsthand personal experience), dramatisations (reflecting on what has happened to the narrator or to other individuals), or a composite narrative (summarising similar experiences into a composite storyline).

The personal narrative approach has been selected for parts of this thesis in order to differentiate the connecting sections that introduce the publications and to allow for a more reflexive approach to interpretation.

As an author, I have engaged in both retrospective reflection, as I write the thesis at the end of the research journey, and as reflection-in-action (Schon, 1983) through blog posts written at various stages over the years conducting the research for this doctoral thesis (<http://elainesphd.blogspot.com.au>). Referring to these posts (also known as reflective field-texts or observer comments) will allow me to draw on my own evidence base, adding a layer of authenticity to the reflection.

A reflective style of writing allows the author to engage in higher order thinking (Anderson, Krathwohl, & Bloom, 2001) and offers the opportunity to view the research from a different perspective. Such an approach gives rise to description of what has happened without judgement because “we organise our experience and our memory of human happenings mainly in the form of narrative—stories, excuses, myths, reasons for doing and not doing” (Bruner, 1991, p. 4).

Referencing

Finally, a note on the reference list. Since the publications that make up this thesis each contain their own reference list, I decided not to repeat those references in the main reference list. Therefore, the reference list at the end of this thesis only contains works that have been cited in the body of the thesis alone.

Chapter 1

Introduction

Background

Within higher education there exists a body of work on the evaluation of educational programs (Benson, Samarawickrema, & O'Connell, 2009; Kennelly, Maldoni, & Davies, 2010; Owen, 2006). Academic teaching staff are also highly conversant in both the processes and benefits of the evaluation of their own teaching (Birbeck, 2010; Flowers & Kosman, 2008; Kek, Hunt, & Sankey, 2009). However, there is little evidence in the literature that academic teaching staff translate their evaluation practices to learning and teaching *projects*.

In this study, a project is defined as one in which academics and professional staff investigate, develop, and implement funded innovations in learning and teaching (Australian Government Department of Education and Training, 2017). They usually identify learning and teaching question(s) of interest to them, conduct a systematic investigation, and share their findings with colleagues. “The majority of projects investigate the effectiveness of a new teaching approach in a particular course, while others focus on designing and piloting an instructional tool or support curriculum development” (Hum, Amundsen, & Emmiöglu, 2015, p. 30). Ultimately, the goal of these projects is to enhance teaching which will, in-turn, improve the student learning experience.

Funding of projects through learning and teaching grants can be either internal (funded by the institution) or external (through a large funding body). In the latter case, there are specific evaluation requirements in some part related to accountability and the size of the funding. The research reported in this thesis concentrates on the smaller, internally funded, projects that usually stem from grants in the range of up to \$20,000 and are of 12–18 months' typical duration. These can be administered institutionally or at a department or faculty level, and they do not always state explicitly *how* evaluation must be carried out, only that it should exist (Dexter & Seden, 2012). What approaches to evaluation are adopted in these smaller projects? Are the evaluation practices in line with the evaluation theories? If not, what factors inhibit or influence this relationship? It has been suggested that since the projects are framed within the discipline of educational research, some project grant holders move from discipline research experts to “research novices in need of support and advice” (Morris & Fry, 2006). This may be one factor to influence the relationship, but what are others?

In a seminal Australian national study of 104 teaching and development grants funded by the Committee for the Advancement of University Teaching (CAUT), it was found that “in approximately 90% of cases, the project leaders reported having had the intention of improving student learning outcomes, but only one third were able to report this as the actual outcome” (Alexander, 1999, p. 173). That study was specifically focused on projects on innovation in communications and information technologies (CIT) and how they impact on student learning outcomes. Such a focus is only one subset of the diverse learning and teaching projects across Australian universities—projects that have much broader intended outcomes and deliverables. The conclusion in Alexander’s report states that “without effective, scholarly evaluation, even well-designed innovations are unlikely to achieve wider dissemination, and the potential benefits of CIT for learning in higher education are unlikely to be realised” (p. 182). This finding has implications for the broader spectrum of learning and teaching project outcomes. Indeed, without scholarly dissemination of evaluation findings, it would be difficult to systematically build upon previous work (Hum et al., 2015) or to use the findings as catalysts for institutional change (Eble & McKeachie, 1985 as cited in McAlpine & Gandell, 2003).

The importance of negotiating formative evaluation at the beginning of a project to avoid delays in its commencement is highlighted in a report reviewing a national learning and teaching project funding body (Australian Learning and Teaching Council, 2008). However, evaluation is not mentioned elsewhere in this report, again highlighting the need for further evidence-based research to be carried out on the benefits and challenges of conducting evaluation in higher education learning and teaching projects. Other studies have also called for more empirical evidence about the practices of evaluation scholars (Christie, 2003; Rog, 2015; Smith, 1993).

An independent audit was carried out in an Australian Learning and Teaching Council (ALTC) funded project (Cybulski, 2010) and a number of issues with evaluation were noted. Two key issues were that proposed documentation of formative evaluation did not eventuate, and evaluation methods that were used were not encompassing, e.g., they comprised a summative survey instrument only. An important issue is whether such findings are true for only large projects or whether the same can be said for smaller ones.

The National Science Foundation (NSF) in the USA sponsors a range of programs to fund innovative approaches to teaching and learning across all sectors. In an article about the expectations of the NSF for project evaluation, it has been noted that: “Evaluation is one of the most widely discussed but little used processes in today’s educational systems” (Worthen & Sanders, 1973 as cited in Hannah, 1996, p. 412). Hannah (1996) went on to say that although an enormous body of literature around evaluation had been developed, “teachers in the trenches

trying to bring about reforms are mostly unfamiliar with this literature, and faculty seeking funding for curricular reform are uncertain how to design an evaluation effort” (p. 412). Despite the time that has lapsed since this was written, there is still no evidence in the literature to indicate that this gap has been closed.

Funding

Over the past decade, it has become common for learning and teaching projects in the Australian higher education sector to eventuate from a successful grant application. In 2015, Australia’s major funding body for learning and teaching grants and awards was the Office for Learning and Teaching (OLT). In that year, they allocated \$6.375 million to funding 16 innovation and development projects and 21 seed grants (“Grants and Projects”, n.d.). The predecessor to the OLT, the ALTC (2008–2012) funded 51 projects in 2009 (Australian Learning and Teaching Council, 2010) and planned to invest \$7 million on projects and grants in 2011 (Australian Learning and Teaching Council, 2011). Another major Australian learning and teaching funding body is the Higher Education Participation and Partnerships Programme (HEPPP). In 2015, they funded 22 projects across 13 universities to the value of \$2.8 million (Australian Government Department of Education and Training, 2018).

Placing this into the local context, the Australian university in this study invested almost \$3 million on grants and awards for a range of learning and teaching based projects in 2010 (the year preceding the start of the study reported in this thesis). More recently (2015), they committed \$1 million to learning and teaching development grants (L. Heron, personal communication, 29 August 2016).

The OLT has now ceased operation and it is anticipated that the pattern of funding of learning and teaching projects will change within an institution. For example, the university from which data was collected in phase one and two of this research, has had its central learning and teaching unit disestablished and any available (albeit reduced) funding has been devolved to the faculties. Various internal funding models exist in higher education institutions for developing learning and teaching innovations and curriculum (see, for example, Hum et al., 2015 and McAlpine & Gandell, 2003) and competition to obtain these diminishing funds is growing. This is exemplified in the findings from a national project examining an Australian student equity programme (HEPPP). The final report indicates that more competitive measures of success are needed (Zacharias, 2017). The evaluation of an initiative or project can provide data to strengthen any future applications for these limited funds.

Resources

Although funding through grants offers one avenue to support a well-designed learning and teaching project and its evaluation, leaders of smaller projects may not have access to such funding and may use “in-kind” support from central learning and teaching units (Carter & Huber, 2013) or from faculty-based support channels. A set of clearly developed and targeted resources can act as another support mechanism for these smaller projects.

One of the factors for successful grant-application writing is the development of a clear and concise evaluation process (Henson, 1997). Through the writing and submission process, applicants need to be explicit about their thinking with regard to teaching and evaluation, developing a language and discourse that demonstrates rigour and knowledge of the topic (McAlpine & Gandell, 2003). This focus on evaluation was also supported by Australian funding bodies such as the ALTC and the OLT that commissioned a seminal resource on project evaluation for prospective grant applicants (Chesterton & Cummings, 2007). On the ALTC and OLT websites, applicants were directed to this resource as recommended reading to assist in preparing an application (Australian Learning and Teaching Council, 2007). In 2011, this resource underwent a critical review by its authors with the intent to see what was working and what could be enhanced. A number of recommendations emerged from this review, including the need for a clarification of ways in which the resource might be used depending on the evaluation expertise and experience of the user, and for an inclusion of a list of funding-body expectations of evaluation and evaluation reports (Chesterton & Cummings, 2011). It must be noted that in projects funded by the ALTC and OLT, evaluation (both summative and formative) by an external evaluator was obligatory if the funding exceeded \$200,000.

A similar resource exists in the UK as the Joint Information Systems Committee (JISC). Its related advisory service JISC infoNet has been described as “the UK’s leading advisory service for managers in the post-compulsory education sector promoting the effective strategic planning, implementation and management of information and learning technology” (JISC, n.d.). JISC infoNet no longer exists; it has been incorporated under the new JISC umbrella (JISC, n.d.) which still includes guides and resources. Their Project Management InfoKit (JISC, 2008) is a detailed resource that includes an evaluation section (titled *Post Project Review*). However, this provides only one evaluation instrument, detailing questions to ask around issues including lessons learned, quality, and recommendations. This method takes a summative approach to evaluation, looking through one lens and at one point in a project’s lifecycle. A more informed approach would be to ensure that evaluation is carried out at more than one defined stage of the project (i.e., formative as well as summative) and through multiple lenses.

In order to decide on the approach to evaluation, one must first establish *why* the evaluation is being carried out, i.e., what is intended to be achieved by evaluating. There are many foci, and each has its corresponding approach to evaluation. These foci can be captured as *forms* of evaluation with five different categories labelled as proactive, clarificative, interactive, monitoring, and impact (Owen, 2006). In a study about evaluation practice, it would be pertinent to ask questions such as: Are staff who apply for grants and who lead or manage learning and teaching projects aware of these different approaches to evaluation? How do they choose the best approach for their project? Do they (or anyone else) review the evaluation method(s) during or after the project? How useful was their chosen approach to evaluation?

The literature about evaluation of ICTs in education provides a variety of frameworks. These include TPCK (Technology, Pedagogical Content Knowledge), which is a framework for teacher knowledge of technology integration, deemed critical for effective teaching with technology (Koehler & Mishra, 2008); CICTO (Curriculum, ICT and Organisational) for integrating software solutions into educational environments (Gosper, Woo, Muir, Dudley, & Nakazawa, 2007); CHEATS (Clinical, Human and organisational, Educational, Administrative, Technical, Social) for use in health education (Shaw, 2002); CPF (Computer Practice Framework) for conceptualising the educational practice surrounding computer use (Twining, 2002); and ERF (Evaluation and Redevelopment Framework) to be used in identifying high quality learning designs that can be redeveloped in a more generic format for dissemination (Hedberg, Wills, Oliver, Harper, & Aghostino, 2002).

In the literature about the evaluation of ICTs, the focus is predominantly on *product* evaluation. I am interested in the evaluation of the *process* and the *outcomes* of the project and hence further detailed investigation into the ICT evaluation literature will not be included in this study. In one ICT evaluation study, Hedberg et al. (2002) wrote about the development of their evaluation framework based on the four principles for providing a “high quality learning experience” (Boud & Prosser, 2001, as cited in Hedberg et al., 2002). My research study has a similar focus in that the projects that it aims to investigate also have this implicit outcome (improving the student learning experience). Therefore, there may well be relevant findings that could be extrapolated from such bodies of work and applied to this study, as per the Alexander (1999) study mentioned earlier.

Significance

Educational development activities are well reported in the literature about the scholarship of teaching and learning (or SoTL, see for example Boyer, 1990). Similarly, there is a growing number of studies that report on the evaluation of grant funding systems, particularly large programs that have an element of accountability of public monies and more recently for smaller, internal grant programs (Dexter & Seden, 2012; Hum et al., 2015; McAlpine & Gandell, 2003;

Morris & Fry, 2006). These studies tend to report on the grant schemes themselves and their effectiveness to improve learning and teaching, but there is little evidence about what is occurring in the evaluation space.

Although there is some evidence in the literature that project evaluation is not being carried out in a systematic way in the higher education arena (Alexander, 1999; Bearman et al., 2008; Cybulski, 2010), there is no evidence-based research to explain why this is so. Since there is a large body of work on evaluation theory, what is inhibiting the successful translation into practice? This study will seek to provide this evidence.

Research aims and objectives

The broad aim of this research study was to investigate the praxis of evaluating small-scale learning and teaching projects in higher education. The more specific objectives were to:

- investigate the evaluation strategies used in completed learning and teaching projects and determine what has worked and what has not,
- examine the relationship between evaluation theory and practice,
- explore different perceptions of evaluation and how this affects the praxis,
- determine what other factors inhibit the relationship between theory and practice of evaluation in learning and teaching projects in higher education, and
- consider what can be done to overcome barriers to evaluation and therefore enhance this praxis.

Research and evaluation

This thesis presents a research study on evaluation. There are many viewpoints on the distinction between research and evaluation and it is important, therefore, to clarify the similarities and differences between the two activities. Some say the goal of research is generalisable knowledge whereas the purpose of evaluation is context-specific (Alkin & Taut, 2003). Mertens expands upon this:

The relationship between research and evaluation is not simplistic. Much of evaluation can look remarkably like research and vice versa. Both make use of systemic inquiry methods to collect, analyse, interpret and use data to understand, describe, predict, control or empower. Evaluation is more typically associated with the need for information for decision making in a specific setting, and research is more typically associated with generating new knowledge that can be transferred to other settings. (2005, p. 2)

Researchers ask their own questions to seek conclusions that can then be used to further knowledge in a particular area. Evaluation addresses questions that are important to a particular person—for example a stakeholder or client—so research seeks conclusions and evaluation leads to decisions (Alkin, 2011). Patton (2014) also identifies the difference based on who asks the questions. In research, the questions originate with scholars in a discipline whereas in evaluation, they originate with key stakeholders and primary intended users of evaluation findings. Put simply: “Research informs science. Useful evaluation supports action” (Patton, 2014, p. 5).

If evaluative enquiry is reduced to its simplest form, there are three components (or stages). These are shown in Figure 1.1 as the development of an evaluation plan (a set of measures to judge against), implementation of the evaluation design and production of findings, and dissemination of findings to identified audiences (Owen, 2006, p. 19). The inclusion of the planning (Stage 1 in Figure 1.1) and communicating stages (Stage 3 in Figure 1.1) is what differentiates evaluation from social research, and the middle section (Stage 2 in Figure 1.1), may use similar approaches to data collection and analysis techniques of research.

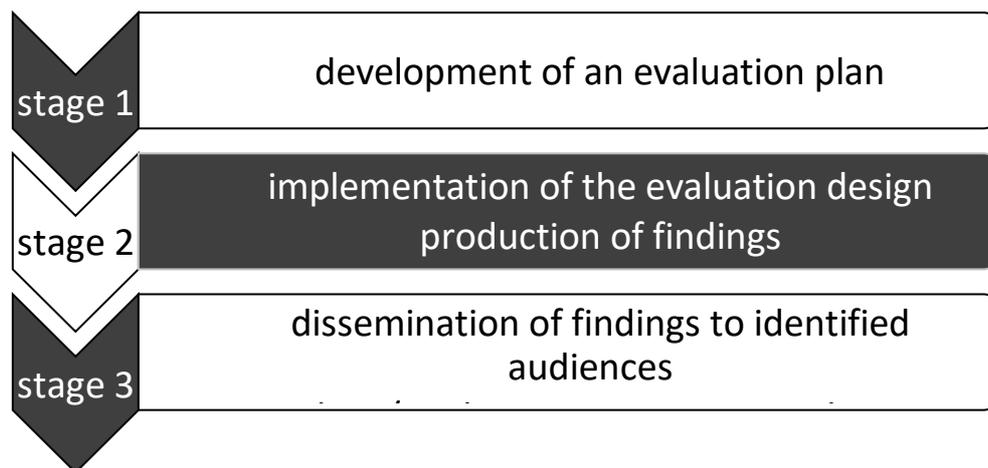


Figure 1.1. Three stages of evaluative enquiry (adapted from Owen, 2006).

Rogers (2014) offers two options to categorise Owen’s description: evaluation as a subset of research “Doing research does not necessarily require doing evaluation. However, doing evaluation always requires doing research” (Endias, 1998 as cited in Rogers, 2014, section 3); and research as a subset of evaluation, since “research (gathering empirical evidence) is one of the tasks involved in doing an evaluation” (Rogers, 2014, section 4).

These different stances point to an intricate connection between research and evaluation. I propose that the theoretical worldviews or paradigms prevalent in social science research can also be applied to evaluative enquiry. This thread will be continued in the methodology section of this thesis (Chapter 3) through the discussion of the theoretical approach used for this study.

Terminology

The following terms are used throughout this thesis and are clarified here to assist the reader.

Academic developer – a term to describe a person who supports teaching staff in the design and development of their curriculum. Also known as *educational developer*.

Academic teaching staff – a term to describe people who teach students at a university or higher education institution and who may (or may not) also conduct research in their discipline.

Dissemination – activities or processes designed to inform others of (learning and teaching) project outcomes and outputs.

Educational development – making changes to the methods and approaches to learning and teaching in order to improve the quality and efficiency of these activities. Also known and discussed in the literature as *academic development*.

Evaluand – the thing or person that is being evaluated.

Evaluation – the process through which judgments are made.

Evaluation use – the application of evaluation processes, products or findings to produce an effect (Johnson et al., 2009).

Evaluation-planning instrument – a tool to be used to assist project leaders to plan the evaluation of their learning and teaching projects.

Evaluator – this could be an external person to the project but in small projects, it is often the same person who leads the project.

Externally funded project – a project that receives funding from an organisation external to the institution—usually larger amounts upward of \$50,000 from both government and private agencies.

HEPPP – Higher Education Participation and Partnership Program.

Impact – the difference that a project makes in its sphere of influence, both during and after the funding period (Hinton, 2014).

In vivo coding – often mistaken for the software program NVivo. In this coding method, a label is assigned to a section of data, using a word or short phrase taken from that section.

Locally funded project – a project that receives money (usually between \$1,000 and \$10,000, or even up to \$20,000) from a grant scheme administered within the applicants' institution.

Participatory evaluation – an approach that involves the stakeholders of a project in the evaluation process.

Praxis – how theory is put into practice.

Professional staff – staff who work at a university in a predominantly administrative and support role. They do not usually teach but may have a deep understanding of student needs.

Project leader – usually the academic who instigates the idea for the project but can also be a professional staff member. Oversees the direction of the project.

Project manager – a person engaged to manage a learning and teaching project. This role is usually found in projects with more funding available.

Project outcomes – effects of the project on target groups.

Project outputs – products produced as a result of a project and often referred to as project deliverables.

Stakeholders - individuals/groups/organisations that have something significant to gain or lose in relation to the project and therefore the evaluation.

Study Audience - individuals/groups/organisations whose information needs are specifically being addressed in the evaluation.

Project versus program

Although the terms project and program are widely used in practice, there can be conflation of the terms. In this research study, the following definitions are used:

Project – can be large or small, funded or unfunded, and where there is an aim to change something (i.e., to improve teaching by introducing an innovation, be it technological or methodological). The project leader plans how the change will occur, implements the change, and observes what happens to the output (which in my study is student learning or student experience). The evaluation of the project can simply be to observe any change in outcome but could (and should) formatively evaluate the process and reflect on learning that takes place for both the teacher and the student.

Program – can also be large or small, funded or unfunded (though most often, it is the former of both options). However, the distinctive aim of a program is usually to provide a service that will result in an outcome, usually social betterment of the participants of the program. The evaluation of the program often aims to judge whether the program has been successful or not, sometimes with the aim of continuing (or not) the program funding, but sometimes to recommend changes to make the program more effective.

The two items (project and program) and their evaluation are indeed very similar and the terms are often used interchangeably. However, in this study I am investigating small projects, not programs.

Practice, theory, and praxis

The three terms practice, theory, and praxis underpin the work of this thesis and are used repeatedly throughout. Snow (2017) reflects on a keynote presentation by John Owen at the International Conference of the Australasian Evaluation Society, 2016:

Practice is about actually doing something vs. *theory*, which is about having “coherent general propositions used as principles of explanation for a class of phenomena or a particular concept of something to be done or of the method of doing it; a system of rules or principles” (Owen, 2016, as cited in Snow, 2017).

Praxis is “the act of engaging, applying, and reflecting upon ideas, between the theoretical and the practical; the synthesis of theory and practice without presuming the primacy of either” (Owen, 2016, as cited in Snow, 2017).

In this study, I investigate the praxis of evaluating small-scale learning and teaching projects in higher education.

Chapter 2

A Critique of the Literature on Evaluation of Learning and Teaching Projects in Higher Education

Background

I began this research study by conducting a preliminary search of the literature on project evaluation to identify any gaps and thus develop a rationale for my investigations. Key search terms for the literature review included higher education, project evaluation, and learning and teaching.

The review of the literature revealed a small number of published studies about internal grant systems and their effectiveness to improve learning and teaching (Dexter & Seden, 2012; Hum et al., 2015; McAlpine & Gandell, 2003; Morris & Fry, 2006). However, there was little relevant literature specifically reporting on the practice of the evaluation of such projects. I decided therefore not to conduct a traditional literature review but instead conduct it as an ongoing, integrated part of each phase of the study in order to support findings along the way.

Upon reflection, I realised that this lack of relevant literature on the topic was actually a finding in itself. Therefore, I widened my search and turned it into a critical review of the literature, following threads and extrapolating findings from similar areas of evaluative research and applying them to my chosen field of small-scale learning and teaching projects in higher education.

One early piece of evidence, a report discussing the evaluation of an interinstitutional funding scheme to promote collaboration through the development of educational technologies across two major Australian universities (Bearman et al., 2008), acted as an indication of the need for further study and prompted me to continue my search. In that report, four methods of evaluation were described: an audit of all project documentation, a standardised objective rating of the completed or almost completed educational technology artefacts by two experts, qualitative in-depth evaluation of five specific projects through analysis of participant interviews, and a staff survey based on the interview findings. Findings showed that “overall the standard of reported evaluation was poor” (Bearman et al., 2008, pp. 12–13). In particular, the researchers found that “evaluation schedules in the proposals were often overly optimistic and on the whole, the proposed evaluations were beyond the resource and time-scale of the projects described” (Bearman et al.,

2008, p. 3). No project matched the proposed evaluation process in this research, or if they did, it was not indicated in the researchers' report. The researchers suggested that one solution to this issue may be to allocate funds specifically for evaluation purposes.

This report and its statement about poor standards of evaluation acted as a critical incident in my preliminary investigations. Based on my own anecdotal experience working in an educational development unit and indirectly with grant holders, I hypothesised that evaluation was lacking in some way and I was challenged to discover whether these observations were common in smaller project evaluations in higher education. I wanted to identify whether anyone else had made such observations of project evaluation, whether funds for such projects were sufficient for the actual project work to be carried out without reserving some for evaluation, and whether the time and involvement with the process matched or outweighed the time (if at all) spent on the evaluation.

Purpose of the literature review

The purpose of the literature review (Paper 2) was to synthesise and derive what works (or could work) in learning and teaching project evaluation, what doesn't and why. I wanted to provide a thematic and systematic focus for practitioners to inform and strengthen small-scale project evaluation strategies. In conducting the review, I wanted to:

- review the learning and teaching project evaluation literature for articles focusing on scope, definitions, and approaches used (Stufflebeam, 2011);
- extrapolate themes from those articles and relate them to the context of the higher education sector; and
- identify issues of relevance to evaluation practice and suggest future research directions.

After widening the search for relevant peer-reviewed studies, twenty-four articles were selected for this review and a critical synthesis of each was produced.

Summaries

Appendix II lists these articles and summarises each against the following criteria:

- Methodology
- Key findings
- Funding source
- Evaluand

Method

I used a constant comparative method (Glasser, 1965) to achieve a thematic content analysis (Krippendorff, 2004) of the data. Using my in-depth experience and understanding of the target context (learning and teaching projects in higher education), I was able to reduce the extracted themes. The frequency analysis resulted in the following eight themes being identified:

- Evaluation approaches, models, and frameworks
- Building capacity in evaluation skills
- Non-usage of evaluation findings
- Stakeholder involvement
- Inaccurate initial expectations
- Noncompletion of project elements
- Planning and defining clear evaluation criteria
- Formative and summative evaluation.

These themes were further explored by “enfolding” (Eisenhardt, 1989, p. 544) the broader literature on evaluation to interpret, explain, and substantiate their status. Two overarching factors tie these themes together, namely *time* (or lack of it) and *participation* (as an approach to conducting evaluation).

In the final section of Paper 2, I discuss the themes and factors and then consider the issues and implications for future research directions.

Findings

Six issues for evaluation practice in the higher education sector emerged from the literature. These were categorised as resource issues and research implications, thus:

Resource issues

- A lack of sufficient rewards may be a barrier to engaging external evaluators, who are limited in number.
- Standardised evaluation criteria could aid collection and comparison or cross-site aggregation of project evaluation data.
- The limitation of the resource of time.

Research implications

- Data are needed as to the extent and effectiveness of evaluation resources.
- Does a participatory approach to evaluation offer potential and a good fit for the higher education sector?
- An exploration is required of how evaluation findings can contribute to quality assurance and/or quality enhancement measures.

A participatory approach to evaluation was the most prevalent approach utilized in the studies investigated in this critical review of the literature. In this approach, the stakeholders are substantively involved in ‘the identification of the evaluation issues, the design of the evaluation, the collection and analysis of the data, and the action taken as a result of the evaluation findings’ (Jackson & Kassam as cited in Benson et al., 2009, p. 712). This evaluative approach aligns with the enquiry paradigm of participatory action research (PAR) in which cycles of planning, action, observation and reflection are enacted (Kemmis, McTaggart, & Nixon, 2014). This alignment is discussed further in Chapter 4 and Paper 3.

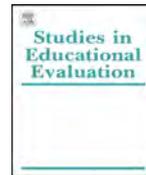
The six issues synthesised through the literature review, are threaded through the findings from across the three phases of this study and are revisited in Chapter 7 where they form the basis of the discussion at the end of this thesis. The design of these phases is presented in Chapter 3.

In conclusion, I found that the alignment of evaluation theory with practice requires more focused attention. Calls for further investigation of evaluation praxis (Christie, 2003) and practice (Smith, 1993) have been made. This research study was designed to meet these calls and provide evidence in the area of small-scale learning and teaching projects in higher education, with the intent of discovering how we can maximise the benefits of evaluation.

Publication

Paper 2

Huber, E., & Harvey, M. (2013). Time to participate: Lessons from the literature for learning and teaching project evaluation in higher education. *Studies in Educational Evaluation, 39*, 240–249.



Time to participate: Lessons from the literature for learning and teaching project evaluation in higher education



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ABSTRACT

Evaluation plays an increasingly important role in the quality-driven context of higher education. Projects that focus on learning and teaching often have evaluation expected of them, however, there is little evidence on the effectiveness of approaches nor the extent to which the praxis of evaluation is achieved. To illustrate this phenomenon, project funding and evaluation expectations are reviewed and the resulting analysis of the literature identifies eight emergent themes. Two overarching factors that unite these themes are time (or lack of it) and participation, leading to six issues for evaluation practice. Alignment of evaluation theory with practice requires focused attention if the maximum benefits of evaluation for the project processes are to be achieved.

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Introduction

Evaluation is the process through which judgements are made and it has become increasingly important in the quality-driven context of higher education. It is however, a process that is inherently complex, contested and variously applied (Oliver, MacBean, Conole, & Harvey, 2002). For example, there is an extant body of work on the evaluation of educational programmes (Kennelly, Maldoni, & Davies, 2010; Kirkpatrick, 1998; Owen, 2006; Venter & Bezuidenhout, 2008); educational resources (Anderson & Rogan, 2010; Beach et al., 2009; Benson, Samarawickrema, & O'Connell, 2009); and, educational systems (Hsiao & Brusilovsky, 2011; Klebl, 2006; Ozkan & Koseler, 2009). The literature tends towards descriptions of the evaluation processes, its benefits, and guidelines on what to do and what not to do. Academic teaching staff are also highly conversant in the processes and value of evaluation of their own teaching and are able to describe how evaluation results contribute to the quality assurance process and to continuous improvement (Birbeck, 2010; Flowers & Kosman, 2008; Kek, Hunt, & Sankey, 2009; Rodriguez, Lopez, & Perez, 2012). Literature may also be found on project evaluation in the higher education sector in the form of support resources and guidelines (Chesterton & Cummings, 2007; Phillips, 2002; Stevens, Lawrenz, & Sharp, 1993). There is though, little

focus in the literature on the effectiveness of practices used to evaluate projects within this sector.

To address this gap, this paper investigates the area of project evaluation in higher education by reviewing the literature to synthesise and derive what works, what does not and why. The term 'project' is used here to describe a deliberate, time limited set of actions in which academics and professional staff members 'examine, develop and implement innovations in learning and teaching' (Grants and Projects, Office for Learning and Teaching, n.d.). These projects are often funded via grants from two main sources: internal (funded by the local institution) or external (through a large funding body). In the latter case there are almost always specific evaluation requirements, the scope of which are in some part related to accountability and the size of the funding which can be upwards of \$100,000 and over a duration of 18–24 months. Internally funded grants tend to be smaller, up to \$20,000 and of 12–18 months duration. These can be administered institutionally or at a department or faculty level, and tend not to explicitly state the scope or method of evaluation required, only that it should exist in some way. It is also often a condition of funding that projects conduct some form of interim or progress evaluation, as well as a final report. Dissemination through journal articles and conference proceedings may also be encouraged (Southwell, Gannaway, Orrell, Chalmers, & Abraham, 2005).

A seminal Australian national study of 104 teaching and development projects, each funded by the Committee for the Advancement of University Teaching (CAUT), found that 'In approximately 90% of cases, the project leaders reported having had the intention of improving student learning outcomes, but only one third were able to report this as the actual outcome'

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(Alexander, 1999, p. 173). This study was specifically focused on innovation in Communications and Information Technologies and how they impact on student learning outcomes. Such a focus is just one subset of the diverse learning and teaching projects across Australia. The conclusion of Alexander's report still resonates and remains valid for 'Without effective, scholarly evaluation, even well designed innovations are unlikely to achieve wider dissemination, and the potential benefits... for learning in higher education are unlikely to be realised' (p.182).

Background

Major external funding bodies for learning and teaching projects include the Office for Learning and Teaching (OLT) in Australia, the National Science Foundation (NSF), National Institutes of Health (NIH) and the U.S. Department of Education (DE) in the United States of America. In the U.K., the Higher Education Funding Council for England (HEFCE) have funded a series of initiatives, including the Centres for Excellence in Teaching and Learning (CETL), a Fund for the Development of Teaching and Learning (FDTL), the Higher Education Academy (HEA) and the Joint Information Systems Committee (JISC). Each body has its own application requirements. One criterion for successful grant application writing, and therefore funding, is the development of a clear and concise evaluation process (Henson, 1997). Various resources exist to support applicants in this regard, for example, in Australia the OLT refers applicants to a seminal resource (commissioned by an earlier predecessor) by Chesterton and Cummings (2007).

Externally funded learning and teaching projects in higher education

The Australian context

Over the past decade, a large number of learning and teaching projects in Australian Higher Education have eventuated from a successful grant application. Currently the Office for Learning and Teaching (OLT) is Australia's major funding body for learning and teaching grants and awards. With a budget of A\$8 million (indicative in 2012) for grant programmes they will fund academics and professional staff to investigate, develop and implement innovations in learning and teaching (Australian Government Office for Learning and Teaching, Grants and Projects, n.d.).

One criterion for successful grant application writing, and therefore funding, is the development of a clear and concise evaluation process (Henson, 1997). In projects funded by the OLT, evaluation by an external evaluator is obligatory if the funding exceeds \$120,000. However there are no details of what or how this independent evaluation should take place, only a reference to the use of the funding body's evaluation resource. An earlier predecessor to the OLT (The Carrick Institute for Learning and Teaching) had commissioned a seminal resource on project evaluation for prospective applicants (Chesterton & Cummings, 2007). Applicants are directed to this project evaluation resource as recommended reading to assist in preparing an application. (Australian Government Office for Learning and Teaching, Programs and Applications, n.d.). Although a comprehensive set of evaluation resources exist, the extent to which they are adopted for use may well depend on a range of factors including the users' experience in the field of evaluation and the funding body requirements. A key research question therefore emerges of "What factors contribute or inhibit the use of available evaluation frameworks?"

The international context

In the United States a number of bodies support the higher education sector in funding the completion of learning and

teaching projects. The three largest federal agencies are the National Science Foundation (NSF), National Institutes of Health (NIH) and the U.S. Department of Education (DE), each having numerous granting programmes within their departments (Miner, 2011). Across these programmes "Evaluation is one of the most widely discussed but little used processes in today's educational systems" (Worthen and Sanders, 1973, as cited in Hannah, 1996, p.412). The authors offer one explanation in that "although an enormous body of literature around evaluation has been developed, teachers in the trenches trying to bring about reforms are mostly unfamiliar with this literature" (p. 412). In spite of the time that has lapsed since this publication, there is still no evidence in the literature to confirm that there has been any change in educational practitioners use of evaluation.

The NIH produces detailed information to support grant applicants with the review processes of their applications. There are five core review criteria used: significance; investigator; innovation; approach and environment (National Institutes for Health, 2009). The section on 'Approach' describes some typical evaluation type criteria, however the word 'evaluation' is not used. If application guidelines do not emphasise project evaluation it may follow that project leaders will also not emphasise the crafting of evaluation plans.

The Department of Education offers a wide range of grants applicable to the higher education learning and teaching arena. In 2012 there were 35 funding programmes listed under the higher education category, each with their own detailed application requirements (U.S. Department of Education, n.d.). Unlike NIH and NSF, their grant review criteria are not standardised but programme specific (Miner, 2011) and the criterion of "quality of project evaluation" is included across many of their programmes.

The Higher Education funding Council for England (HEFCE) funds a series of initiatives, including The Centres for Excellence in Teaching and Learning (CETL), a Fund for the Development of Teaching and Learning (FDTL) and the Higher Education Academy (HEA). Since 2004, the HEA has been offering Teaching Development Grants and they provide some support resources for grant applicants on their website but amongst them there is no direct mention of a suggested evaluation framework or approach. There is a resource (presentation) that calls for applicants to undertake peer review before submission and suggests the four areas to concentrate on should be aims and rationale; methodology; dissemination and budget (Howard, 2012). No specific direction on the role of evaluation is made, other than a mention of 'methodology' that asks 'How will you evaluate the success and impact of your project?' No formative evaluation is required and similarly to previous examples, no guidelines or evaluation frameworks. This raises the question of whether the applicant is familiar with the various theories of evaluation and how to apply them to projects. And furthermore, do academics and project leaders actually apply the evaluation theory to their projects? This is not reported on in the literature. The HEA also provides a project planning document that they 'encourage' submission of, during the early stages of the project (Teaching Development Grants – Tools & Resources, 2012). This document gives guidelines on what items should be evaluated (i.e. outcomes, project management, etc.) but leaves the methodology of such to the applicant.

The HEFCE also funds the Joint Information Systems Committee (JISC). Their Project Management InfoKit (JISC, 2009) is a very detailed resource, which includes an evaluation section (titled 'Post Project Review'). The resource provides one evaluation instrument detailing questions to ask around issues such as lessons learned, quality and recommendations. This method takes a summative approach to evaluation, looking through one lens and at one point in the project lifecycle.

What emerges from looking at these external funding bodies requirements is that evaluation, if mentioned at all, is mainly considered as a summative, reporting and accountability mechanism. This is understandable considering the large amounts of public funds being appropriated, however the value of formative measures must not be underestimated and as such, should be integrated into the lifecycle of the project to improve its quality (Alexander, 1999). The OLT in Australia concurs with this proposition and requires funding recipients to indicate in project progress reports what formative evaluation processes are being used and what has been learnt from these processes. So whilst a comprehensive set of evaluation resources does exist, the extent to which they are adopted for use may well depend on a range of factors including the users' experience in the field of evaluation and the funding body requirements.

Internally funded learning and teaching projects in higher education

Smaller research projects are also undertaken in higher education 'which may add to understanding of the field and research expertise but which are also pragmatically undertaken to keep researchers in their jobs between the (hopefully) larger projects' (Clark & Hall, 2008, p.255). Focusing on the smaller internally funded learning and teaching projects, we find little to no literature on project evaluation. This could be due to the historical currency of funding in this area, or perhaps such projects have not yet attained scholarly output via academic publications. The reasons could be more complex: there may be a discomfort with evaluation, a lack of familiarity or awareness of evaluation frameworks; perhaps there is a lack of evaluation requirements in these projects. Resourcing (budget) and timescale could also be issues. It is possible that the evaluation practices are clearly aligned with the different approaches and theories of evaluation and therefore there is no need to write about them. It would be pertinent therefore to investigate whether they are aligned, and if not, what factors inhibit this relationship. Additionally, if this is found to be the case (misalignment) then it would also be relevant to discover how disciplinary cultures and approaches and regulatory requirements influence evaluative practice.

Information and Communication Technologies projects in higher education

Findings from the area of Information and Communication Technologies (ICTs) in education have been strong contributors to frameworks for evaluating product evaluation. While ICTs product evaluation is not the focus of this review it may be possible to extrapolate and transfer key learnings such as those from Hedberg, Wills, Oliver, Harper, and Aghostino, (2002), who developed their framework based on the 'four principles for providing a high quality learning experience' (Boud & Prosser, 2001 as cited in Hedberg et al., 2002).

Aims and objectives of this review

The literature around evaluation of internally funded projects in the higher education sector is the focus of this review. The aim is to provide a thematic and systematic focus for practitioners to inform and strengthen project evaluation strategies. The objectives are to:

1. Review the learning and teaching project evaluation literature for articles focusing on scope, definitions and approaches used.
2. Extrapolate themes from these articles and relate them to the context of the higher education sector.
3. Identify issues of relevance to evaluation practice and suggest future research directions.

Learning and teaching project evaluation – a review of the literature

Method

Relevant electronic education databases were searched using the terms 'higher education' AND 'project evaluation'. These databases included A+ Education, Australasian education directory, Database of research on international education, and EdITLib Digital Library for Information Technology and Education. Articles whose abstracts focused on scope, definition or approaches to project evaluation (Stufflebeam, 2011) were retained. This produced only one relevant article. A search of ERIC (Educational Research Information Clearinghouse) was narrowed by removing the word 'student' from the results since many of the articles returned were about evaluation of student projects. This produced four relevant articles, which were predominantly focused on the expectations and supporting resources for externally funded project evaluation. Google Scholar was next used with the same search terms. These search results were then restricted by removing the word 'book' (since Google Scholar searches the Google Book repository and this review is focused on articles based on studies rather than books on theories) and by applying the date range from 2002 to 2012. Results from this search were large (approximately 854), so the phrase 'learning and teaching' was added to further narrow the search, resulting in 17 articles; however only two of these were relevant to this review, covering findings about selection of appropriate methodology and importance of establishing clear evaluation criteria.

An additional search methodology was used in which educational evaluation journals were searched using the term 'project evaluation' and articles limited to the previous 10 years and returned 17 relevant articles (see Appendix for details). As there were limited articles found in these searches relating to the higher education sector, articles were also included that reported on project evaluation in the K-12 sector and international development project arena. These were included if the authors felt there was information which could be extrapolated to the higher education sector.

In total, 24 articles were selected for this review and a critical synthesis of each was produced. These twenty-four syntheses were then manually coded using a constant comparative method (Glaser, 1965) to achieve a thematic content analysis (Krippendorff, 2004). The researchers used their in-depth experience and understanding of the target context (learning and teaching projects in higher education) to reduce the extracted themes. The frequency analysis resulted in eight themes being identified in this process. These were further interrogated by "Enfolding" the broader literature on evaluation, to interpret, explain and substantiate their status (Eisenhardt, 1989). Supporting evidence for each of these themes is presented, followed by a discussion of their impact on the higher education sector.

Themes from the literature

Evaluation approaches, models and frameworks

There are a variety of ways in which evaluation can be approached or framed. Four benefits of a participatory approach to evaluation were highlighted in one US study. These benefits are that the approach: is based on the core values of the project; engages all stakeholders in developing the evaluation framework; provides a certain degree of objectivity and transparency; and is comprehensive. The primary concern of this approach is the length of time and labour required to conduct the evaluation and for this reason it may not be an applicable approach for evaluating smaller

projects (Stoner, Meaden, Angell, & Daczewitz, 2012). A similar approach is adopted in a study of an Egyptian educational development project funded by an international aid agency. The authors argue a need for adopting a systematic participatory evaluation approach involving individuals and groups at the different levels of an educational system; and that the linchpin of a sound process evaluation is employing skilled people (Hashimoto, Pillay, & Hudson, 2010). A study investigating five NSF funded multi-site programmes asks whether such programmes can be considered truly participatory and then goes on to investigate the ways in which participation can contribute to the overall quality of the evaluation (Lawrenz & Huffman, 2003). A model for participatory multi-site evaluations is proposed and named a 'negotiated evaluation approach'. The approach consists of three stages, creating the local evaluations (each project), creating the central evaluation team and negotiation and collaboration on the participatory multi-site evaluation. This enables the evaluation plan to evolve out of the investigations at the sites and results in instruments and processes, which are grounded in the reality of the programme as it is implemented. Another study on participatory evaluation (DeLuca, Poth, & Searle, 2009) agrees that negotiation to secure a commitment on the part of both the evaluator and the stakeholders is crucial to its success. Two additional strategies are identified for effective participatory evaluation as trust building and a balance between planned process use and emerging learning opportunities. A process-oriented approach to culturally competent evaluation is discussed using an African educational initiative as a case study (Botcheva, Shih, & Huffman, 2009). Three main ingredients for success are named: collaboration, reflective adaptation, and contextual analysis. They also acknowledge that further research is required to highlight specific contextual factors that may enhance or impede achievement of a culturally competent evaluation.

Guba and Lincoln's constructivist approach to evaluation in the seminal *Fourth Generation Evaluation* (1989) is challenged by O'Neill (1995). He disagrees with the claim that this approach leads to action and instead 'there was still an onus on the evaluator to actively facilitate usage.' (p.17). The author concludes by suggesting that exemplars could support the practical implications of this theoretical approach.

An action research model was used in a study, that 'trails a programme in real time, enabling immediate feedback and adaptation of the evaluation process' (Sheard & Markham, 2005, p.355). This trailing approach to evaluation points to the importance of a flexible approach that utilises the skills of the key stakeholders.

Such flexibility is also key to the approach to professional development (PD) programme evaluation developed by Abell et al. (2007), which requires individual project profiles to take into account the unique contextual variables of a project whilst comparing projects across a funded programme.

The archipelago approach (Lawrenz & Huffman, 2002), extends the idea of triangulation, which is predominantly linear, to take into account the complex, unequally weighted and multi-dimensional manner of many projects and they highlight the benefits of this mixed-methods evaluation design. 'This approach created a way for the authors to preserve some unique aspects of each school while at the same time considering that the schools were linked in some fundamental way' (p. 337). The authors hope that this approach can lead evaluators to think less in either/or ways about mixing methods and more in complex integrative ways.

Given the multitude of different approaches available the question of how the novice researcher selects the most appropriate or best fit is raised.

This point is exemplified in a research study based on a popular web-based toolkit developed for evaluation of ICTs in learning (Oliver et al., 2002), whereby the assumption that users have similar evaluation needs is rejected. Differing needs suggests that practitioners must be aware of the range of evaluation methods available to them, and have the capacity to select the approach that best addresses their needs. This resonates with the literature on project evaluation. Achieving the best evaluation processes and outcomes requires a capacity in evaluation skills.

Building capacity in evaluation skills

A study and corresponding report initiated by the Carrick Institute in Australia (the major government funding body for learning and teaching projects in higher education from 2004 to 2008) aimed to investigate Australian and International learning and teaching grant schemes (Southwell et al., 2005). Five conditions for successful dissemination of project findings were identified: effective, multi-level leadership and management; climate of readiness for change; availability of resources; comprehensive systems in institutions and funding bodies; and funding design. Strategies are suggested for each of the five conditions and there is consistent reference to the role of evaluation. For example (resources condition) 'those responsible for the project may require assistance in designing an appropriate evaluation process' (p. 55) and (systems condition) that 'support for quality processes, particularly monitoring and evaluation ought to be supplied' and 'that evaluation is reported within an evaluation framework' (p. 71). This is supported by another study in which a theory of change and logic models are used to guide the evaluation of a programme. However conclusions are made that if theory-based evaluation is to be maximised, it does require training of programme participants (arguing for logic model development and theory of change approaches) early in the process of implementation (Nesman, Batsche, & Hernandez, 2007).

In a discussion on building evaluative capacity in schools and the organisational constraints involved, it was found that the major challenge for schools was time – setting aside time for regular evaluation and reflection on the data when faced with a busy teaching and administrative schedule was difficult (Ryan, Chandler, & Samuels, 2007). The proposition is posed that professional development on evaluation should incorporate the skills teachers already have and show them how to develop their evaluative skills in tandem, i.e. assessment of student work, facilitating small group discussion and interviews with parents, rather than assume they have no background in doing observational searches for quality. This aligns well with a strengths based approach (Harvey, 2013).

A comprehensive theoretical model for designing and implementing evaluation is the evaluation capacity building (ECB) model (Preskill & Boyle, 2008). The model draws on the fields of evaluation, organisational learning and change and adult learning. The authors conclude that 'for ECB to be transformational, efforts must be intentional, systematic and sustainable' (p. 457). There are similar conclusions in the study by Smeal, Southwell, and Locke (2011), who investigate critical factors in embedding sustainable university-wide engagement in external awards and grants funding initiatives. Items that were relevant to evaluation include provision of support for quality processes, monitoring and evaluation, and access to resources.

An alternative viewpoint to that of evaluation capacity building is postulated by Worthen and Sanders (2011). Their research question asks whether to do an evaluation well you need to be an expert in the content you are evaluating. It is postulated that the evaluation is best done as a team approach using an evaluation expert and a content specialist. Evaluators are seen as

methodologists and brokers, acting as an interface between the content expert and the stakeholders.

Non-usage of evaluation findings

Evaluation use is defined as ‘the application of evaluation processes, products or findings to produce an effect’ (Johnson et al., 2009) and there is a large body of work in this area (Alkin & Coyle, 1988; Alkin & Taut, 2003; Johnson, 1998; Preskill & Torres, 2000). One such study looked at the design and development of a business English course through formative evaluation of the programme to give feedback to a number of parties: administration (financing body), students, teachers and the curriculum development team (Geva-May & Peretz, 1992). Findings showed that when factors such as low personal involvement and (cost) benefit versus high risk and dependency are at play, the probability of non-utilisation of evaluation findings increases. A review of the empirical literature on evaluation use (Johnson et al., 2009) found that stakeholder involvement (possibly as a result of an increase in participatory evaluation) is imperative for the successful facilitation of evaluation use.

Stakeholder involvement

Stakeholder passivity throughout evaluation was identified as an issue in a critical review of Guba and Lincoln’s (1989) seminal work, *Fourth Generation Evaluation*, (O’Neill, 1995). It was felt that not all stakeholders behaved in the idealised way that Guba and Lincoln suggested, instead they were sometimes passive and nonchalant towards the evaluation.

In a mixed-method case study of a culturally responsive school-based evaluation initiative, a grounded-theory approach was used as an analysis strategy of the three components, culture, context and responsiveness. It was found that schools began to develop a deeper understanding of the meaning of culture and the importance it played when it came to implementing school improvement initiatives. Recommendations were made that schools be more inclusive in their discussions about the meaning of data among key stakeholder groups (Ryan et al., 2007).

The four-step evaluation model is derived from a study of comprehensive health, economic and social intervention programmes (Yang, Shen, Cao, & Warfield, 2004). While these programmes are often multi-level, transferable findings could be applied to a higher education based evaluative effort for example, the importance of planning and getting stakeholders on board from the very beginning to avoid the feeling of imposition of evaluation processes.

A study about product evaluation (a web-based learning environment), points out that it involved a team with expertise in evaluation, knowledge of the functional aspects [of the product] and the educational purpose [of the product] i.e. people with different perspectives and experience (Sheard & Markham, 2005). Key consequences of this approach were: the participants owned the outcomes of the evaluation; frequent meetings of the evaluation team enabled adaptation when and as required; and the learning experience gained by all people involved in the evaluation. This study points to the importance of a flexible approach to evaluation that utilises the skills of the key stakeholders.

A multi-attribute utility approach (Stoner et al., 2012) is a formative approach that is participant oriented, allowing the parent representatives (of schools under study) to have a voice in the evaluation. One of the four identified benefits to using this approach was in fact the participation of key stakeholders in the development of the evaluation framework. An evaluation case study of a HIV/Aids programme in Zimbabwe is used to

demonstrate how the programme can be viewed through the eyes of the stakeholders, which then allows adaptation of the methods and analysis needed to improve the validity of the evaluation work.

With many benefits of a stakeholder inclusive approach to evaluation, there are also identified challenges. One is that universities often use sessional staff to coordinate the programme (which was being evaluated in this particular study) and therefore time has to be spent on acquainting staff with objectives and processes each semester since these staff do not usually continue in the organisation (Harris, Jones, & Coutts, 2010). ‘From a stakeholder ethos model this represents a missed opportunity for universities to learn from, and to incorporate, students’ and industries’ reflections on current curriculum’ (p. 556).

Inaccurate initial expectations

The scoping phase of the evaluation process is highly critical to the evaluation’s success and a number of studies report on this theme. A study on cultural competence in evaluation discussed the issues raised by the definition of the problem often originating from the funding bodies and not necessarily from the project leader (Botcheva et al., 2009). Without careful consideration of the appropriate approach to evaluation, it becomes difficult to deliver on outcomes set by others.

Findings in a meta-evaluation study of how schools evaluated which projects were put forward for funding (Brandon, 1998), showed inaccurate estimates of project costs; misjudging the managerial, administrative, or logistical requirements of the projects; and underestimating the level of staff, parent, or community understanding or motivation required for successful project implementation. Whilst this study is based on the K-12 sector, it would be interesting to compare how projects in the higher education sector might fair, using the same criteria.

During an initiative to develop, implement and evaluate programme(s) that would increase Latino student access to higher education, Nesman et al. (2007) also found that the initial evaluation plan ‘had been overly ambitious and that it would not be possible to accomplish this large number of interventions with the available resources.’ (p. 272). This resulted in a paring back of outcomes with some initiatives being prioritised and some being dropped altogether. Use of a developmental approach to evaluation enabled these changes to occur.

The lack of clear project planning is linked closely with the following theme.

Non-completion of project elements

Project elements mentioned in the literature include proposals, reports and the evaluation component. In some cases, the project itself is not completed within the planned timeframe.

A discussion of the evaluation of an inter-institutional funding scheme to promote collaboration through the development of educational technologies across two major Australian universities is presented in Bearman et al. (2008). Four methods of evaluation were used in this study and findings indicate that ‘overall the standard of reported evaluation was poor’ (p. 12–13). In particular, ‘evaluation schedules in the proposals were often overly optimistic and on the whole, the proposed evaluations were beyond the resource and time-scale of the projects described’ (p. 3). No project matched their proposed evaluation process, or if they did so, it was not indicated in their reports. They also go on to suggest that ‘Reserving funds specifically for evaluation purposes may resolve this type of difficulty’ (p. 12). However there is no evidence in the literature that by reserving funds to carry out evaluation, the evaluation carried out is aligned to the theory. In fact, comments

derived from the in-depth interviews indicated that ‘evaluation would not occur unless mandated’ (p. 9).

Findings from the Southwell et al. (2005) study on factors for successful dissemination of project findings, state that institutions that allocated funding for evaluation after the projects were finished were evaluated well and regularly and were eventually embedded within an institution. ‘Generally, however, experiences quoted in the literature and in case studies evidenced poor quality of evaluation if done at all.’ (p. 58). A similar key finding in a higher education study noted that promised documentation of formative evaluation did not eventuate (Cybulski, 2010).

A ‘shoestring approach’ to evaluation is presented in an investigation of how evaluators can operate when often they are under considerable constraints in terms of time, budget and also data collection (Bamberger, Rugh, Church, & Fort, 2004). The framework identifies threats to the validity or adequacy of evaluation findings, and guidelines for addressing these different threats. The underpinning belief is that the goal is to conduct evaluations that are credible and adequately meet the needs of key stakeholders, given the conditions under which such evaluations need to be undertaken.

Planning and defining clear evaluation criteria

The importance of planning the evaluation and defining the evaluation criteria at the beginning of a project are essential steps towards a successful project. This theme emerges clearly from the literature.

A study of the administration of Federal funding for research and development projects in higher education in India identified a number of areas needing further investigation (Mouly & Sankaran, 1999). These included proposal submission, peer review, project reporting, budgeting, inter-agency interaction and criteria for evaluation of a project’s success. In particular, respondents felt that ‘the evaluation of the completed project report should be as strict as the evaluation of the project proposals’ (p. 5).

In a position paper set in the context of the office of special education and rehabilitation service (OSERS) DeStefano (1990) looked at the funding system and programme evaluation requirements. It investigated what the expectations, both perceived and expected, were held for the type and quality of the evaluation data. Federal (funder) expectations favoured quantitative assessment of a programme to see the extent of its achievement of objectives. The absence of interest in implementation and process data did not correlate with the need of the federal government (in this scenario) to identify and replicate successful projects. In addition, the lack of standardised evaluation criteria exacerbates the problem of collection and comparison or cross-site aggregation of evaluation data. Similar findings were described in Clark and Hall (2008) who illustrate the difficulties placed on local evaluators by the lack of clear structures within which to work and conclude that it is crucial to clarify and explicitly agree upon the purpose of an evaluation if it is to be carried out successfully.

The possibility of systematising evaluation criteria in order to compare impact of projects was examined in a study by Sirilli and Tuzi (2009). The study of managers of research projects (approximate duration of 46 months) financed by the Italian Ministry of Education, Universities and Research, concluded that the results could be used as a starting point for evaluation and further exploration rather than suggestions for building indications for project evaluation.

Formative and summative evaluation

Within this theme, the benefits, challenges, purposes and differences between these two types of evaluation are discussed.

The importance of negotiating formative evaluation (Cronbach, 1982) at the beginning of a project to avoid delays in its commencement is highlighted in the Australian Learning and Teaching Council (ALTC) report ‘Operational learnings of ALTC project holders’ (ALTC, 2008). However evaluation is not mentioned elsewhere in this report, highlighting the need for further evidence based research to be carried out on the benefits and challenges of conducting evaluation in higher education learning and teaching projects. The benefits of formative evaluation through ongoing discussions with the stakeholders were highlighted in a study in which an action research model of project evaluation was adopted (Harris et al., 2010). They found this approach led to greater learning and development for all parties. This formative approach was also adopted in another evaluation study which found that in reality, the parameters of the project were already set up by the time the evaluators were invited to take part, and that there was no time ‘to do much more than a post hoc reflection’ (Clark & Hall, 2008, p. 260).

Dissemination of evaluation findings across institutions frequently occurs before it is apparent that there is any value or improvement in student learning and therefore impact analysis is also vital. This was one conclusion reported in the Southwell et al. (2005) study. Impact was also one of the goals in the Nesman et al. (2007) study, and whilst they recognised that the time scale required for measurement was out of scope, they developed a tracking system to collect data which could eventually be evaluated and contribute to a longitudinal study.

The results are presented with the caveat that there are two main limitations of this study. Firstly the literature that has been searched includes published material only. Any unpublished data such as evaluation reports and studies that may exist particularly within institutions’ firewalls has not been reviewed. The second limitation is related to the coding process. Whilst the findings and analyses were peer reviewed by colleagues, ultimately the coding was carried out by only one researcher hence there may be an element of researcher bias. However this can also be considered as a strength in terms of coder reliability.

Reflections on evaluation; relating the themes to the context of higher education learning and teaching projects

The generation and subsequent development of the eight themes highlighted in this study, makes a significant contribution to the area of evaluation of learning and teaching projects in higher education. The value of the themes lies in their potential to inform, direct and strengthen the evaluation (and corresponding framework) of future projects by providing a thematic and systematic focus. This structured approach will allow practitioners to consider how evaluation can be improved as part of a developmental approach to evaluative research (Patton, 1994).

Higher education institutions across the world are under growing pressures from external factors such as growth of students, internationalisation and changes in world economy. There is also growing emphasis on accountability of the public funding of universities (Shah, Nair, & Wilson, 2011). In this landscape one would imagine that evaluation of learning and teaching will become more prevalent for practitioners. There are a plethora of approaches, methods and terminology as discussed, but how does the novice evaluator, working on small projects with minimal funding, navigate this minefield? They may not even be aware of the many options available to them, and if they are, how do they choose the best approach for their project, not just the most familiar (Oliver et al., 2002)?

The literature reviewed involved externally funded programmes and projects and most often this comes with requirements for external evaluators for accountability purposes.

One may assume that any person fulfilling such a role would bring their evaluation expertise and knowledge to the project, but again the question arises, what of the smaller, internally funded projects, where there is usually no budget to buy in this expertise? Whilst the evaluation expert is recommended over the content specialist (with some knowledge of evaluation), the lack of sufficient rewards in the higher education sector is a barrier and therefore their numbers tend to be limited (Worthern & Sanders, 2011). We must therefore turn to the notion of building evaluation capacity (Nesman et al., 2007; Oliver et al., 2002; Preskill & Boyle, 2008; Ryan et al., 2007; Smeal et al., 2011).

To build evaluation capacity an institution must allocate resources into such activities as provision of support for quality processes, monitoring and evaluation, and access to resources (Smeal et al., 2011). There is evidence in the literature that such resources do exist (Chesterton & Cummings, 2007; Oliver et al., 2002; Phillips, 2002; Stevens et al., 1993) but not of how they are used or how effective they prove to be. It is unknown whether they are in fact able to cater to the wide range of projects carried out under the learning and teaching banner, as well as the differing approaches that are often linked to specific disciplines. A resource with enough flexibility to be of use across the board (for example, as per the evaluation toolkit examined in Oliver et al. (2002)) is needed.

The findings from multi-site studies (refer to DeStefano, 1990 and Abell et al., 2007) have the potential to be applied to the higher education sector. Multi sites can be considered analogous to multiple university departments, faculties, disciplines and institutions, which are often contextually different. Conclusions, such as the need for standardised evaluation criteria to aid collection and comparison or cross-site aggregation of evaluation data could also be transferable to the higher education sector.

Whilst it would be unwise to recommend one particular approach to evaluation of higher education learning and teaching projects, one theme emerges through many of the studies analysed in this paper, that of a participatory approach (Benson et al., 2009; Botcheva et al., 2009; DeLuca et al., 2009; Harris et al., 2010; Hashimoto et al., 2010; Johnson et al., 2009; Lawrenz & Huffman, 2003; Stoner et al., 2012). Application of such an approach and associated benefits would be two fold, covering both the project team and the stakeholders. In the case of the former collaboration, a project leader and an evaluation expert could negotiate an evaluation plan grounded in the reality of the department or discipline of the project (Lawrenz & Huffman, 2003). Successful evaluation requires the identification of relevant stakeholders and being inclusive of their views (Harris et al., 2010). Such collaboration allows for better evaluation planning and formulation of clear criteria, both conducive to successful project completion as well as improved utilisation of findings. This leads us to consider how an institution may wish to utilise evaluation findings to contribute to quality assurance and quality enhancement measures.

The role of evaluation for accountability purposes or quality assurance is another emerging theme and understandable considering all of the articles discussed stem from projects with external funding. But what of evaluation for improvement or quality enhancement, most often the aim of smaller projects? The evaluation expert Yoland Wadsworth (2011) writes about an open-enquiry approach to evaluation, which is also known as Developmental (Patton, 1994) or as she calls it, MERI (monitoring, evaluation, research and improvement). This approach offers the potential of a good fit with the higher education sector (Sheard & Markham, 2005) where action research is commonplace (McNiff, 2001) and can be applied to evaluation as per the Harris et al. (2010) study, which found increased learning and development opportunities for all involved parties. Indeed the collection of

evaluation data throughout the project lifecycle is also strongly encouraged by Alexander and Hedberg (1994) and by some funding bodies such as the OLT in Australia. Further scholarly investigations of the benefits to this participatory approach are now called for. Questions must be asked about the approaches used in these smaller projects and how effective they are as there is nothing of this nature reported on in the extant literature.

The concept of time emerges as a factor linking many of the other themes together. Many of the evaluation approaches are not suitable to smaller scale projects due to their complexity (Stoner et al., 2012). Or simply there is not enough time available to implement the required evaluation measures (Bamberger et al., 2004; Bearman et al. 2008; Harris et al., 2010; Ryan et al., 2007). Time is also required to build capacity in evaluation but if we are looking at small-scale projects perhaps of only 12–18 months duration there may not be adequate time to invest in such measures. This may be one of the answers to the emergent research question “What factors contribute or inhibit the use of available evaluation frameworks?” and furthermore, “What other barriers to successful evaluation and utilisation of findings exist?”

Issues and implications for future research directions

There is some evidence in the literature that project evaluation is not being carried out in a systematic way in the higher education arena (Alexander & Hedberg, 1994; Alexander, 1999; Bearman et al., 2008; Cybulski, 2010). However there is a lack of evidence based research to explain why this is so. Further research which seeks to provide this evidence would be beneficial in the current landscape where high-quality education, university accountability and transparency in the use of public funding, and meeting the needs of the diverse stakeholders are the order of the day (Shah et al., 2011). This review of the literature is the first step in such an examination. Six issues for evaluation practice in the higher education sector have emerged from the literature, divided into resource issues and research implications:

Resource issues

- A lack of sufficient rewards may be a barrier to engaging external evaluators, who are limited in number.
- Standardised evaluation criteria could aid collection and comparison or cross-site aggregation of project evaluation data.
- The limitation of the resource of time.

Research implications

- Data are needed as to the extent and effectiveness of evaluation resources.
- Does a participatory approach to evaluation offer potential and a good fit for the higher education sector?
- An exploration is required of how evaluation findings can contribute to quality assurance and/or quality enhancement measures.

These issues are summarised together with their implications for future development and research.

Firstly, the lack of sufficient funding in the higher education sector is a barrier to engaging external evaluators for learning and teaching projects. This issue is exacerbated by the limited availability of a pool of experienced evaluators in learning and teaching in higher education. An implication of this situation is the need to investigate the strategy of building evaluation capacity throughout the sector. This capacity development also has the benefit of providing a sustainable outcome.

The literature suggests that there may be a need for an option of standardised evaluation criteria specific to learning and teaching projects in higher education. This could aid collection and comparison or cross-site aggregation of evaluation data. Many institutions already have the infrastructure of online evaluation systems in place, for evaluation of teaching and course design or delivery. These could be adapted or extended to include project evaluation. Making such an option available offers the possibility of enhancing the efficiency of the evaluation process thereby beginning to address the argument of there being insufficient time for evaluation in these smaller learning and teaching projects.

However, this issue of time (or lack of it) needs to be carefully considered in a locally funded learning and teaching project. These smaller projects have relatively short timelines and therefore an appropriate level of evaluation needs to be determined at the start of the project. Again we return to the importance of the project scoping phase. The approach, the purpose and the time available, all need to be carefully considered before the evaluation plan is implemented. Research into any of the five previously highlighted issues in evaluation practice will contribute to a better understanding of how the limitations of time can be overcome.

To build evaluation capacity an institution must allocate resources into such activities as provision of support for quality processes, monitoring and evaluation, and development and access to resources. Such resources do exist but we do not know the extent to which they are used or how effective they prove to be. Investigating what frameworks, methods and approaches to evaluation have been used in a range of internal learning and teaching projects will provide answers to these questions and provide further evidence in support of evaluation capacity building.

The majority of studies analysed for this paper, utilise a participatory approach to evaluation resulting in positive outcomes. Should this approach be one that is recommended or encouraged in the higher education sector? Further investigation into smaller projects using this approach at the internally funded project level is required. A case study research approach could help identify the practicalities of the praxis of a participatory approach to evaluation.

Institutions may wish to utilise evaluation findings to contribute to quality assurance and/or quality enhancement measures. The purpose of each can be different and this should be clarified in the project-scoping phase. The case of evaluation for improvement or quality enhancement is most often the aim of smaller projects and further scholarly investigations of the benefits to this approach are now called for.

A caveat must be made here about the literature used in this review. As there was no literature found on internally funded learning and teaching project evaluation, other literature such as evaluation of externally funded projects in higher education, programme evaluation in higher education, and process, programme or project evaluation in the K-12 sector, was included. This could be considered a limitation to this review and further research is required to qualify the themes and issues highlighted here and their applicability to the higher education sector.

Conclusion

This review focused the search of the literature to criteria on scope, definition and approaches (Stufflebeam, 2011) that could be applied to internally funded learning and teaching project evaluation in higher education. The scope of evaluation in the reviewed literature covered project and programme evaluation equally. In addition, the evaluation of processes was also found to be prevalent. Non of the papers used in this review provided a succinct definition of evaluation and further research into the ways

in which evaluation is defined for internal learning and teaching projects would be of benefit to practitioners. A number of approaches or methods of evaluation were found to be in use however a participatory approach was most prevalent. Benefits of such an approach have been highlighted for both the project team and the stakeholders.

Eight critical themes have been extracted from the literature on learning and teaching evaluation and subsequently developed by linking them to the practice of evaluation of internally funded learning and teaching projects in higher education. The themes can be used to inform and strengthen project evaluation strategies by providing a thematic and systematic focus. As the underlying purpose of these smaller projects is often quality enhancement, the themes can act as a framework for a developmental approach to evaluative research (Patton, 1994) whereby practitioners use evaluation findings in an iterative manner.

Six issues for evaluation practice have also been highlighted and it would be pertinent therefore to investigate whether evaluation practices are clearly aligned with the different approaches and theories of evaluation and if not, what factors inhibit this relationship.

It is anticipated that the six issues for evaluation practice highlighted here can inform other disciplines and sectors that are also experiencing the issue of misalignment of evaluation theory and practice. Together with the implications to future research this paper has identified emergent research questions and provides a focus for ongoing development in the area of evaluation of learning and teaching projects.

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Appendix

The following journals were searched using the criteria defined in the method section, with the number in brackets indicating the number of relevant papers found:

American Journal of Evaluation (7);
 Assessment and Evaluation in Higher Education (1);
 Educational Assessment, Evaluation and Accountability (1);
 Higher Education Research and Development (1);
 Journal of Multidisciplinary Evaluation (2);
 Research Evaluation (1);
 Studies in Educational Evaluation (4).

The following journals were searched using the above criteria and returned no relevant articles: Issues in Higher Education; Evaluation Review: a Journal of Applied Social Research; Educational Evaluation and Policy Analysis: a quarterly publication of the American Educational Research Association; Educational Research and Evaluation: an International Journal on Theory and Practice; Evaluation and Research in Education; Studies in Learning Evaluation Innovation and Development.

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Chapter 3

Research Design and Methods

Findings from the literature review shaped the design of this research study. In this chapter I explain the theoretical framework and methodologies underpinning the research, identify the research questions and outline the design and methods selected for the study. The chapters that follow (4, 5 and 6) provide additional methodological detail.

Research questions

The following six research questions reflect the aims and objectives of this three-phase research study and guide the direction of the research methodology:

Phase 1

1. What evaluation forms and approaches have been used in one university's internally funded learning and teaching projects?
2. Is there alignment between evaluation theory and praxis?
3. What is understood by evaluation?

Phase 2

4. How does a project leader's perception of evaluation affect their praxis?
5. What can be done to overcome barriers to successful project evaluation praxis?

Phase 3

6. What is required to develop a framework to support the evaluation of small internally funded learning and teaching projects?

Theoretical approach

"Philosophical theoretical frameworks ... address issues of the nature of knowledge and how and what types of knowledge are generated" (Vo & Christie, 2015, p. 47).

There are various paradigms of enquiry in which to frame a research study about evaluation, with post-positivist and constructivist paradigms being the two most commonly used in practice (Owen, 2006; Vo & Christie, 2015). The first is based on the view that relationships exist between social phenomena and the enquiry is based on proving these relationships. It is often (though not

always) associated with quantitative approaches (Healy & Perry, 2000; Phillips & Burbules, 2000). Opponents of this approach to enquiry for evaluative research are concerned that the evaluator cannot be held responsible for findings nor are they concerned about how these findings are used (Guba & Lincoln, 1989).

The second paradigm, constructivism, is based on the premise that reality is socially constructed and that enquiry adopts an investigative perspective. Applied to evaluative research, the contextual factors and interaction between the observer, stakeholders, and participants begin to shape the findings and go on to construct generalisations and extend further to broad understandings. This paradigm is typically associated with qualitative approaches (Creswell & Plano-Clark, 2011; Healy & Perry, 2000).

It is acknowledged that studies do not usually fall neatly into the above two paradigms. Therefore, a third enquiry paradigm, known as emergent realism (Owen, 2006), has been gaining ground with evaluation theorists considering how these paradigms impinge on evaluation in practice. This enquiry paradigm can be applied to evaluative research by:

- providing a basis for principled discovery as we oscillate between explanations and data;
- using explanation as a means for extrapolating findings from one evaluation to other settings;
- viewing all methods, both quantitative and qualitative, as aids to sense-making that have strengths and flaws;
- connecting evaluation practice with the ultimate goal of most [program] evaluation – social betterment; and
- balancing the focus of the evaluation between sense-making and value inquiry (Henry, Julnes, & Mark, 1998, p. 1).

Also known as pragmatism, within this paradigm, importance is placed on the research questions asked rather than on the methods used (Creswell & Plano-Clark, 2011). Furthermore, emergent realists do not insist that theirs is the only approach to evaluative enquiry. On the contrary, this paradigm encourages other forms and approaches to evaluation (Mark, Henry, & Julnes, 1998). Proponents of a pragmatic approach emphasise the importance of practicality, contextual responsiveness, and consequentiality as important factors for success (Datta, 1997). Owen has elaborated on this by writing that the pragmatic approach is

practical, in terms of recognizing the evaluator's experience of what does and does not work; responsive, in terms of knowledge of the context and the information needs of stakeholders; consequential, in terms of being able to be implemented given limitations set by resources. (2013, p. 16)

The emergent realism/pragmatism paradigm frames this research since the ontology of realism assumes interaction with complex social phenomena—in this case education—involving reflective people (Healy & Perry, 2000). Furthermore, the epistemology of realism describes researchers within this paradigm as neither value-laden (as in constructivism) nor value-free (as in positivism) but rather as value-aware. In other words, “a participant’s perception for realism is a window to reality through which a picture of reality can be triangulated with other perceptions” (Healy & Perry, 2000, p. 123). This research study aligns with the paradigm of realism by employing a multiphase design (Creswell & Plano-Clark, 2011) that responds to the research questions asked.

It is interesting to note that although there are examples of the use of pragmatism in the literature on evaluative enquiries of educational programs (see, for example, Mark & Shotland, 1987), when it comes to project evaluation, not only is there minimal literature, but the few studies that exist do not state anything about the worldviews on which they are based (Huber & Harvey, 2013). Since the aim of this study is to investigate the praxis of evaluation, the theoretical framework of pragmatism provides the benefit of enabling a consideration of what has previously worked and what has not.

Research methodology

The pragmatic approach to this study suggests that a mix of research methodologies can be employed since “the choice of methodological techniques follows from the questions asked, not vice versa” (Owen, 2006, p. 89). Returning to the discussion on research being an integral part of evaluation, a research methodology that aligns with evaluative enquiry methods was adopted. My research was in fact underpinned by two methodologies, action research and case study research. These fit well within the paradigm of realism which sits in the centre of the continuum between theory-building research (with an emphasis on meaning) and theory testing research (with an emphasis on measurement). Figure 3.1 represents this continuum and related methodologies (taken from Healy & Perry, 2000). I have highlighted in this figure, the two methodologies used in this research study.

In Phase 1 of this study, I wanted to find out what approaches to evaluation had been used, what the project leaders’ understandings were with regard to evaluation and whether there was alignment between evaluation theory and practice. In this phase, action research (Coghlan & Brannick, 2009; Harris, Jones, & Coutts, 2010; McNiff, 2001) was used. Action research is well-documented in the literature and is usually based around specific problems in specific settings, investigating solutions to these problems, and then repeating the research with the new solution.

Phase 1 was the first cycle of action research, investigating the ‘problem’ of evaluation praxis and producing findings that informed the development of Phase 2. I observed the action of evaluation practice, reflected on the findings and planned the next cycle of research.



Figure 3.1. A representative range of methodologies and their related paradigms (Healy & Perry, 2000, p. 121, with highlighting and the words *Action Research* added within parentheses in the upper box).

In Phase 2 of this research, I investigated the contextual factors that impact upon evaluation praxis in three learning and teaching projects using case-study methodology. I strategically chose a case-study approach because case studies allow researchers to “investigate a contemporary phenomenon in depth, within its real-life context” (Yin, 2009, p. 18). Case studies can be used to explain how the context influences the success of an initiative or intervention (Goodrick, 2014). Although case study research can be used to develop theory, in this study the approach was used “for adding to existing experience and humanistic understanding” (Stake, 2000, p. 24) through an explanatory, multiple-case, replication design (Yin, 2009). In this second phase, the context was a large, metropolitan single-campus university with approximately 38,700 students and 2,700 staff. In this phase I set out to explain how and why evaluation praxis is influenced by the conceptualisation of the project leader.

The findings from Phase 1 and Phase 2 led to the development of Phase 3 in which I employed an iterative, action research process. Action research “seeks to bring together action and reflection, theory and practice, in participation with others, in the pursuit of practical solutions to

issues of pressing concern” (Reason & Bradbury, 2001, p. 1). In this case, the issue was the practice of evaluation in small-scale learning and teaching projects and the practical solution a framework that would be flexible and useable. Action research also requires iterative cycles of action, observation, evaluation, and redesign (Wadsworth, 2011a). In Phase 3 of the research study I investigated the design and development of an evaluation planning framework through two iterative cycles of reflection on practice, feedback, and redesign.

Research design and methods

I employed a multiphase design (Creswell & Plano-Clark, 2011) in this research study. Such a design allowed for each phase to contribute to and expand upon the findings from an earlier phase and allowed for the evolution of the study as a whole. Multiphase designs combine qualitative and quantitative studies that can be sequential or concurrent. The three phases in this research study were carried out sequentially as summarised in the diagram of Figure 3.2 and Table 3.3 at the end of this chapter. (Also refer to the concept map in Appendix III). The three published papers introduced in Chapters 3 (Huber & Harvey, 2016a), 4 (Huber & Harvey, 2016b), and 5 (Huber, 2017a) discuss the research design for each of the individual phases, in more detail.

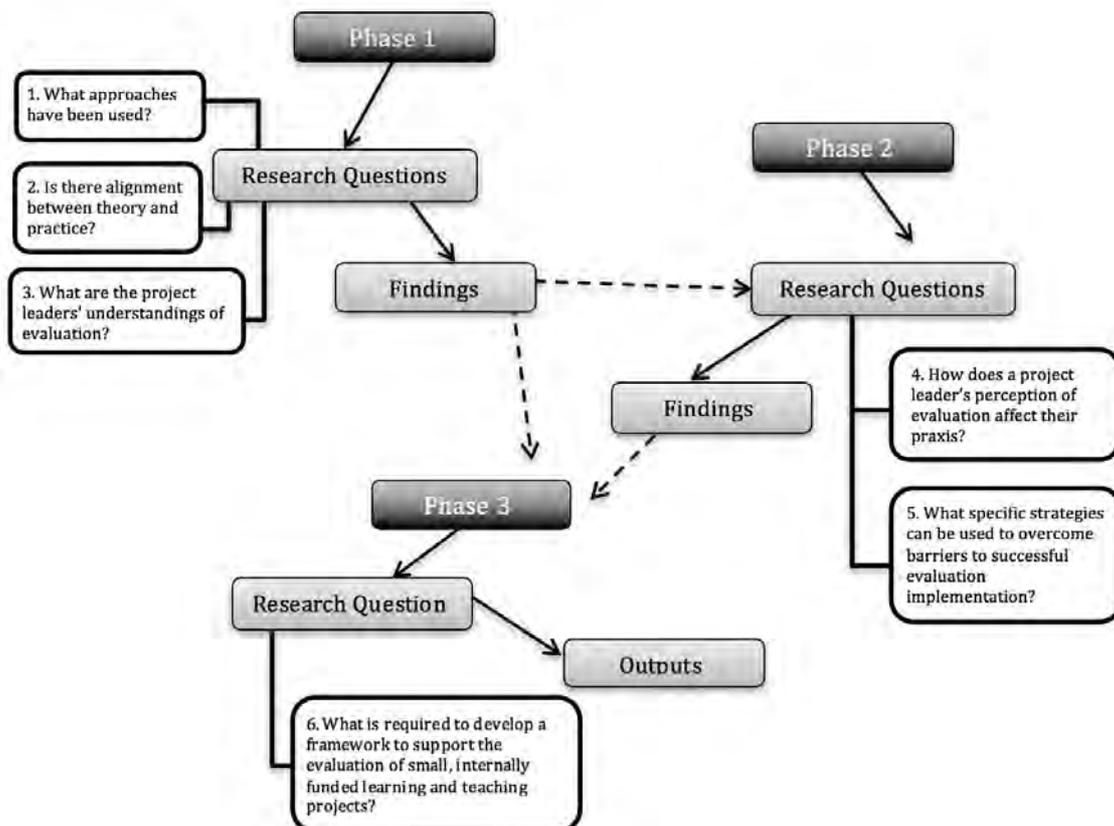


Figure 3.2. An overview of the three phases and associated research questions in this study.

Macquarie University Human Ethics Research Committee approved all three phases of this study (reference number 5201100864) at Macquarie University. Details of communication with the committee, including the amendments, questions used, and information and consent forms can be found in Appendix I.

The third phase was carried out with staff at a different Australian metropolitan university, the University of Technology Sydney (UTS). The Human Ethics Research Committee at UTS approved this phase of the study based on provisions of the Macquarie approval. See Appendix I for further details.

Phase 1

The purpose of Phase 1 was to find out what is understood by project evaluation; what (if any) evaluation had been carried out in a range of learning and teaching projects and how this related to the theories of evaluation; why (or why not) a particular framework, approach, or method of evaluation was chosen, and how effective it was.

Data. The small grants scheme had been in operation at the university used in Phase 1 for four years at the time of this study and the total number of grants awarded at this point was recorded ($N = 61$) (see Table 3.1). A purposeful sample (Wadsworth, 2011b) was taken from across each of the two categories (priority grants and competitive grants), that is, all those projects that had publically available final project reports ($N = 36$). Then, each project leader was contacted by email and invited to participate in this research (see Appendix I). Fifteen of these people responded and the corresponding projects were then used as the data for Phase 1. The final submitted reports for each of the 15 projects were also used as data sources. This is unobtrusive data collection since these reports live in the public domain.

In addition to the project leaders, a sample was identified for the qualitative data collection. This was a group of people who assess applications for grants. Looking at the evaluation practices through the lens of the governing body that administers the grants for these projects would further enhance the robustness, and strengthen the validity of the study (Yin, 2011). If guidelines for good practice were to be drawn from the findings of this study, it would be essential that I looked at all stakeholders' viewpoints. Members of the grant application review panel could offer this additional lens, and the interview questions were adapted for this sample group (See Appendix I). Although the members of this panel were invited to be interviewed, none of them responded. The implications of this are discussed in Paper 3 (see Chapter 4).

Table 3.1

Number of Grants Awarded and Reports Available per Year and Number of Interviews Held

Year	Grants awarded		Reports available		Project leaders interviewed
	Competitive	Priority	Competitive	Priority	
2007	5	N/A	4	N/A	2
2008	8	13	4	7	2
2009	9	8	7	5	6
2010	11	7	4	5	5
Totals	33	28	19	17	15

Method. A set of criteria was developed for this first phase, informed by the literature of Patton (1994), Datta (1997), Scriven (2007), Stufflebeam (2011), Owen (2006), and Chesterton and Cummings (2007), and was used to analyse the project documentation. These criteria are discussed in detail in Paper 3 (see also Chapter 4, Table 4.1). Output from the document analysis informed follow-up interview questions posed to the 15 project leaders. These interview samples are therefore of convenience (Krippendorff, 2004; Marshall, 1996). Interview participation was entirely voluntary, and these project leaders had been contacted by email, which lowered the risk of feeling coercion to participate. Each participant was interviewed once and the interview lasted no longer than one hour. Some interviews were held by telephone if a face-to-face interview was not possible due to time or location constraints. The interviews were used to collect qualitative data for analysis since the aim was to get further insight into why particular decisions around evaluation processes were made. The interviews were recorded for later analysis and the questions used were consistent. Probing questions were also developed to allow for deeper exploration if replies needed unpacking. These interview questions became a pilot in preparation for use in Phase 2 of the study.

Analysis. The method of analysis for the (qualitative) interview data was thematic (Krippendorff, 2004). “Thematic analysis is a method for identifying, analysing and reporting patterns (themes) within data” (Braun & Clarke, 2006, p. 79). I chose this method because I wanted to use these themes to inform the next phase of the study and (if required), to develop recommendations. To create the themes, the data were coded using a software program called Leximancer. The output from this program was then validated through a manual coding procedure. I then used a three-step process in which the themes were described, compared across different contexts (discipline, project types, and participants’ experience in learning and teaching as well as in evaluation), and

related to the evaluation literature (Bazely, 2009). Further information about this analysis is provided in Chapter 4.

Phase 2

The purpose of Phase 2 was twofold. First, I sought to investigate one of the findings from Phase 1, namely how project leaders' perception of evaluation affected their praxis. Second, I intended to investigate the barriers to successful evaluation implementation. Some of these barriers had been identified in Phase 1 and in the second phase I intended to try to understand why these barriers arose and how they presented in practice. In Phase 2 I used an explanatory case-study approach with a multiple-case (embedded) replication design (Yin, 2009). See Table 3.3 for a summary of the design.

There was a change from the initial planned research design for Phase 2 (reported in Paper 1) and the actual research design. Initially it was envisaged that the criteria (piloted in Phase 1 to interrogate the data) would be modified from the findings of that phase of the study. Then this modified set of criteria would be used as an evaluation framework by the project leaders in two or three projects (cases) as they ran. This initial design planned to use four lenses (Brookfield, 1995) to determine how effective the framework (formed through these modified criteria) was as an evaluation tool. In this way, in Phase 2 I initially planned to use an exploratory case-study approach (Yin, 2009) to investigate the use of the framework in each case.

However, considering the overarching action-research approach to this study, the design of Phase 2 was modified in response to the findings and direction of the study after Phase 1. Instead of the project leaders using the set of evaluation criteria (or framework) in their projects, I used these criteria as a basis of the case study protocol (see Table 3.2). Then an explanatory approach was taken to understand the *how* and *why* of the findings from Phase 1.

Data. Phase 2 focused on the evaluation of three learning and teaching projects studied over 12 months. The sample was drawn from awardees of internal learning and teaching grants funded by the provost at the university under study in Phases 1 and 2. An initial meeting was held with the provost's executive officer to discuss this research proposal (B. McLean, personal communication, 14 February 2011). Agreement was reached that the learning and teaching grant application guidelines would be rewritten to include a reference to this project and allow invitations to participate in the study to be sent out to grant awardees. Interest was expressed from the provost's office in terms of closing the quality assurance/quality enhancement cycle for project funding. That is, ensuring that evaluation is carried out, that findings are communicated

and that they are used in future applications for project funding. Thereby building on previous work and not “redeveloping the wheel” (Morris & Fry, 2006).

Data generated in case study research can become unwieldy. Case study evidence can (and should) come from multiple sources. These may include documents, interviews, participant observation, direct observation, physical artefacts, and archival records (Yin, 2009). In this research study, the first four types of data were collected, therefore prospectively providing converging lines of enquiry through a process of triangulation and corroboration. Construct validity is addressed since “multiple sources of evidence provide multiple measures of the same phenomenon” (Yin, 2009, p. 117). However, study data were kept to a minimum by restricting the number of cases (projects) to three.

Table 3.2

Case Study Protocol for Phase 2

Step	Action
1	Examine the project applications for data to inform and generate follow-up questions.
2	Meet with the project team. Show the list of questions that will be used as part of the data-gathering instrument. Answer any questions about the study.
3	First interview with the project manager.
4	Attend all the project meetings (where possible) and take notes that will support researcher’s reflections. Act as participant-as-observer.
5	Meet two more times with the project manager for interviews, once after the progress report is due (mid-point) and again at the end of the project—perhaps after the final report is submitted. Each time, the initial interview questions will be revisited, unpacking answers with follow-up questions.
6	Meet with the project leader midway through the project. The questions asked in this interview act as a checkpoint and comparison to the project manager’s answers.
7	After each interview/meeting, record observer-comments and field notes for later analysis.
8	Examine the data through thematic analysis, coding each interview/meeting separately and comparing across cases and across roles for similarities and differences.
9	Triangulate findings with the literature to answer the research questions.

Method. Participation was voluntary (all grant awardees were approached using a standard email; see Appendix I) and three project leaders responded and agreed to participate in this study. We worked closely at the award stage of the funding (for planning), during the project, and at the

conclusion of the project to investigate the evaluation practices carried out. The following project stakeholders were interviewed: the project coordinators or 'leaders' ($n = 3$) and the project managers ($n = 3$). The interview questions and guiding notes used with the project managers are included in the published paper corresponding to this second phase of the research (see Appendix B in Paper 4). The interview questions used with the project leaders can be seen in Appendix IV. These interviews were in the form of guided conversations, using a focused interview style (Merton, Fiske, & Kendal, 1990, as cited in Yin, 2009). There were two units of analysis for this case study:

1. the criteria developed in Phase 1 (based on the evaluation framework of Chesterton & Cummings (2007, 2011) and the literature of Datta (1997), Owen (2006), Patton (1994), Scriven (2007), and Stufflebeam (2011)); and
2. qualitative data collected from interviews with project members and any project documentation.

In this way, I acted in the role of participant-as-observer (Gold, 1958) of the evaluation and project process(es), actively participating with the project members and with documentation, providing a depth to the research that would not be possible with an observer-only role (Babchuk, 1962). I used critical reflection (Brookfield, 1995; Moon, 2004) as part of the case study protocol, providing a further source of evidence to be employed. These are referred to as reflective field texts in Table 3.3.

Analysis. The case study protocol was developed as a result of, and informed by, findings from Phase 1 of the study. An evaluation case-study approach was developed, integrating tenets of evaluation methods together with case-study methods. Patterns were identified for each of the checklist items for each of the sources of evidence and these were analysed for themes. Thematic analysis was carried out within each project (case) and across the three projects. Simple descriptive statistics were performed on the data and this is elaborated on further in Paper 4, Chapter 5.

The findings that resulted from this phase were combined with those from Phase 1 to inform the direction and design of the third phase of the study.

Phase 3

An initial design for a third phase was formulated based on the hypothesis that some form of targeted evaluation resource was required to support the evaluation of small-scale projects. The expectation was that this phase would proceed only if results from the preceding phases deemed

it necessary. This aligns well with an action research methodology whereby observations inform iterative changes that can then lead to further development, implementation, and improvements.

The purpose of the third phase of the study was to design, develop, and test an evaluation-planning framework and deploy it as an interactive instrument. The intention of this framework was to assist project leaders in planning an evaluation schedule and conducting evaluation of a small-scale learning and teaching project.

Table 3.3

Summary of Research Questions and Research Designs Used in This Multiphase Study

Research questions	Methodology	Data	Method	Analysis
Phase 1				
1. What evaluation forms and approaches have been used in one university's funded learning and teaching projects?	Action research	15 projects 15 project leaders 15 final project reports	Semi-structured interviews Document analysis	Thematic analysis Pattern matching
2. Is there alignment between evaluation theory and practice?				
3. What is understood by evaluation?				
Phase 2				
4. How does a project leader's perception of evaluation affect their praxis?	Case study research	Three project leaders Three project managers	Interviews Document analysis	Thematic analysis Frequency counts - simple descriptive statistics
5. What can be done to overcome barriers to successful project evaluation praxis?		Reflective field-texts Project documentation <ul style="list-style-type: none"> • Reports • Applications • Meeting minutes 	Participant observation	
Phase 3				
6. What is required to develop a framework to support the evaluation of small, internally funded learning and teaching projects?	Action research	14 participants reflective field-texts	Two guided workshops Two focus groups	Enfolding literature Triangulation

Data. An action research approach was used whereby two iterative cycles of reflection on practice, feedback, and redesign were implemented. In each cycle, all past grant awardees were invited via email to a combined, one hour workshop and focus group session. Seven people responded and attended the first session. Another call-out was made by email for the second cohort and second cycle of action research. It was a coincidence that there were seven respondents, making a total of 14 participants for Phase 3 of the research study.

Method. Figure 3.3 illustrates the procedure used in both cycles of the research in Phase 3. In each of the combined workshop and focus group sessions, participants reflected on their project evaluation practice. A combination of individual reflection questions, workshoping the framework in small groups, and focus group questioning was employed. The questions used as prompts are discussed further in Chapter 6. The sessions were recorded and transcribed. Findings from the first cycle of Phase 3 were used to modify the evaluation planning framework. The modified framework was then investigated in the second research cycle, followed by further fine-tuning to produce the final framework. This evaluation planning framework for small learning and teaching projects forms the major research output of this study and is discussed in detail in Chapter 6, Paper 5.

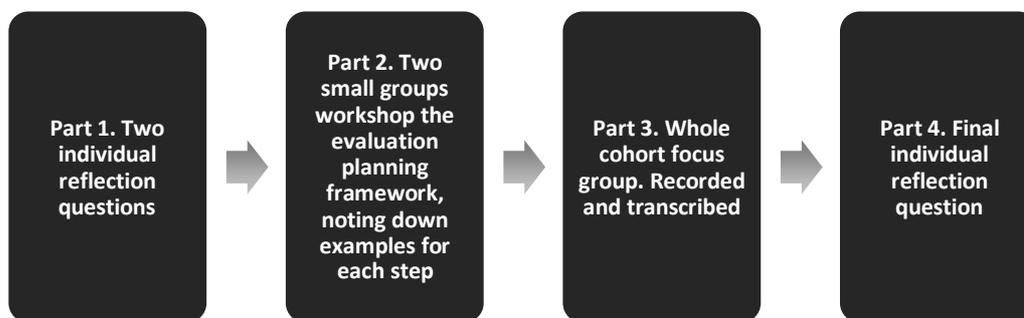


Figure 3.3. Component parts of the combined workshop and focus group session.

Analysis. In both cycles, analysis of the data used an enfolding method. In this process, the (evaluation) literature is used to interpret, explain, and substantiate the relevance of the participants' comments (Eisenhardt, 1989). In addition, I triangulated the workshop participants' feedback on the framework with my own reflective observations.

Publication

The introduction to this research study detailed in Chapter 1 as well as the research design detailed in this chapter originally formed the basis of the first paper from this thesis. Unlike other papers from this research study, Paper 1 is not reproduced in the body of the thesis because it was an early draft of the research design. In line with an action research approach, the final study diverged from the original plan due to the findings of the literature review and the findings from each phase, and therefore Paper 1 is included as an appendix (Appendix V).

Paper 1 (see Appendix V)

Huber, E., & Harvey, M. (2012). The Design of a Meta-Evaluation Study of Learning and Teaching Projects in Higher Education. In *Global TIME 2012* (pp. 71–77). Association for the Advancement of Computing in Education (AACE).

Chapter 4

How are Small-Scale Learning and Teaching Projects Evaluated in Higher Education?

Overview of Phase 1

The first phase of this study builds on the finding from the literature review (presented as Paper 2 in Chapter 2) that there is lack of evidence about how locally funded learning and teaching projects are being evaluated. This first phase was written up as a paper titled *An Analysis of Internally Funded Learning and Teaching Project Evaluation in Higher Education*. This was published in the *International Journal of Educational Management* and is Paper 3 of this thesis.

The following short summary introduces the paper. Figure 4.1 provides a visual overview of how Phase 1 fits into the wider study.

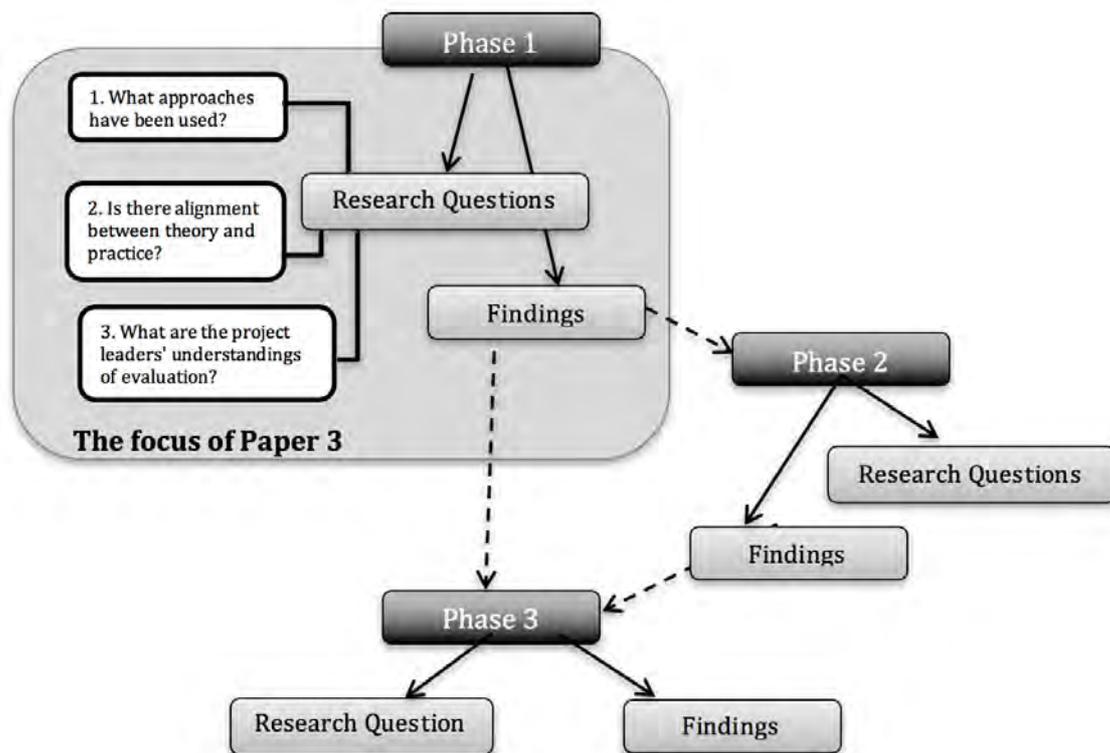


Figure 4.1. A visual overview of the three phases of this study with a focus on Phase 1.

Background

The literature review (Chapter 2) indicated that there was little extant literature about how learning and teaching project evaluation is carried out. Was evaluation occurring and not being reported in the literature, was it not happening at all, or was something in between happening? Furthermore, no evidence was found regarding which evaluation theories or approaches were being used in these small-scale internally funded learning and teaching projects. Are academics aware of the different possibilities or perhaps do they have preference for a particular approach? I wanted to explore the reasons for this lack of evidence in the literature by investigating the practices at one university. What evaluation approaches were used? What were the project leaders' understandings of evaluation? Was there alignment between evaluation practice and evaluation theory? My expectation was that through better understanding of current praxis, strategies and recommendations could be developed to support academics with their evaluation practice.

Methodology

An emergent realism paradigm was used to provide the theoretical framework for the first phase of the study together with a pragmatic approach to mixed methods data collection, as described in Chapter 3. This paradigm allows for the investigation of what works, for whom, and in what contexts (Datta, 1997). An action research (AR) approach (McNiff, 2001) was taken in this research study and phase one can be considered the first cycle of AR. Research questions were formulated for areas of investigation (plan), evaluation practice was observed, then reflection on the findings helped shape the direction of phase two.

Data collection and analysis

After an open invitation to all internally funded learning and teaching project grant holders at one university, 15 projects were selected for inclusion in this first phase of the research study. In the first cycle of action research, the project documentation, including applications (where available) and final reports (publicly available), were analysed using an evidence-based checklist, see Table 4.1, Step 1. The criteria, presented as checklist and interview questions, were developed from the work of a number of leading evaluation scholars as indicated in Table 4.1. Analysing the 15 sets of project documentation produced data that were to be further interrogated in the second pass of the data (Table 4.1, Step 2) through interviews of the 15 project leaders. If the Step 1 questions (Table 4.1, left hand column) were not able to be answered from details in the project documentation (report or application), they were asked along with the Step 2 checklist questions at the interview.

Table 4.1

Protocol Used to Interrogate the Data in Phase 1

Step 1: Quantitative data collection	Step 2: Qualitative data collection
<i>Checklist criteria</i>	<i>Follow up / notes – Interview questions</i>
A1. Was evaluation of the project carried out? If not, why?	B1. Find out which forms and approaches have been used (Owen, 2006)
A2. Who carried out the evaluation? (Datta, 1997; Stufflebeam, 2011)	B2. If project team member, is the evaluation objective enough? Did evaluator have appropriate skills?
A3. Was the evaluation based on a framework (named), theory or particular method?	B3. Were there any shortcomings to the framework? How effective was it?
A4. Was the purpose and scope of the evaluation detailed in the report? (Chesterton & Cummings, 2007; Stufflebeam, 2011)	B4. How will the information from the evaluation be used? (Scriven, 2007)
A5. Were stakeholders and study audiences identified? (Chesterton & Cummings, 2007; Stufflebeam, 2011)	B5. Primary and secondary?
A6. Was there an evaluation plan detailed in the application and/or final report? (Owen, 2006)	B6. Did this go to plan? Could it have been done better?
A7. Were the key evaluation questions stated? (Chesterton & Cummings, 2007)	B7. Could they be answered adequately? (Datta, 1997)
A8. Was the evaluation plan reviewed? (Chesterton & Cummings, 2007; Scriven, 2007; Stufflebeam, 2011;)	B8. If yes, what benefits arose from this review?
A9. Were the results useable? (Datta 1997; Owen, 2006)	B9. What amount of generalisability was there? (Scriven, 2007)
A10. What reporting strategies were used? (Chesterton & Cummings, 2007; Stufflebeam, 2011)	B10. How were these reports received?
A11. Where any challenges to conducting the evaluation identified? (Datta, 1997)	B11. What could have been done to help overcome these issues? B12. What value did the evaluation process add to your project? B13. Any other comments on the evaluation process and outcomes.

A thematic analysis (Braun & Clarke, 2006; Krippendorff, 2004) of the data was carried out using a software program called Leximancer. This program can be used to automatically analyse qualitative text-based data and in this phase of the study the data comprised interview transcripts. Further details are provided in Paper 3 about how Leximancer works and was used. One form of output from Leximancer is a concept map to visually represent the data. Only one example of a

concept map was included in Paper 3 due to space restrictions of the publication. The additional concept maps that were produced for the analysis of this phase of the study can be viewed in Appendix VI.

Manual coding of the data was also carried out to validate the outputs from Leximancer. That process is explained in detail within the body of Paper 3 along with an example in Table II (p. 612 of the paper). For completeness of the thesis, all of the tables that compare the themes (Leximancer generated vs. manually classified) are listed in Appendix VII.

Findings

The findings from these analyses are presented in Paper 3. To summarise, four key themes were evident from the data on small-scale learning and teaching projects. There was a:

- lack of clarity around conceptualisations, particularly with the overlap between evaluation and research;
- need for evaluation capability building within the sector;
- lack of resourcing in terms of time and money; and
- focus on an action oriented approach to evaluation.

Each of the themes is discussed in Paper 3 within the framework of the research questions and with reference to the literature. This discussion is supported with verbatim quotes from the project leaders. Figure 4.2 provides an overview of research questions and findings.

Implications

Linking back to the aims of the wider study (to investigate current evaluation practices for small-scale learning and teaching projects and to understand what works well and supports innovation) and the pragmatic objectives of investigating how we can enable evaluation, I developed a series of strategies for developing evaluation capacity across the higher education sector. These strategies are presented in the final section of Paper 3 and include the development and provision of:

- a time allocation for evaluation in future and ongoing project plans as well as provision to revisit the project and assess impact,
- models of how to incorporate evaluation into the research cycle,
- constructive feedback on evaluation reports from the university and its funding body, and
- networking opportunities to disseminate learnings from project evaluations.

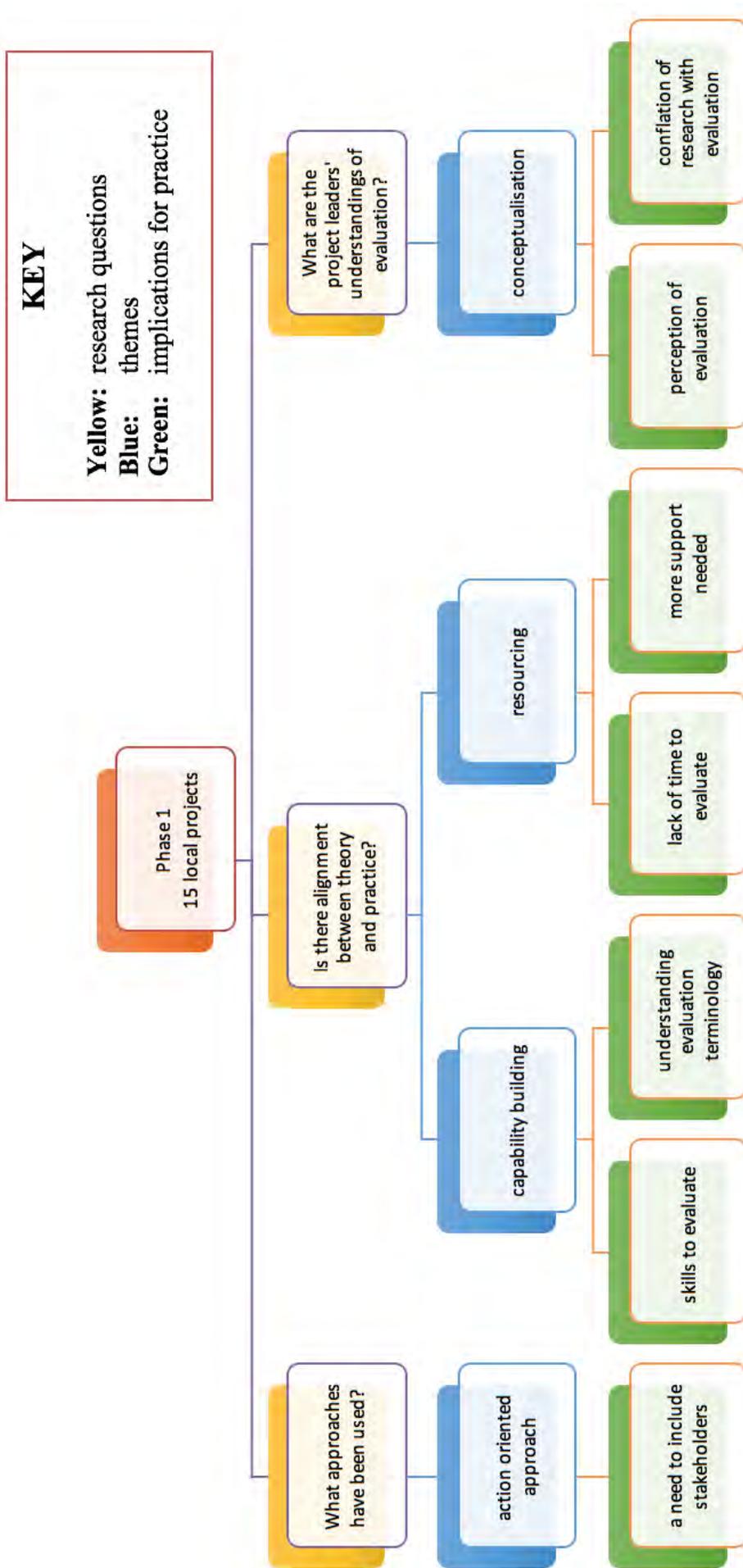


Figure 4.2. An overview of Phase 1: Research questions, themes, and implications for evaluation practice.

Conclusion

The findings from this phase of the research indicate that learning and teaching practitioners hold a range of perceptions relating to evaluation. I conclude that there is misalignment between evaluation theory and the practice of learning and teaching project evaluation and that the project leaders' perceptions of evaluation can inhibit this relationship. In the next chapter, I describe Phase 2, where I investigated the contextual factors influencing these perceptions, in more detail.

Publication

Paper 3

Huber, E., & Harvey, M. (2016a). An analysis of locally funded learning and teaching project evaluation in higher education. *International Journal of Educational Management*, 30, 606-621.

Pages 45-60 of this thesis have been removed as they contain published material. Please refer to the following citation for details of the article contained in these pages.

Huber, E. and Harvey, M. (2016), "An analysis of internally funded learning and teaching project evaluation in higher education", *International Journal of Educational Management*, Vol. 30 No. 5, pp. 606-621.

DOI: <https://doi.org/10.1108/IJEM-08-2014-0108>

Chapter 5

A Deep Dive into Small-Scale Learning and Teaching Project Evaluation in Higher Education

Overview

This chapter provides an introduction to the second phase of the study, the praxis of evaluating small-scale, locally funded learning and teaching projects, building on findings from the literature review and Phase 1. This second phase of the research study was written up as a paper titled *Project Evaluation in Higher Education: A Study of Contextual Issues*. This was published in the *Australasian Journal of Evaluation* and appears as Paper 4 of this thesis. The following summary introduces the paper. Figure 5.1 gives a visual overview of how Phase 2 fits into the wider study.

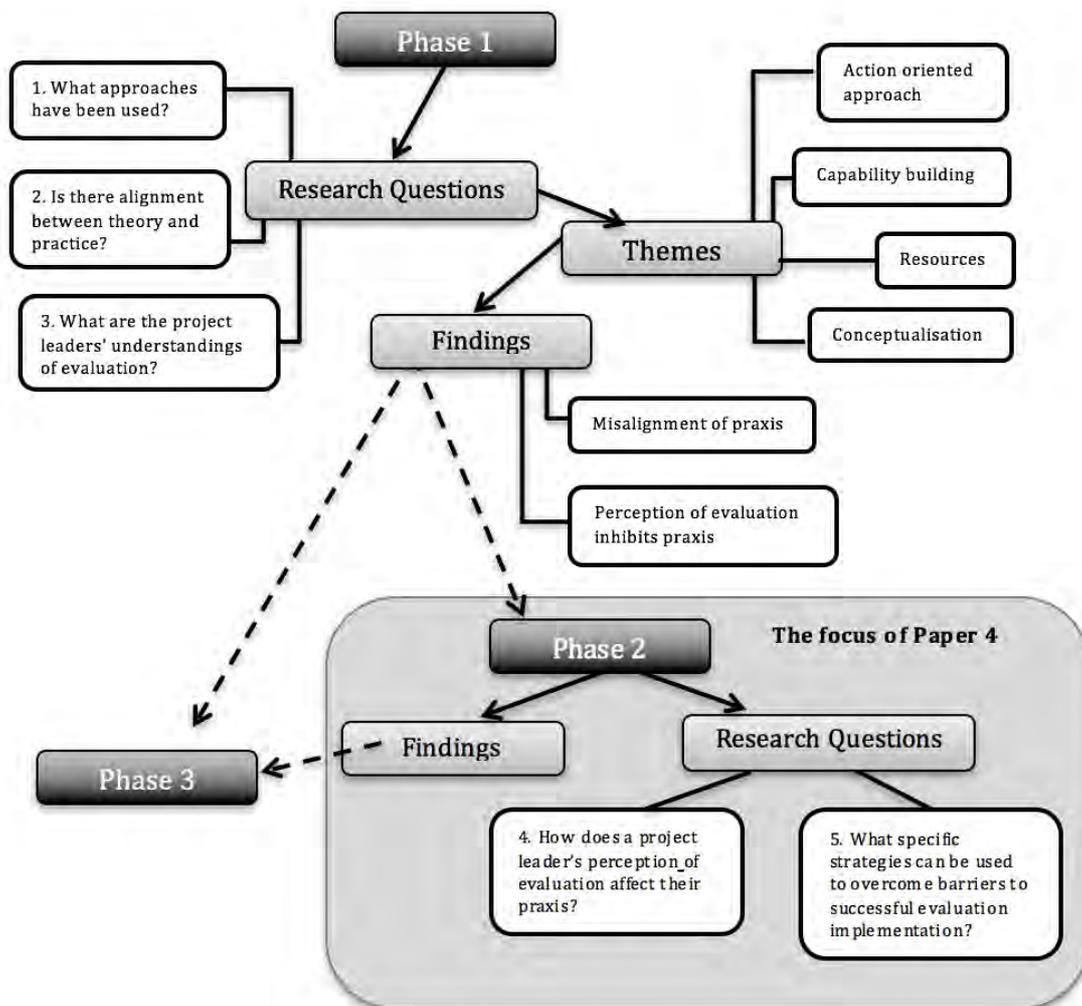


Figure 5.1. A visual overview of the three phases of this study with a focus on Phase 2.

Background

A review of the literature in the area of small-scale learning and teaching project evaluation revealed that there is little evidence of the extent to which the alignment between theory and practice, or praxis, of learning and teaching project evaluation is achieved.

In the first phase of the study I established that a project leader's perceptions and conceptualisation of evaluation can inhibit their achievement of praxis. Consequently, I designed the second phase of the study to investigate in detail the contextual factors impacting on project evaluation practice and influencing these perceptions. "Context is generally understood as a source of information needed for fuller, more complete understandings about a given unit of analysis or target of inquiry" (Vo & Christie, 2015, p. 44).

The purpose of Phase 2 was to substantiate findings from Phase 1 and to find out what kind of evaluative mechanisms may be appropriate to support learning and teaching practitioners. The findings from this phase and from Phase 1 would then feed into the design of Phase 3 (refer to Figure 5.1).

Methodology

Continuing with a pragmatic approach, this next phase of the study was led by the questions I wanted to investigate rather than the method to be used, which enabled the use of a different research approach to Phase 1. The two research questions that directed Phase 2 were:

- What specific strategies can be used to overcome the barriers to successful evaluation implementation?
- How does a project leader's conception of evaluation affect their praxis?

Three case examples of small-scale, internally funded learning and teaching projects provided the data for analysis in this phase, in which I adopted an explanatory approach. The projects shared a focus on curriculum design and innovation in arts and humanities disciplines at the university under study in this phase. A case-study approach enabled the in-depth investigation of this contemporary phenomenon (project evaluation) within its real-life context (Yin, 2009).

Data collection and analysis

Each project under investigation in this phase of the research had a project lead (PL) – the person who instigated the project and applied for the grant, and a project manager (PM) – the person who managed the project. I interviewed each of the three PMs at the beginning, middle, and end of

their projects. I also interviewed each of the PLs around the mid-point of their project. These interview data were analysed alongside data from the project's documentation (grant applications, final reports, and meeting minutes where available) and with observer comments (Saldana, 2009) that I had documented throughout this phase.

As in Phase 1 of this study, I adopted a thematic approach to coding the research data using three manual coding techniques. On the first pass of the data, I carried out initial coding (Saldana, 2009) alongside in vivo coding. I then used focused coding (Charmaz, 2014) on the second pass of the data to produce key themes. These themes were then used to interpret the data and produce the findings. The reduction of the codes to themes, along with excerpts from the qualitative data set, are displayed in the Appendix (A) of Paper 4. Space was limited within the published paper for providing detail of the quantitative analysis. The full set of tables, containing counts of codes and themes for all three cases and for the PLs and PMs, can be seen in Appendix VIII.

Findings

Six key themes relating to the factors that inhibit the practice of small-scale project evaluation were extracted from the data. These are:

1. *Meeting the needs of and directions from stakeholder groups* – this theme combined codes relating to people (such as the steering committee, audience, or reference group), communications (including dissemination activities), feedback on the project reports or outcomes, and project management terminology and processes.
2. *Contextual challenges and impacts* – a number of codes combined to form this theme, including discussion of research challenges; the changing nature of a project including “scope-creep”; the unexpected time the project was taking; challenges related to timing within the academic calendar; and the lack of, or need for, adequate support mechanisms.
3. *The value of evaluation* – this theme comprised mention of evaluation approaches and forms as well as mention of quality assurance or quality enhancement within the project.
4. *Internal factors that influence practice* – personal conceptions and perceptions of evaluation, but also anything emotive related to evaluation.
5. *External factors that influence practice* – this theme covered experience (of evaluation), network connections or relationships, and influencers (i.e.,) people who can help make change happen.
6. *Future proofing (sustainability)* – this theme encompassed sustainability of project outcomes; having an impact in future; discussion of the findings from the evaluation or the project; and the next steps such as where to from here and how the findings are meaningful.

As there were six themes, this lent itself to visualisation by plotting the frequency of occurrence of each theme on a radar chart with six axes. The aim of this was to investigate whether there was a pattern of themes between project leaders and project managers within projects and across projects. This was discussed in detail in Paper 4, and, again due to page restrictions, only one example provided there. The full set of radar charts are provided in Appendix IX of this thesis.

One key finding from this second phase of the research study indicates a disjunct in how evaluation is conceptualised between the project lead and the project manager. The importance of this finding manifests in reporting of project outcomes and perceived success of a project. In addition, factors that influence the praxis of evaluation were identified as:

- Time frame – there was a commonly held belief that with such short projects (12–18 months in duration) there was not enough time to complete a rigorous evaluation.
- Previous experience of leading a project – when the project leader had experienced good evaluative practice, this was replicated in their own projects.
- The requirement for evaluation (or lack of) from the project’s grant funding body – evaluation only occurred when mandated.

These findings will be revisited when discussed in further detail in Chapter 7 in the context of tensions that exist when conducting evaluation.

Implications

Informed by these findings, I developed four strategies to enhance the adoption of systematic evaluation in small-scale learning and teaching projects:

1. Evaluation support mechanisms need to be made more explicit. Grant applicants and awardees need to be informed from whom and where they can get help.
2. Develop an evaluation community of practice (CoP) with other grant recipients to engage in collaborative reflection. Include previous grant winners and institutional influencers.
3. Require grant applicants to identify how their project builds on previous work.
4. Offer grant applicants a flexible framework for evaluation planning.

Although generalisability cannot be claimed from a case-study design (Dexter & Seden, 2012), these strategies do offer the potential to reach across disciplinary and sector boundaries in their application and are discussed in more detail in Paper 4 (Chapter 5).

Conclusion

There is no one-size-fits-all approach to evaluation in the context of small-scale internally funded learning and teaching projects. There are several factors that influence a practitioner's praxis. This second phase of the research supports earlier findings that there is a need for more targeted evaluation support mechanisms that are flexible, adaptable, and timely.

In Phase 3 of the study I investigate a possible framework and corresponding online tool specifically designed for planning the evaluation of small-scale learning and teaching projects in higher education.

Publication

The paper was presented at the Australasian Evaluation Society Conference in Melbourne, September 2015 and published in the society's peer-reviewed journal:

Paper 4

Huber, E., & Harvey, M. (2016). Project evaluation in higher education: a study of contextual issues. *Evaluation Journal of Australasia*, 16, 19–37.



ELAINE HUBER | MARINA HARVEY

Project evaluation in higher education: a study of contextual issues

This paper reports on the second phase of a wider study on evaluation of locally funded learning and teaching projects in higher education. A review of the extant literature in this area shows that there is little evidence of the extent to which the alignment between theory and practice, or praxis, of such evaluation is achieved. The first phase established that the project leader's perception and conceptualisation of evaluation can inhibit achieving praxis. Consequently, the aim of the second phase was to investigate in detail the contextual factors impacting on project evaluation. Three case examples of internally funded learning and teaching projects provide the data for analysis using an explanatory approach. The projects share a focus on curriculum design in arts and humanities disciplines at an Australian university.

A case study approach enabled the in-depth investigation of this contemporary phenomenon, within its real-life context. Data collection included interviews with each project manager and with the project lead; this was triangulated with the data of grant applications, final reports and meeting minutes. A thematic approach to coding the research data was adopted. One key finding indicates a disjunct of how evaluation is conceptualised between the project lead and the project manager. In addition, factors that influence the praxis of evaluation were also identified including timeframe; previous experience of leading a project; and the requirement (or lack thereof) from the projects' grant funding body. Informed by the research findings, four strategies to enhance the adoption of systematic evaluation in small learning and teaching projects are presented; these strategies offer the potential to reach across disciplinary and sector boundaries in their application.

Introduction

Without effective, scholarly evaluation, even well designed innovations are unlikely to achieve wider dissemination, and the potential benefits...for learning in higher education are unlikely to be realized. (Alexander, 1999, p. 182)

In the higher education sector, learning and teaching grants constitute one avenue of funding for research projects that are internally or externally funded by various private and governmental bodies (Huber & Harvey, 2013). With the move towards greater accountability of public funding and the drive to increase quality education, the necessity to incorporate evaluation measures is growing. Not only to *include* evaluation but also to build systematic and rigorous evaluation into the project life-cycle (Wadsworth, 2010).

In Australia, funding can range in value and length from small seed grants of \$5000 for pilot or short-term projects, to larger grants upwards of \$250 000 that encourage cross-institution collaboration over periods of up to two years. Examples of small, internally funded grants by universities include the redesign of curriculum for a more blended approach or a compressed delivery, through to integrating new tools in the learning management system to improve formative assessment



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strategies. Examples of larger projects, funded by external organisations, such as the Australian Government Office for Learning and Teaching (OLT), may be strategic/priority or disciplinary focused (Australian Government, Office for Learning and Teaching, n.d.).

There exists a wide body of literature on the evaluation of learning and/or teaching in the higher education sector and in the utilisation of evaluation results to improve the student experience (Boysen, Kelly, Raesly & Casner, 2013; Marsh, 1987; Ryan, in press). In contrast, the literature related to the evaluation of learning and teaching projects in the sector is limited, even though such projects are routinely funded and undertaken.

While there are many ways and approaches of conducting evaluation, evidence is emerging that project evaluation is not being carried out in a systematic way in the higher education sector (Alexander & Hedberg, 1994; Alexander, 1999; Bearman et al., 2008; Cybulski, 2010; Huber & Harvey, 2013; Oliver, MacBean, Conole & Harvey, 2002; Peat, 2000). There are limited studies centered on learning and teaching project evaluation but those that exist have focused on evaluation situated mainly in the learning technologies project space. An investigation of a range of conference papers (on Information Communication Technology [ICT]-based projects) found that whilst many learning and teaching projects did undertake evaluation, findings were not implemented (Alexander & Hedberg, 1994). A national study of funded ICT-based projects concluded that evaluation (both formative and summative) must become as much a part of professional practice as project development, if the potential of benefits identified in such projects are to be realised (Alexander, 1999). A review of an inter-institutional grant scheme for collaboration in educational technologies revealed that standards of reported evaluation were poor and there was some suggestion that evaluation would not occur unless mandated (Bearman et al., 2008). However, this raises questions about how such mandatory evaluation activity would be perceived. There is no evidence in the literature that either supports or refutes these concepts. In a project aimed at building academic staff capacity for using eSimulations in professional education for experience transfer, effective project management (enacted as action research) was identified as the key to ensuring evaluation commitments were followed through:

Implementing action research and action learning in such projects is not straightforward. It is important, however, to adhere to the spirit of such collaborative learning approaches, and adapt [evaluation] methods based on changing project circumstance. Contingent action is required. (Cybulski, 2010, p. 38)

There is little to no other empirical research to explain why evaluation is not carried out in a systematic fashion in the higher education sector. Evaluation can be strongly influenced by contextual factors (Rog, 2012) and none more so than the culture of this sector.

Since 2011, the OLT and its predecessors have mandated evaluation by an external practitioner for all grants that it awards, with accompanying budgetary allocation. They have also developed detailed evaluation resources to support the grant recipients in their evaluation endeavours (Chesterton & Cummings, 2011), as well as offering two-day workshops on project evaluation for all project managers. These professional development activities can support capacity building within the sector. Other evaluation resources also exist (Oliver et al., 2002;



Phillips, McNaught & Kennedy, 2012; Stevens, Lawrenz & Sharpe, 1993), although most do not cater specifically to learning and teaching projects in higher education. Those that do focus on learning and teaching can at times be viewed as too expansive for smaller projects that lack the time or money to invest.

Background

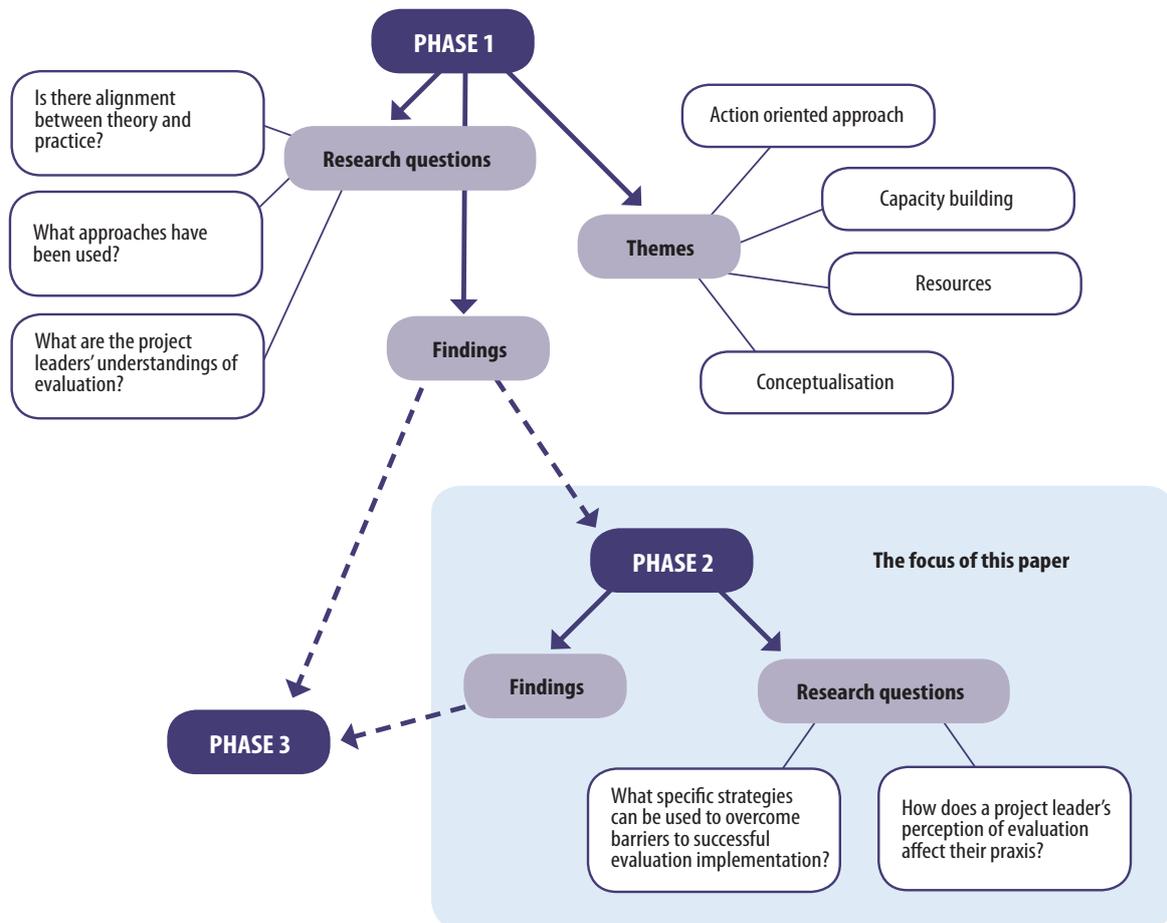
This research paper describes Phase 2 of a wider study on evaluation of learning and teaching projects in higher education, as depicted in Figure 1. Phase 1 investigated the evaluation approaches used in 15 learning and teaching projects at one university. Four themes emerged from the findings including: unclear conceptualisations, particularly with the overlap and even conflation between evaluation and research; a need for capability building within the sector; resourcing in terms of time and money; and, a predilection for an action-oriented

approach to evaluation (Huber & Harvey, in press). The authors concluded that a project leader’s perception and conceptualisation of evaluation could inhibit the relationship between theory and practice.

These findings (supported by Christie, 2003) demonstrate the need for developing a stronger understanding of learning and teaching project evaluation, including how the project leader’s perceptions of evaluation may impact the evaluation processes and outcomes—‘Evaluation researchers need to focus increased effort on the independent, empirical study of the practice of evaluation’ (Smith, 1993, p. 241). With such limited attention in the literature on the practice of learning and teaching project evaluation, systematic investigation into what can be done to support the effective integration of project evaluation is needed.

Using case study methodology, Phase 2 of the study aimed to investigate one of the findings from Phase 1: how project leaders’ perception of evaluation affected

FIGURE 1: THE CONTEXT OF THE REPORTED STUDY





their praxis; that is, how their theories of project evaluation were enabled in the practice of their learning and teaching projects. This study drew on data from three locally funded learning and teaching projects at one large Australian metropolitan university. An established grant scheme has been in existence at the case university for a decade with the aims mirroring the national learning and teaching grants program. This university offers a range of funding opportunities for its learning and teaching projects ranging up to \$10 000. Such projects are usually around 6–18 months in duration. While the application form for these grants requires applicants to detail what processes are built into their project to enable it to be evaluated, the final report template does not indicate a need to report on evaluation outcomes. The central learning and teaching unit offers support for evaluation of these projects but not in a structured way. Individual project leaders can contact their faculty developer or support person and request help. At the case university, any research study that plans to publish student data will require human ethics clearance. Learning and teaching studies involving trialing of new innovations or curriculum design are usually classed as low risk and can often be expedited through the human ethics application process.

The second aim of this study was to investigate the barriers to successful evaluation implementation. While some of these challenges were highlighted in Phase 1 of the study (see Figure 1), Phase 2 offers the opportunity to investigate them in more detail. Informed by the research findings, strategies to overcome these barriers (and therefore enhance this praxis) were developed and are presented in this paper.

In summary, the extant literature on the praxis of evaluation of learning and teaching projects in higher education is limited and this paper makes a contribution by reporting the findings from three project evaluation case studies at one Australian metropolitan university.

Introducing the three case studies

A summary of each funded project that provided the data for this study is outlined in Table 1 on page 23. The key elements of the cases include faculty affiliation, project duration, budget, team members, project aims, project details, and, proposed evaluation approach (referred to in the interviews or in the application documentation).

Method

Theoretical framework

This study adopted a pragmatic approach to research, which helped identify what works best in practice (Cresswell & Plano-Clarke, 2011; Lodico, Spaulding

& Voegtler, 2010). Pragmatism is an experience-centered philosophy that emphasises change. Pragmatic frameworks make use of a mix of qualitative and quantitative methods to provide the empirical evidence most often utilised by practitioners. Pragmatism is underpinned by the realism paradigm which:

- provides a basis for principled discovery as we oscillate between explanations and data
- uses explanation as a means for extrapolating findings from one evaluation to other settings
- views all methods, both quantitative and qualitative, as aids to sense-making that has strengths and flaws
- connects evaluation practice with the ultimate goal of most [program] evaluation-social betterment
- balances the focus of the evaluation between sense-making and value inquiry (Henry, Julnes & Mark, 1998, p. 1)

Realists believe that reality exists independent of the human mind (Cohen, 1999) and this can be aligned with evaluative research in the quest for evidence:

The gold standard for the realist evaluator is not just 'what works', but 'what works, for whom and in what contexts', recognising that an explanation at any one time requires further investigation and further explanation. (Kazi, 2003, p. 160)

This framework provided a reference point and rationale for the researchers during the analysis of the case study data. The relationships between emerging themes were compared and contrasted within the higher education context. This allowed for interpretation, application and generalisations to be made in the form of potential strategies for evaluation capacity building (ECB). Furthermore, 'realist and theory-oriented theorists view [context] as a source of explanation' (Rog, 2012, p. 26).

Case study approach

A case study approach was strategically chosen in order to 'investigate a contemporary phenomenon in depth, within its real-life context' (Yin, 2009, p. 18). In this study, the context was a large, metropolitan single-campus university with approximately 38 700 students and 2,700 staff. Case studies can be used to explain how the context influences the success of an initiative or intervention (Goodrick, 2014). Whilst case study research can be used to develop theory, in this study the approach was used 'for adding to existing experience and humanistic understanding' (Stake, 2000, p. 24), through an explanatory, multiple-case, replication design (Yin, 2009). This research study set out to explain how and why evaluation praxis is influenced by the conceptualisation of the project leader.



TABLE 1: CASE STUDY DETAILS

	Case 1— <i>formative feedback</i>	Case 2— <i>MOOCs</i>	Case 3— <i>embedded mentoring</i>
Faculty	Arts and Human (Social) Sciences	Human (Social) Sciences	Arts & Student Support Services
Duration	18 months	12 months	18 months
Budget	\$20 000	\$20 000	\$10 000
Team	Project lead, project manager, reference group	Project lead and project manager	Project lead/manger
Aims	To determine the type of feedback that was most likely to be used by students to help them improve their future assignments	To investigate the rationale, implications, and design considerations relating to offering Massive Open Online Courses (MOOCs) at the university	To investigate the impact on subject performance and retention, focusing on at-risk cohorts and equity groups
Project details	Project meetings were used to develop the survey instrument which was administered online to a range of students (n=339)	This project came at a time when the idea of introducing MOOCs was highly controversial in the sector, resulting in its somewhat politically charged nature. Three phases: <ul style="list-style-type: none"> ■ literature review ■ consultation (30 key university personnel) ■ design of four MOOCs 	Represented a move from a generic student mentoring approach (Thriving at Uni) to a discipline-based approach (thriving in [discipline/subject])
Proposed evaluation	Theory of change model (Weiss, 1998)	Learning Processes and Learning Outcomes (LEPO) framework (Phillips, McNaught & Kennedy, 2012)	No defined approach, cited program evaluation mechanisms: <ul style="list-style-type: none"> ■ feedback surveys ■ focus groups ■ monitoring retention of at-risk students using university data

Participants (data collection)

In the year of the study, 39 projects were funded through a learning and teaching grant scheme at the case university. The funded projects in this study were to be undertaken over 12–18 months with budgets ranging from ten to twenty thousand dollars. Human ethics approval was granted to send an invitation to each project leader and invite them to participate in Phase 2 of this research study. Three grant recipients responded within the timeframe and agreed to participate in the research and each of these participants and their respective projects became a case study. The projects were located in the faculties of Human Sciences and Arts and each had a project leader and a project manager, although in one project these roles were carried out by the same person. Both project leaders

and project managers were briefed on the case study protocol which included using the researcher in the role of participant-as-observer (Gold, 1958) of the evaluation and project process(es). In this way the researcher participates with the project members and documents and provides a depth to the research, which would not be possible with an observer-only role (Babchuk, 1962).

Case study design

Three types of data were collected for this study (see Table 2) including: interview transcripts; reflective field notes (or observer comments); and documents (applications, final reports and meeting minutes)—thereby providing converging lines of enquiry, through a process of triangulation and corroboration. Construct



TABLE 2: DATA COLLECTION

Data type	Beginning (months 1–3)	Middle (months 8–10)	End (months 14–18)
Transcripts	Interview (1) with project manager	<ul style="list-style-type: none"> ■ Interview (2) with project manager ■ Interview with project leader 	Interview (3) with project manager
Documentation	Grant applications	Meeting minutes and other project files if available	Final project reports
Reflective field notes	Observer comments	Observer comments	Observer comments

validity is addressed since ‘multiple sources of evidence provide multiple measures of the same phenomenon’ (Yin, 2009, p. 117). Study data was contained to a minimum and manageable three cases.

The case study protocol included a minimum of three interviews with the project manager over the duration of the project (beginning, middle and end). The questions covered topics such as scoping, identification of stakeholders, development of key evaluation questions, and progress and dissemination plans (see Appendix B). An interview with the project leader halfway through the project was also conducted. Interviews were recorded for transcription, and transcripts were sent to the participants for review and validation.

Coding

Each project (or case) was analysed separately and findings compared and contrasted. Content analysis of the data was carried out using the manual extraction of themes (Krippendorff, 2004; Saldana, 2013). The first cycle coding of the data used an initial coding method (Charmaz, 2014; Corbin & Strauss, 2008) whereby the data was broken down to ‘provide(s) the researcher with analytic leads for further exploration’ (Saldana, 2013, p. 101). This process resulted in 19 thematic codes across the three cases. In conjunction with this initial coding process, NVivo coding was simultaneously performed on the data to identify participant-generated terms and phrases that could illustrate the thematic (initial) codes. These coding methods provide a good fit for action and practitioner research, allowing a more realistic and grounded description to complement the researchers’ academic interpretation (Coghlan & Brannick, 2010).

A second cycle coding process, known as focused coding (Charmaz, 2014), was then undertaken. In this approach, themes (or categories) are ‘constructed emergently from the reorganisation and categorisation of the participant data’ (Saldana, 2013, p. 217). The observer comments were used as reference points to contextualise these emerging themes; a final six themes emerged at the end of this cycle.

Analysis

Computer-based spreadsheets were used to collate all of the codes as this enabled them to be sorted, counted and plotted for simple quantitative analysis. A frequency content analysis of the coded, transcribed narratives provides data that illustrates the differing values or emphasis placed on evaluation and related issues. The themes were similarly collated and quantified. Each of the six themes were plotted on a radar chart allowing for a simple visual comparison between project roles within cases and across cases. Such a comparison is displayed in Figure 2 (page 25).

The codes are listed in Appendix A, alongside an in vivo example (indicative verbatim quotes from interview transcripts). The codes were then reduced to six themes with the numbers correlating with the legend in Figure 2. See Appendix C for details of the quantitative data reduction. Each theme encapsulates factors that inhibit/affect the practice of evaluation and they are summarised in Table 3 (page 25) along with an indicative excerpt from the data.

Findings will be described followed by a discussion of how the findings align to the current literature. The second research question ‘what specific strategies can be used to overcome barriers to successful evaluation implementation, thereby enhancing this praxis’ will then be explored.

Findings

In this section, the findings are reported in two ways: firstly, as individual findings per case, then by comparing and contrasting the findings across the three cases. Reference to the findings from Phase 1 is made when applicable.

Implementing evaluation across the cases

Whilst a project grant proposal may read as presenting a unified approach to evaluation, it does not necessarily follow that all members of a project team will share the same approach. The personal perceptions of evaluation held by an individual project team member may, or may not, align with the perception held by other team



FIGURE 2: DISTRIBUTION OF SIX THEMES IDENTIFIED FROM A PROJECT LEADER AND A PROJECT MANAGER IN ONE CASE STUDY

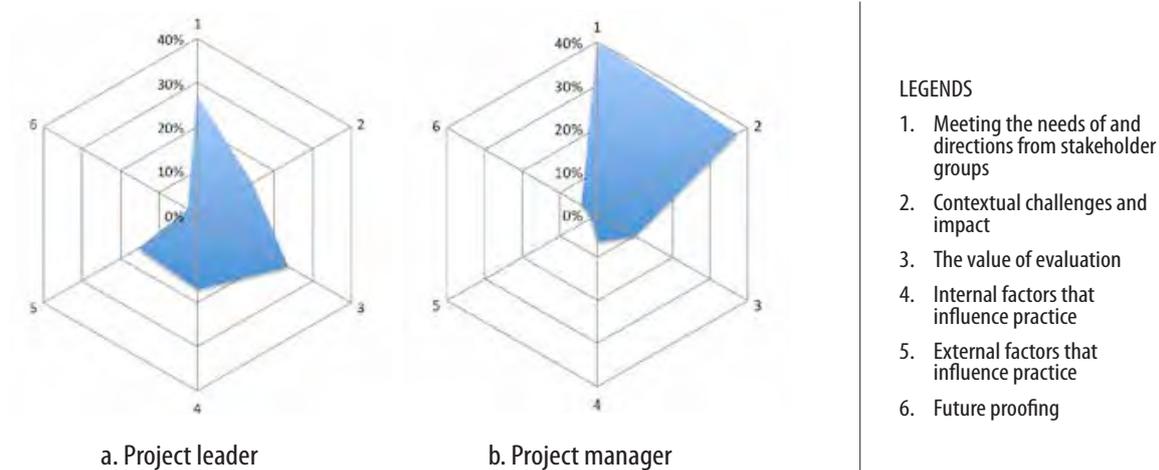


TABLE 3: EMERGING THEMES ON FACTORS THAT INHIBIT THE PRACTICE OF EVALUATION

Themes	Excerpts
1. Meeting the needs of and directions from stakeholder groups	'The reference group signed off on the adjustments or the proposal rationale.'
2. Contextual challenges and impacts	'We haven't got the ethics approval yet.' 'Whose workload does it fall under? There is no clear... it would be a favour from a friend kind of thing.'
3. The value of evaluation	'Any delay would be associated with doing the project better to meet the specification for outcomes...'
4. Internal factors that influence practice	'Evaluation feels like a form filling exercise.'
5. External factors that influence practice	'So a lot of my project management experience... and evaluation experience has been on the job.'
6. Future proofing	'And they [teaching staff] all came back and said oh yes it saved us time but its something we will use in our next session. So the benefit will not be realised till the next session.'



members. We investigated whether or not there was a unified approach to evaluation amongst the project teams for each case study. In the next section the analysis of these findings begins to explore the impact and effect of evaluation alignment on project outcomes.

Case 1—formative feedback

The 12-month project ran almost exactly as planned and no changes were required. Both the project leader (the person who conceptualised the project and applied for the grant, hereafter PL) and the project manager (the person who managed the day to day activities of the grant-funded project, hereafter PM) believed that this was due to their extensive experience in managing learning and teaching projects; therefore, they deemed formal evaluation as unnecessary, particularly due to the ‘small’ nature and simplicity of the project. ‘I wouldn’t have spent any time developing an evaluation approach for a project this small. It would just be ridiculous’ (PL, Case 1). Nevertheless, their grant application mentioned using evaluation as a monitor of progress against project milestones; feedback from stakeholders via the participant action research (PAR) process; and, feedback on the journal publication. This evaluative research approach was used in three of the 15 projects in Phase 1 of this study.

The PL began their interview (held midway through the project completion) by discussing their experience with the theory of change (ToC) evaluation approach. They noted that a ToC document was created at the beginning of the project, but then went on to explain that because the project ran smoothly, there was no need to update this (ToC document):

We probably should have been more focused on the evaluation. I don’t think because of the nature of this project that it’s going to be problematic. But if the project itself was losing momentum then the fact that we haven’t stayed focused on the evaluation could have become a problem. So we are just lucky. (PL, Case 1)

This approach was corroborated by the PM who did not mention any plans for evaluation (during Interview 1) as such, other than the possible use of a critical friend to give feedback on how the project was progressing (although this never eventuated).

Case 2—MOOCS

The PL held a different approach to evaluation compared to the PM who was engaged in the project after the grant was awarded. While the initial codes that were derived from the analysis of both the PL and the PM interview data in this case were similar, an additional three codes were identified for the PL. The PL was additionally aware of the importance of quality, their academic reputation, and the need to influence stakeholders if change was to be

achieved. This compared to the PM who was interested and affected by the minutiae of their day-to-day tasks of project management, which is understandable given that a PM is judged on their ability to deliver the project outcomes in a timely manner. The PM often referred to their own experience (typically 4 to 5 times in a one hour interview) and used terminology to strengthen the fact that they were proficient in the area of project management. This is contrary to Phase 1 findings which had indicated a lack of evaluative skills in the project teams studied:

Apart from you know prior experience in managing large projects. Which I have done quite a lot of, especially research based projects. General experience I think, more formally to keeping an eye on one chapter of a book from Kennedy, Phillips and McNaught—which is chapter 10 on project management evaluation. (PM, Case 2, Interview 1)

While a PM has some understanding of the wider realm of connections and influence, they are less affected by it. The PL, in contrast, talked about feedback and the value of feedback but was not as concerned (as the PM) about who was giving this feedback i.e. stakeholders, steering group members etc. This aligns to Phase 1 findings, which found there was a lack of stakeholder involvement in smaller learning and teaching projects. This experienced PL was quite clear in their personal conception (theme from Phase 1) of the value of evaluation, chiefly that it does not make a difference to project outcomes. In other words, whether you conduct evaluation or not, the project outcomes still need to be achieved:

Maybe people feel like, “look I can achieve all the outcomes of the project and I’ll have a bit of a sense about whether it went well or not”, but actually the main thing is that I’ll do my best there and the evaluation often can feel like a form you’ve got to fill in. (PL, Case 2)

Case 3—embedded mentoring

The original idea for this project came from the PM, who worked very closely with the PL to develop and submit the grant application. The PM in this case very much owned and directed the project with minimal intervention from the PL. In fact, the PL was not available for interview and thus their two perspectives on evaluation cannot be compared.

In this case, the PM constantly referred to lack of time for evaluation throughout all of the interviews. This was a common finding from the projects studied in Phase 1. The PM was experienced at conducting research and according to the application for the grant, had planned to do research-type activities for data collection (i.e. interviews and focus groups). However, there was no time planned for analysis in this project, resulting in no useful evaluation being carried out:



We would love to [reflect on what is working] but it's an issue of time. We are running Session 3 support so we have no downtime at all now. There is no program evaluation time, no planning and development time. It's all booked out. We go straight from end of Session 3 into Session 1. Down to the day. Bang, bang, bang. (PM, Case 3, Interview 1)

When the PM was asked about evaluation at the beginning of the project, the response was that there was no time to do this. Towards the end of this project there was a gradual realisation from the PM that to get useful data (in this case feedback from students), questions should have been asked formatively, with evaluation made part of the ongoing project participation, and not confined to the end.

In this project, the PM constantly looked ahead and discussed how problems and challenges could be overcome next time. This informal and undocumented evaluative practice included reflecting on the project and how it could be modified for the future, to become 'business as usual'. 'I'd look at the sustainability of it from the start and build that in' (PM, Case 3, Interview 3).

Influencing and contextual factors

The data from each of the three cases was compared and contrasted (by analysing the emergent themes). There was a lack of commonality across all cases, although in some aspects there were similarities between two of the three cases.

Individual perspectives

Project leaders in both Cases 1 and 2 had a strong sense of the importance of evaluation, having previously been involved in numerous externally funded projects. However, both believed that these internally funded projects did not need to allocate time to formal evaluation. Similarly, the PMs in both cases, whilst acknowledging an understanding of evaluation (as part of the project process), did not share a similar approach with the PLs to evaluation, thus impacting on their motivation to undertake evaluation activities. Phase 1 of this study also found that the perceptions of evaluation influenced the enactment of evaluation in practice. The PM in Case 3 was somewhat similar to PMs 1 and 2, in terms of acknowledging the need for evaluation; however, in their case they could not find time in the project to conduct any analysis of the evaluation data collected, resulting in no final report or recommendations (as was also found in Phase 1).

Project processes

In terms of project processes, the researcher wished to observe project team meetings. This occurred in Case 1 perhaps because of the PAR approach and an inherent

need to hold discussions with stakeholders on developing survey questions. However, in Cases 2 and 3 there was no evidence that project meeting minutes were kept, in fact, project meetings consisted of informal discussions between the PL and the PM (in Case 2); between the PM and participants (in Case 3); and in both Case 2 and 3, the PM conducting data collecting activities alone. Case 2 held two public presentations on the design aspects (Phase 3) and findings of the project, which the researcher attended.

Stakeholders

The need for stakeholder involvement was a finding from Phase 1 of this study. In Phase 2, it was found that on average, the PMs in all of the cases talked more than the PLs (in simple quantitative terms 38 per cent of the PM's coded interview transcripts, compared to 24 per cent of the PL's coded interview transcripts) on the theme titled *stakeholder influence and directions*; these average scores only tell part of the story. When we look at the percentage on a case-by-case basis, it gets more interesting. As highlighted previously, the PM of Case 3 actually took on a dual role of PM and PL. The scores of PMs in Case 1 and 2 were 40 per cent and 48 per cent respectively, but the average was lowered by PM 3 who scored 26 per cent. This PM was also the defacto PL in Case 3 and this is highlighted by the fact that they scored similar to the other PLs (21 per cent and 27 per cent for Case 1 and 2).

In contrast, the PLs talked more than the PMs on the theme of *the value of evaluation* (on average 21 per cent compared to 7 per cent).

Dissemination

There were various levels of engagement with dissemination across the three cases. In Case 1, gaining ethics approval was highly prioritised. In Case 2, ethics approval was the cause of some delays in the project timeline. In Case 3, the PM did not apply for ethics approval at all, citing this as a reason for not being able to publicly write about findings from the project.

A participatory approach

Again, this approach was cited as one of the themes in Phase 1 of this study, with a call for further investigation of this as a good 'fit' to the sector. In Phase 2, this approach was noted as a difference between the three cases. Case 1 talked about PAR and used this approach to develop the questions they planned to use to gather the data:

PAR groups will consist of assessors themselves and so we expect...to draw upon their direct experience of providing feedback and that potentially will have an impact on how we design our survey or the questions that we decide to ask on the survey. (PM, Case 1, Interview 1)



Case 2 did not use PAR and Case 3 talked about using this approach but in fact was confused about what it really meant and in reality did not use it.

Perceptions

In Phase 1, the perception of evaluation was a finding that emerged and this led to the design of Phase 2 in order to further investigate how such perceptions can influence evaluative praxis. In Case 3, the PM enjoyed diverting from the evaluation questions being asked in order to discuss the content and findings of the project. It was an opportunity for the PM to hold a discourse, to formulate thoughts on what was unfolding in their project. For example:

The convener really does have to create the environment and say yes you [the tutors] can make changes and that's fine. Because they sort of have a flow on because then you have the marking criteria and then you have the criteria that the staff actually use. So then you bring it down to something for the students to put into their assessments but then you bring it down again to the staff to look for in their marking. (PM, Case 3, Interview 2)

Also in Case 3, there was a feeling of uncertainty and concern about being seen as doing the right or wrong thing according to university procedures and hierarchies. This PM was not aware that they could ask the central support unit (Learning and Teaching Centre) for help, and they expressed concern that they would be seen as 'stepping on toes' if it was viewed that they were helping staff with learning and teaching issues.

Discussion

Case study research can be used to explain how context can influence the success of an initiative or intervention (Goodrick, 2014). It can also illustrate cultural specificity of the environment and give rise to a deeper understanding of, in this case, the tertiary education sector. These cases illustrate individual approaches to evaluation, and the fact that different approaches may exist within one project team. This correlates with findings in the literature suggesting that there is an overall lack of common understanding and shared perception of evaluation that is not restricted to the higher education sector (Huber & Harvey, in press), but is evident across the K–12 sector (Azzam & Szanyi, 2011) and in the field of evaluation practice (Christie, 2003; Huber & Harvey, 2013).

How was the *praxis of evaluation* enacted in these three case studies? The PMs in all of the cases were experienced researchers and well versed in data collection. When reflecting on evaluation activities for this study, each was able to clearly describe what they were doing in terms of evaluation, yet there was no identified or named approach or framework referred to outside of the initial grant application; there appeared to be a disjunct between the theory of evaluation and the practice, as

was discovered in Phase 1 of this study (refer to Figure 1). A similar outcome was found in a study of eight distinguished evaluation theorists and 138 evaluation practitioners (Christie, 2003). That study revealed that theory is not requisite to evaluation practice; in fact, evaluators adopt only select portions of a given theory. Even 'those who did claim to use a particular theory did not correspond empirically with the practices of the identified theorist' (Christie, 2003, p. 33). Similarly, a study of K–12 evaluation practitioners found that only 13 per cent (n=212) were able to name the theoretical evaluative approach used during a summative program evaluation design (Azzam & Szanyi, 2011).

If evaluation of smaller projects were to be mandated as suggested by Bearman (2008) and in line with other research requirements such as human ethics approval, it would be interesting to observe the effect this could have on project outcomes. The question remains however, of the extent to which evaluation ought to be mandated. It was clear that one of the cases in this phase of the study did not acquire human ethics approval nor did they carry out evaluation and this impacted on its outcomes.

As previously highlighted, PL2 talked frequently about *external influences to practice* (e.g. experience, connections and influence, refer to Table 3 for details). As noted in the findings section of this manuscript, this perspective differed from the other PL and all of the PMs and may be explained by the highly political nature of the project in Case 2 and the diversity of its participants from all levels of the university. It also acts as a reminder that each project has different influencing and contextual factors. Therefore, there is a need for evaluative approaches that offer an inherent flexibility to adapt to the contextual needs of individual projects, programs or policies (Rog, 2012).

There was no consistent *approach to evaluation* across the cases in this study. In a critical review of the higher education project evaluation literature by the authors, the PAR approach was found to be used in a number of the studies investigated (Huber & Harvey, 2013). The advantages of a participatory approach to evaluation include being able to 'identify locally relevant evaluation questions; empower participants; build capacity; develop leaders and build teams; sustain organizational learning and growth' (Sette, n.d.). As a result, the PAR approach has been proposed for further investigation into its potential supportive role for small L&T (Learning and Teaching) projects (Huber & Harvey, 2013). Phase 1 found three out of 15 projects purporting to use PAR and the analyses of the Phase 2 case studies have indicated that there is in fact some interest in the PAR approach, but mixed experience with applying it successfully.

It was noted earlier that the PLs talked more than the PMs on the theme of *the value of evaluation* as exhibited by the leaders' higher scores on percentage of comments



coded to this theme. This could possibly result from their wider experience of conducting learning and teaching projects and their evaluation (each of the PLs in this study had also worked on large externally funded projects). In addition, they had envisaged the project and therefore had more to say about the importance of the evaluation. If there is to be a project team and/or project manager, then getting them involved in the application stage may be essential to ensure alignment between perspectives and expectations. Furthermore, team meetings held ‘early’ in the project lifecycle need to be instigated in order to clarify the evaluation scope, inputs and approach (Owen, 2006; Stufflebeam, 2011). Without all parties’ involvement in the planning stages, it is possible that the project may not eventuate as initially envisaged. Evaluation aims can be open to interpretation (Huber & Harvey, 2013) and worse still, not supported (Stufflebeam, 2011).

Project processes differed across the three case studies. Project meetings for small L&T projects are often informal (no official minutes kept) and sometimes adhoc (due to competing priorities on the time of team members, as was also evident from Phase 1 findings). At a superficial level, this appears of little significance and may be explained by the ‘small’ size and lack of accountability requirements of the projects. However, if we enquire further, we can see that this lack of record keeping results in a lack of evidence upon which to reflect for the individuals who are ‘living’ the experience (Wadsworth, 2010) and for future grant applicants who could use such evidence and build upon it. The term ‘productive reflection’ is one coined to describe the connection between work and learning. ‘It provides a link between knowing and producing and is a part of the change process’ (Boud, Cressy & Docherty, 2005). Project work is synonymous in academia with research funding opportunities, which in turn can lead to findings, which can further the pursuit of knowledge. Productive reflection through the keeping of evidence of meetings can lead to a powerful and much needed outcome of changing practice and contribution to new knowledge.

There are many ways to *disseminate* outcomes from projects, an essential activity if any level of change to (learning and teaching) practice is desired (Hinton, Gannaway, Berry & Moore, 2011; Southwell, Gannaway, Orrell, Chalmers & Abraham, 2005). If research papers or publications are to be one dissemination method, then gaining human ethics approval is imperative (though not always evidenced in these projects). The importance of disseminating such scholarly outputs cannot be underestimated. Scholarship is defined as ‘making scholarly processes transparent and publicly available for peer scrutiny’ (Trigwell & Shale, 2004, p. 525); whilst these authors are talking about the scholarship of teaching for learning, this definition could equally be applied to the scholarship of evaluation for learning.

The PMs were well versed in project activities and processes, hence their strong alignment with meeting the needs of, and being influenced by, stakeholders (Stufflebeam, 2011). However, both phases of this study found that more engagement could be made with these stakeholders to gain traction with the implementation and dissemination stage of a project to a wider audience. This aligns with the literature in that a balance is needed between ‘attention to context, stakeholder needs, and rigor’ (Rog, 2012, p. 27).

The impact management, planning and evaluation ladder (Hinton, 2014) developed specifically for learning and teaching encourages grant awardees (project leaders) to consider how their project will remain impactful after the completion of the funding, as well as how they will maintain relevant project materials for others to access after project completion. In this study, this process of impact was coded as a theme of ‘future proofing’ and clearly evidenced particularly by the PLs across all three cases.

Potential strategies that could develop evaluation capacity and enhance praxis of evaluation of L&T projects

This study investigated how project leaders’ perception of evaluation affects their praxis. Informed by the findings and research literature, we can now synthesise the key learnings into four potential strategies to develop capacity and thus answer the second research question for this project: what specific strategies can be used to overcome the barriers to successful evaluation implementation and therefore enhance the alignment of evaluation theory and practice?

The strategies are presented with a caveat: generalising results from three cases may not be possible (Saldana, 2013). In this research study, two ‘soft’ (Kreber & Castleden, 2009) faculties were involved, and results and findings may vary in other/‘hard’ disciplines. Nevertheless, key learnings from the results may inform and be transferable to learning and teaching project evaluation in higher education.

1. Evaluation support mechanisms need to be made more explicit—grant applicants and awardees need to be informed from whom and where they can get help. Findings from these case studies have indicated that those who have been exposed to good practice from being involved in larger projects cascade that experience down to the project team (e.g. Case 1 and 2). However, there are other people who start off with smaller grants and projects and who admit that they are quite limited in what they know about evaluation or that they don’t know where to find useful support or tools (e.g. Case 3). In these instances, evaluation activities tend to be given lower priority. Applicants might write about it in the application because it may be required (e.g. a grant application), but this does not guarantee evaluation within the actual



project activities. This could, in part, be a function of a lack of follow up regarding final project reports by funding bodies; the funding bodies may not make any request for articulation about the evaluation process, for example in a final report template (Huber & Harvey, in press).

The findings of this research study indicate that evaluation support mechanisms need to be made more explicit. This finding is an affirmation of the process that some key funding bodies have already established, for example, all OLT grant awardees are sent information about conducting evaluation when they receive their grant acceptance letter.

2. Develop an evaluation Community of Practice (CoP) with other grant recipients to engage in collaborative reflection—previous grant winners and institutional influencers could be included. Support mechanisms could include tools to conduct evaluation, workshops for skill building (in multimodal delivery options such as online or blended) and opportunities to join a suitable CoP (Wenger, 1998). Such forums allow for peers to support each other and provide alternative channels for dissemination of project findings. However, CoPs require institutional support, which may have unsustainable resource implications.

Through the data collection process, this study provided some of the participants with an opportunity to share thoughts and ideas, similar perhaps to what may occur in a CoP. These structured and supported sessions of collaborative reflection (Harvey, 2013) were valued by the participants:

Having the opportunity to have these kinds of conversations, to me has actually been something I would include in your question about reflection and opportunities to do that. It was quite a deliberate... reason for me accepting, wanting to participate in your project...even talking these things through makes me more aware of the fact that you are conscious about how you are evaluating. (PM, Case 2, Interview 2)

Therefore, a CoP facilitated by a person with learning and teaching experience but without vested interest in the project outcomes may be a good support for individuals wishing to reflect on their projects and develop expertise around evaluation. Again, this requires institution level resources, perhaps delivered via a research, evaluation or learning and teaching office.

The ECB model (Preskill & Boyle, 2008) draws on the fields of evaluation, organisational learning and change and adult learning. 'For ECB to be transformational, efforts must be intentional, systematic and sustainable' (Preskill & Boyle, 2008, p. 457). By encouraging scholarly practice within and across project teams, the institution can also build collective understanding and new knowledge.

CoPs can help build community but also trust and understanding of different roles within the institution. This network building is important if an institution wishes to overcome inefficiencies as well as confidence around policies and procedures. Collegiality between both novices and experts in the field of learning and teaching evaluation is imperative in order to harness effective sharing and knowledge building.

3. Require grant applicants to identify how their project builds on previous work—grant applicants should be encouraged to demonstrate how their project (that they are applying for funding for) builds on their own previous work or that of others within the institution. This may encourage the reading of other final project and evaluation reports in order to identify gaps and new directions for deeper and/or wider investigation of issues rather than repeating something that may already have been covered. It also adds the element of sustainability and closes the loop on quality enhancement. Furthermore, novice evaluators can observe differing approaches to evaluation in similar project contexts.

4. Offer grant applicants a flexible framework for evaluation planning—the diversity of internally funded projects has been highlighted through this study. Results from both Phase 1 and 2 have indicated that a one-size approach to project evaluation will not suffice. A flexible evaluation-planning instrument could scaffold the decision-making processes and enhance evaluation capacity development as well as project outcomes.

Final reflections

A key recommendation emerging from the findings of this study is for learning and teaching projects to consider employing the project evaluation praxis strategies that have been developed and discussed above. A future area for investigation could focus on development of an online interactive evaluation-planning instrument tailored to the sector. An online tool that is flexible and responsive may offer an innovative solution that could also add efficiencies into the project evaluation process. This strategy has been used to support the evaluation of large externally funded ICT based projects in the UK (JISC, 2009) but awaits being trialed and implemented for smaller learning and teaching projects.

Across the Australian higher education sector there exist strict and rigorous protocols and procedures for research ethics. Project leaders and teams must comply with institutional and national guidelines. It would be appealing to imagine the impact that an analogous approach to project evaluation would achieve. Future research could investigate higher education stakeholder perceptions about the mandating of evaluation in smaller internally funded learning and teaching projects.



This research study investigated three cases of internally funded learning and teaching projects and how the project lead, in collaboration with their project manager, evaluated their project. The aim of the study was to look at the contextual factors that influenced each project and develop strategies for overcoming the barriers to successful evaluation implementation.

The analysis of the case studies revealed a number of insights. Firstly, a range of diverse contexts underpin learning and teaching projects and their evaluation within the higher education sector and therefore, there is no 'one size fits all' approach. Any evaluation approach or model that is adopted needs to be flexible and adaptable to respond to varying contextual needs. Secondly, the praxis of project evaluation is not aligned. Project evaluation is influenced not only by the perception of the project leads but also by their experience, the support mechanisms available and the timeframe of the project. To achieve stronger praxis between evaluation theory and practice with learning and teaching projects in higher education, we recommend that those involved in project evaluation (ranging from the project leads and managers to organisations and funding bodies), work towards engaging with and adopting the four project evaluation praxis strategies.

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APPENDIX A: REDUCTION OF CODES TO THEMES

Codes	Excerpts	Themes
People: steering committee, audience or reference group	'The reference group signed off on the adjustments or the proposal rationale.'	1. Meeting the needs of and directions from stakeholder groups
Communications: including dissemination activities	'Respond . . . in a way that is meaningful.'	
Feedback on the project reports or outcomes	'So the only usefulness of that feedback now would be as the evaluation as a learning thing for us [which] may help us in a future project.'	
Project management: terminology, process	'We hit all the milestones we had to meet.'	
Research	'Which meant that there was the real world vs. the research project. . .'	2. Contextual challenges and impacts
Issues or challenges	"We haven't got the ethics approval yet."	
Contextual factors: including changing nature of projects, scope creep	'A project is less set [than evaluation] because it is dynamic.'	
Time taken and timing	'I may have underestimated . . . how long it would take to do it.'	
Support: lack of or as needed to move forward adequately	'Whose workload does it fall under? There is no clear. . . it would be a favour from a friend kind of thing'	3. The value of evaluation
Evaluation approaches, forms, evaluands	'And they are just participating in their class and you can treat that as an evaluation.'	
Quality of the project, QE, QA	'Any delay would be associated with doing the project better to meet the specification for outcomes. . .'	4. Internal factors that influence practice
Emotions: conceptions and perceptions of evaluation but also anything emotive	'Evaluation feels like a form filling exercise.'	
Experience important for the project team	'So a lot of my project management experience and evaluation experience has been on the job.'	
Connections or relationships	'Point of reference for others.'	
Influence people who can make change happen	'Here's what was done . . . and so in that way it might have some sort of direct or indirect influence.'	
		5. External factors that influence practice



Codes	Excerpts	Themes
Sustainability of project outcomes	'Yes much more formal but sustainable. Because we don't have the cost of paying people for their time etc.'	6. Future proofing
Impact: moving forward—to have an effect	'And they [teaching staff] all came back and said oh yes it saved us time but its something we will use in our next session. So the benefit will not be realised till the next session.'	
Findings: from the evaluation or the project	'People who were really hanging to try and find some of those principles and just needed the lessons from that project brought in, in order to move ahead.'	
Next steps: where to from here, how is this meaningful?	'Maybe sets of tasks that could be completed immediately by people . . . who want to continue on with the work that's been done in a slightly different way in their own setting.'	



APPENDIX B: INTERVIEW PROTOCOL

AREA/Interview	QUESTIONS	NOTES
1. Project clarification Interview 1 Updates in Interview 2	<ul style="list-style-type: none"> ■ What is the nature of the project? ■ What is the focus of the project? ■ What is the scope of the project? ■ What are the intended outcomes? ■ What (if any) are the project outputs? ■ What are the operational processes developed to achieve the outcomes? ■ What is the conceptual and theoretical framework underpinning the project? ■ What is the context of the project? ■ Are there any identified risks? ■ What key values drive the project? 	<ul style="list-style-type: none"> ■ Are there sufficient resources/admin for this project? ■ Are the plans too ambitious? ■ What may happen to delay the project? ■ Has teaching time been factored in?
2. Evaluation purpose and scope Interview 1 Check for updates in Interview 2	<ul style="list-style-type: none"> ■ What are you evaluating? ■ Why is the evaluation being done? ■ Are you basing the evaluation on any particular method framework or approach? ■ How will the information be used? ■ Who will evaluate this project? Are they suitably skilled? ■ What value will the evaluation process add to the project? 	<ul style="list-style-type: none"> ■ Do they need training? ■ Do they need some support resources?
3. Project stakeholders and study audiences Interview 1	<ul style="list-style-type: none"> ■ Audiences—who will be interested in the results of the study and what types of information do they expect from the evaluation? 	<ul style="list-style-type: none"> ■ How should competing interests be prioritised? ■ Have they asked for feedback on the project? ■ Suggest the stakeholders use these to their advantage – to help guide the project. ■ Be clear to understand the difference between two groups.
4. Key evaluation questions Interview 1 and/or 2	<ul style="list-style-type: none"> ■ What are the KEQs? ■ Some examples could be: <ul style="list-style-type: none"> – What processes were planned and what were actually put in place for the project? – Were there any variations from the processes that were initially proposed, and if so, why? – How might the project be improved? <p style="text-align: right;"><i>[continued next page]</i></p>	<ul style="list-style-type: none"> ■ These may not be finalised and may need to be asked in Interview 2.



AREA/Interview	QUESTIONS	NOTES
4. Key evaluation questions Interview 1 and/or 2	<ul style="list-style-type: none"> ■ What were the observable short-term outcomes? ■ To what extent have the intended outcomes been achieved? ■ Were there any unintended outcomes? ■ What factors helped and hindered in the achievement of the outcomes? ■ What measures, if any, have been put in place to promote sustainability of the project's focus and outcomes? ■ What lessons have been learned from this project and how might these be of assistance to other institutions? 	
5. Data collection methods Interview 1, 2	<ul style="list-style-type: none"> ■ How will the information be collected and analysed? ■ What/who are the data sources? ■ What types of data are most appropriate? ■ What are the most appropriate methods of data collection? ■ How will the data be analysed and presented in order to address the key evaluation questions? ■ What ethical issues are involved in the evaluation and how will they be addressed? 	<ul style="list-style-type: none"> ■ Check if there has been any delay or issues with these during Interview 2.
6. Dissemination of findings Interview 1, 2 & 3	<ul style="list-style-type: none"> ■ How will the evaluation findings be disseminated? Who are the audiences for reports on the evaluation and what are their particular needs and interests? ■ What are the functions of reporting? ■ What reporting strategies will be used? ■ When will reporting take place? ■ What kinds of information will be included in evaluation reports? 	<ul style="list-style-type: none"> ■ Are the stakeholders involved in dissemination plans? ■ May not be able to answer these in Interview 1 therefore ask in Interview 2. Then confirm in Interview 3.
7. Evaluation plan Interview 1	<ul style="list-style-type: none"> ■ What does your evaluation timeline and activity schedule look like? ■ What measures do you have in place to ensure you don't run out of time for the evaluation to take place as planned? ■ Who will you ask to review your evaluation plan? 	<ul style="list-style-type: none"> ■ Has time for reflection been built in to the plan?



APPENDIX C: QUANTITATIVE DATA COLLECTION OF CODES—SUMMARY

CODE	CASE 1		CASE 2		CASE 3	
	COUNT	PER CENT	COUNT	PER CENT	COUNT	PER CENT
1	18	11	25	9	14	7
2	7	4	43	15	19	9
3	19	11	56	20	26	12
4	5	3	33	12	33	15
5	10	6	19	7	15	7
6	10	6	20	7	22	10
7	32	19	18	6	23	11
8	10	6	18	6	9	4
9	6	4	8	3	0	0
10	6	4	13	5	13	6
11	5	3	2	1	0	0
12	0	0	1	0	0	0
13	1	1	2	1	0	0
14	2	1	1	0	5	2
15	1	1	0	0	7	3
16	4	2	0	0	9	4
17	8	5	3	1	10	5
18	4	2	9	3	6	3
19	18	11	8	3	4	2
Total	166		279		215	

Chapter 6

Developing the SPELT (Small Project Evaluation in Learning and Teaching) Framework

“Designing an evaluation plan is a work of art” (Cronbach & Shapiro, 1982, p. 27).

Overview

Scholarly evaluation practices in higher education learning and teaching projects are under-reported in the literature (Huber & Harvey, 2013). In Phase 1 of this study I analysed data from 15 internally funded learning and teaching projects to discover what evaluation methods and approaches were being used. I found that there was a misalignment between what was happening in practice and what the evaluation literature suggested. In addition, project leaders’ perceptions of evaluation inhibited their praxis.

The findings from Phase 1 were further supported by findings from Phase 2 of this study where I took an in-depth look at three project evaluations through a case-study methodology. In the second phase, the contextual influences on evaluation practice were examined and I synthesised findings into recommendations aimed at helping to support good evaluation practice in the small-scale learning and teaching project space in higher education.

One of the recommendations from Phase 2 was to offer directed resources targeted at the evaluation of small-scale learning and teaching projects. In this chapter I describe the development of an evaluation planning framework underpinned by the research question for Phase 3: *What is required to develop a framework to support the evaluation of small, internally-funded learning and teaching projects in higher education?* This phase was written up as a paper titled *Introducing a New Learning and Teaching Evaluation Planning Framework for Small Internally Funded Projects in Higher Education*. It was published in the *Journal of University Teaching and Learning (JUTLP)* and appears as Paper 5 of this thesis. The following summary introduces the paper, and Figure 6.1 gives a visual overview of how Phase 3 fits into the wider study.

Background

Large projects, for example those funded by government organisations such as the (former) Office for Learning and Teaching in Australia or the Higher Education Academy in the UK, often have

mandated evaluation requirements alongside budget allocation in their grant application guidelines. There is also a range of good quality resources to support project teams with the implementation of various evaluative approaches (see, for example, BetterEvaluation, n.d.; Chesterton & Cummings, 2011; Harvey, 1998; Phillips, Bain, McNaught, Rice, & Tripp, 2000). But what of smaller projects (which are the focus of this study) that are limited in both time and money?

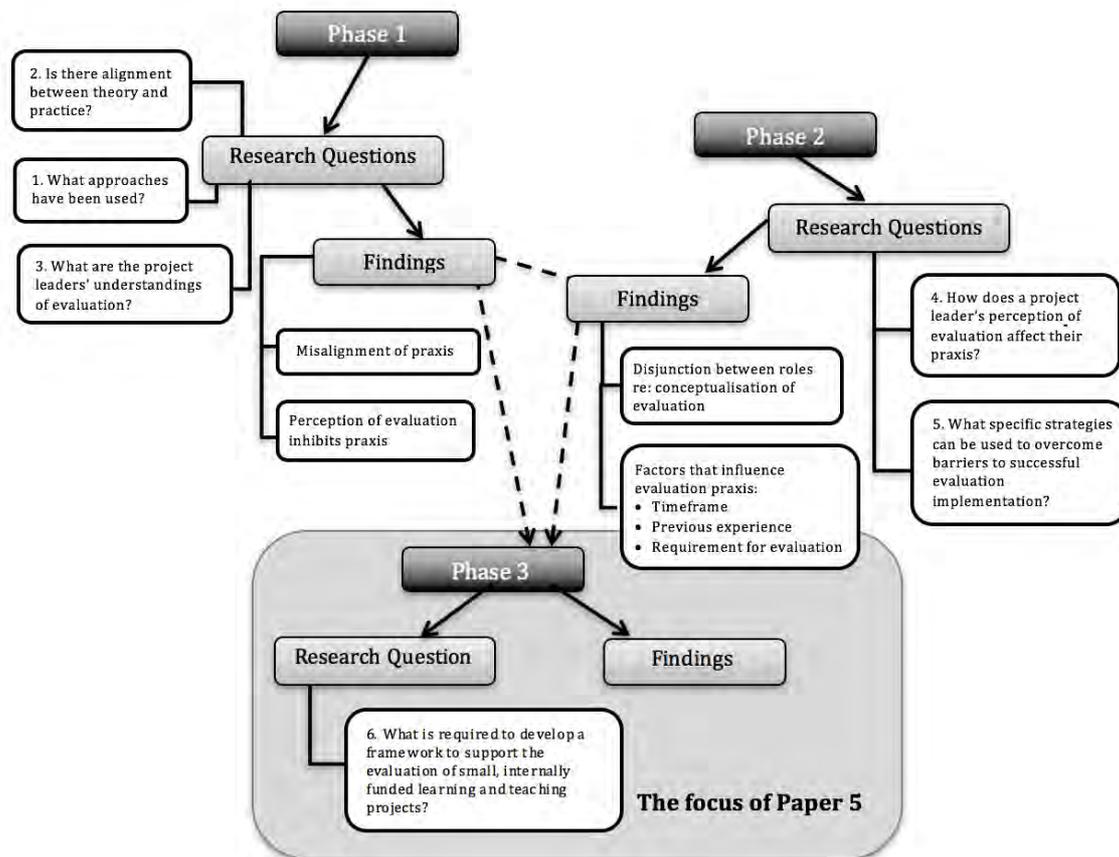


Figure 6.1. A visual overview of the three phases of this study with a focus on Phase 3.

Earlier phases of the study indicated that existing evaluation resources can sometimes be overwhelming and too complex or difficult to locate for the leaders of these smaller projects. Such projects are often led by academics who may be less familiar with the learning and teaching literature and/or the evaluation literature, and they may not be aware of the existence of supporting tools and resources. This was discussed in Paper 3 (Chapter 4). However, the importance of evaluation for improvement of the project outcomes leading to innovation and change cannot be underestimated (Alexander, 1999; McAlpine & Gandell, 2003; Zacharias, 2017) and it would be in the best interest of the academy to promote project evaluation activities and resources (Huber & Harvey, 2016a, 2016b; Olds & Miller, 1997).

For robust evaluative measures to be implemented, a project requires a well-designed evaluation plan (Owen, 2006; Stufflebeam, 2011). A common finding from both Phase 1 and Phase 2 of this study was the need for targeted resources to support small-scale learning and teaching project evaluation, and this key piece of evidence led to the design and development of Phase 3.

The purpose of Phase 3 of this study was to design and test a framework to assist project teams in the development of an evaluation plan that would be flexible and relevant to their contextual needs (Zacharias, 2017). The need for such context-specific evaluation is also highlighted in a report on a national funding programme for student equity projects (Zacharias, 2017). The evaluation-planning framework was informed by leading evaluative scholars including Paul Chesterton, Rick Cummings, Lois-Ellin Datta, John Owen, Michael Patton, and Daniel Stufflebeam. Their work had been incorporated into the development of interview protocols used in earlier phases (see Chapters 4 and 5) and these criteria were further refined in the formation of the initial 12-step evaluation-planning framework. Further details are provided in Paper 5 as to how these 12 steps were developed. (See Table 1, p.4 of the paper.)

Methodology

In the third phase of the research study I investigated the development of a practical evaluation planning framework through two cycles of action research (McNiff, 2001) using primary data from learning and teaching practitioners in higher education.

Data collection and analysis

The 12-step evaluation-planning framework was piloted with a group of academics ($N=7$) from an Australian metropolitan university, all of whom were recipients of learning and teaching project funding. The framework was interrogated through a hands-on workshop and focus group (see Table 2 in Paper 5, p. 6). I used the literature to support the data from this first action research cycle and triangulated the workshop participants' feedback with my own reflective observations. The findings were then applied to the redesign of the framework (into a six-step approach), before I carried out a second action research cycle of development, implementation, and evaluation with a new cohort of small-scale grant recipients ($N=7$).

Findings

Findings showed that a simple six-step approach to evaluation planning (versus a 12-step framework) is appropriate for small-scale internally funded learning and teaching projects. Underpinned by the literature, the final evaluation planning framework is accessible to a wide

range of disciplinary scholars as it is designed to be responsive to various contextual requirements. Furthermore, the research participants agreed that such a flexible evaluation planning framework could contribute to the improvement of their evaluation of learning and teaching innovations.

I spent some time crafting an acronym for the framework to make it memorable and easily searchable. The final name was the SPELT (small project evaluation for learning and teaching) framework.

Further research

The framework has since been converted into an online interactive tool to be used as a resource for project grant holders in their evaluation planning activities. The tool provides users with a range of fields from which to select appropriate answers, or alternatively they can enter their own contextual information if the choices do not apply. In this way, the framework is flexible enough to meet the variability that exists in the small-scale project evaluation space. The tool can be freely accessed with attribution at: <http://tiny.cc/evalplan> and screenshots can be viewed in Figure 6.2 and Appendix X. Once users have completed each of the six steps, they submit their data to the server and a report is immediately created and emailed to them. This is their contextualised evaluation plan which can be used in a grant application and/or during their project as a scaffold for their evaluation.

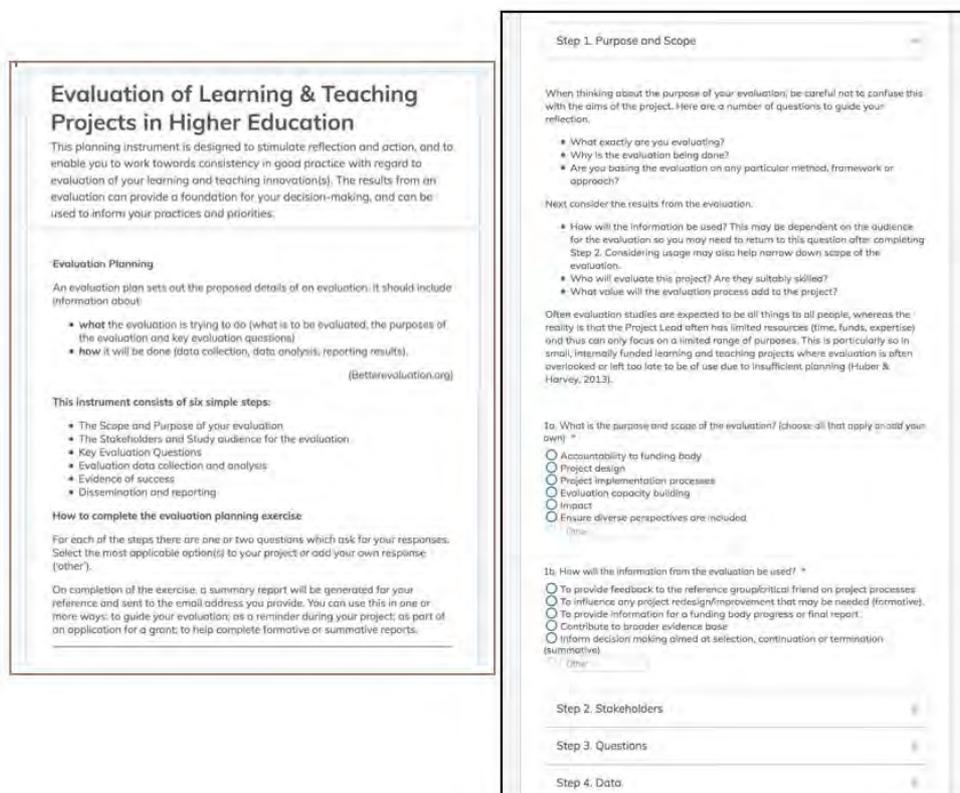


Figure 6.2. Sample screenshots from the SPELT online evaluation planning tool.

Further investigations are called for to trial the tool across a range of projects, disciplines, institutions, and sectors.

Publication

Details of the development of the SPELT framework were presented at the Conference of the International Society for the Scholarship of Teaching & Learning (ISSOTL) in Melbourne, 2015 and it was well received by the participants at the session, many of whom said they had been looking for something like this to help them think through the evaluation needs of their small projects. The paper was then written up, submitted for review (August 2016), and published.

Paper 5

Huber, E. (2017). Introducing a New Learning and Teaching Evaluation Planning Framework for Small Internally Funded Projects in Higher Education. *Journal of University Teaching & Learning Practice*, 14. Retrieved from <http://ro.uow.edu.au/jutlp/vol14/iss1/9>

Pages 93-113 of this thesis have been removed as they contain published material. Please refer to the following citation for details of the article contained in these pages.

Huber, Elaine, Introducing a New Learning and Teaching Evaluation Planning Framework for Small Internally Funded Projects in Higher Education, *Journal of University Teaching & Learning Practice*, 14(1), 2017.

Available at: <https://ro.uow.edu.au/jutlp/vol14/iss1/9>

Chapter 7

Reflecting on the Findings and Making Recommendations

Introduction

The broad aim of this research was to investigate the praxis of evaluating locally funded learning and teaching projects in higher education. The more specific objectives were to:

- investigate the evaluation strategies used in completed learning and teaching projects and determine what had worked and what had not,
- examine the relationship between evaluation theory and practice,
- explore different perceptions of evaluation and how these affect praxis,
- determine what other factors inhibit the relationship between theory and practice of evaluation in learning and teaching projects in higher education, and
- consider what can be done to overcome barriers to evaluation and therefore enhance this praxis.

This three-phase study has produced new findings for the field of small-scale learning and teaching project evaluation in higher education. Each of the phases was self-contained with findings and recommendations discussed in the corresponding published papers. A summary of the phases and findings can be seen in Figure 7.1 where I have outlined how each phase links to the next. In this chapter, the findings from across the three phases are synthesised and referenced to the literature review (Chapter 2), to the original aims and objectives of this study, and to the research questions, namely:

Phase 1

1. What evaluation forms and approaches have been used in one university's internally funded learning and teaching projects?
2. Is there alignment between evaluation theory and practice?
3. What is understood by evaluation?

Phase 2

4. How does a project leader's perception of evaluation affect their praxis?
5. What can be done to overcome barriers to successful project evaluation praxis?

Phase 3

6. What is required to develop a framework to support the successful evaluation of small-scale internally funded learning and teaching projects?

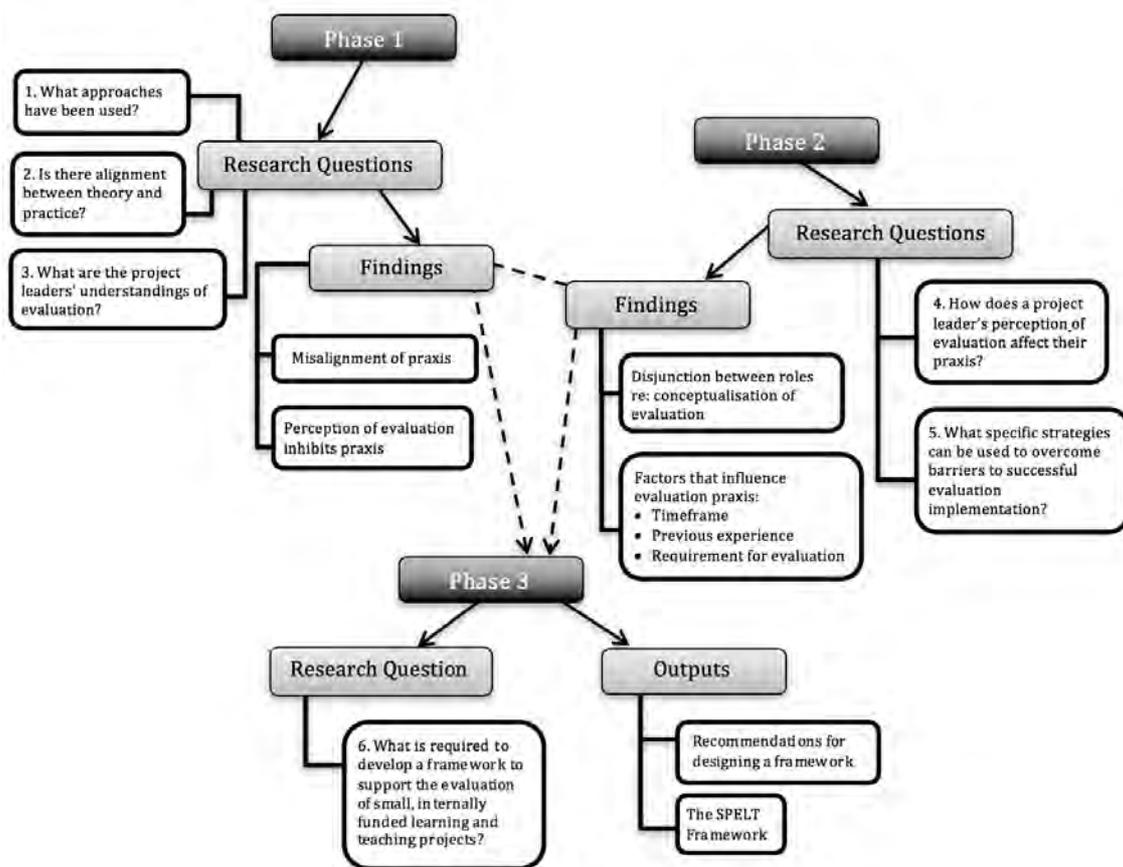


Figure 7.1. Summary of the research questions and associated findings from the three phases of this study.

This discussion is framed through the introduction of a conceptual model (Bergman, 2010) to illustrate the interrelationship between existing tensions and issues in evaluation practice.

A conceptual model

The practice of evaluation in small-scale learning and teaching projects has been investigated in this study. The findings revealed several barriers to successful evaluation practice (see Chapters 4 and 5) and confirm findings from other studies (Alexander, 1999; Bearman et al., 2008; Cybulski, 2010). These barriers include:

- conceptualisations, particularly with the overlap, and even conflation, between evaluation and research;
- lack of skills in evaluation within the sector;
- lack of understanding of evaluation terminology;
- lack of resourcing in terms of time and money;
- insufficient stakeholder inclusion;

- negative perceptions of evaluation;
- contextual challenges;
- previous experience of conducting evaluations;
- networks and influence; and
- sustainability of project outcomes.

Bergman (2010) labels these barriers to successful evaluation practice as tensions and conflicts. Three of the tensions he discusses and has used to construct his conceptual model are *expectations* of the stakeholders, *resources* available to support the evaluation, and *competencies* (knowledge and skills) of the evaluator. Bergman's model is proposed as a way of conceptualising the tensions that are apparent when making an objective evaluative judgment and points at which those tensions intersect. These are depicted in Figure 7.2.



Figure 7.2. Interrelationship between sites of tension in evaluation practice (Bergman, 2010, p. 24).

It is important to further unpack these tensions to fully understand the praxis of evaluation in the context of this study. As Bergman has pointed out:

It is difficult to discern whether tensions around the evaluation process create unsustainable truth claims about the evaluation process, its methods, or its results, whether evaluators themselves introduce these claims in order to present themselves as experts with special insights into how to identify objective truths, or whether evaluation commissioners, politicians, the public, and other stakeholders make unrealistic demands on evaluators that, ultimately, cannot be fulfilled (2010, p. 24).

The findings of this study contribute the affirmation and empirical evidence to support Bergman's conceptualisation. Drawing on the evidence, together with the literature, each component of Bergman's model (numbered 1–7 in Figure 7.2) will be discussed in detail below and corroborated. This is followed by a set of recommendations that can be used to address the tensions that have been identified in this research study.

1. Expectations

Some of the tensions reported in Phase 1 of this research were linked to perceptions about the expectations of an evaluation process. A few participants perceived evaluation to be an accountability measure and therefore would hold back on reporting anything with a negative connotation (Huber & Harvey, 2016a). Others held the perception that in order to be awarded future grant funding, project outcomes needed to align with what the university wanted to see. Therefore, an evaluation approach may be influenced by the tensions generated by perceptions of what is expected of an evaluation process. Stufflebeam (2011) has identified these as sociopolitical tensions: "Unless the evaluation design includes provision for dealing effectively with the people who will be involved in and affected by the evaluation, these people may well cause the evaluation to be subverted or even terminated" (Stufflebeam, 2011, p. 111). Others have also discussed this tension whereby fear and anxiety can influence how evaluations are conducted due to pressures from project or program personnel not to uncover anything that will make the project appear in a negative light (House, 1974, as cited in Rogers, 2002).

In Phase 1 of this study, an important implication from the findings was the need for funding bodies (which in the case of small-scale learning and teaching projects is usually the institution, faculty, or school) to provide constructive feedback about evaluation reports. This was one unmet expectation of the project leaders. If funding bodies mandate evaluation, they should provide guidance about expectations concerning evaluation (over and above just conducting it). This aligns with findings from the review of a national project evaluation resource developed to support large, externally funded project grant holders (Chesterton & Cummings, 2011). That review highlighted the need for an inclusion of a list of funding body expectations regarding evaluation and evaluation reports. A similar recommendation was made during the analysis of a nationally funded programme for student equity (HEPPP) in that policy makers should request universities to complete and publish an equity initiatives map (tool for evaluation and analysis) with their annual progress reports (Zacharias, 2017). These expectations can be highlighted in summative feedback, which should occur after final reports are submitted or better still, during the project in response to formative reporting (see Chapter 4). This was also a recommendation following a review of national and international learning and teaching grant schemes, namely that "feedback should occur on a formative basis in a reflective, collegial atmosphere to allow

progressive adjustments through the life of the project” (Southwell, Gannaway, Orrell, Chalmers, & Abraham, 2005, p. 52). In fact, feedback should be given from the beginning of a project’s lifecycle. Successful (and unsuccessful) grant applicants ought to receive written feedback that is “explicit in highlighting the positive and negative aspects of [the] proposal” (McAlpine & Gandell, 2003, p. 190).

In Phase 2, a key theme extracted from the data was meeting the needs (or expectations) of stakeholders. Findings indicated that the project managers were more influenced by the needs of stakeholders than were the project leaders (in each of the three case studies examined). It is important that all members of a project team “share a common and well defined view of the nature of evaluation. Otherwise their activities won’t complement each other toward achieving some shared objectives of the evaluation” (Stufflebeam, 2011, p. 105).

The first step in meeting stakeholders’ expectations is for the evaluator to be able to correctly identify and engage with these stakeholders. Phase 1 of this study revealed that many participants could not differentiate between stakeholders and study audiences. This distinction is important because, although the two groups may overlap, it is important to consider those who are influenced by the evaluation results (the audience) and those who have something to gain or lose from the results (the stakeholders). Both groups should be involved in the planning of an evaluation (Chesterton & Cummings, 2011) with the caveat that this may not always be possible or practical if the main stakeholder is a large and diverse group such as students. In such cases, a representative may act in this role. A call was made (see Chapter 4) to provide more up-to-date information on contact details for both audience and stakeholders to better facilitate and encourage such interaction and thereby enhance the utilisation of the evaluation results (Patton, 2008).

Recommendations. Four recommendations can be made concerning expectations. These are that:

1. grant recipients must evaluate (or be evaluated) and report their evaluation findings;
2. Require stakeholders to sign off on the evaluation plan;
3. constructive feedback on evaluation reports should be provided by the institution through its funding body; and
4. clear expectations should be provided by the funding body for the type of evaluation required/accepted.

2. Resources

Figure 7.3 identifies the part of Bergman’s model discussed in this subsection. A number of resourcing tensions exist in the practice of evaluation, and two important issues have been identified by this study. These are the lack of funding and time, or, in fact, the lack of both.

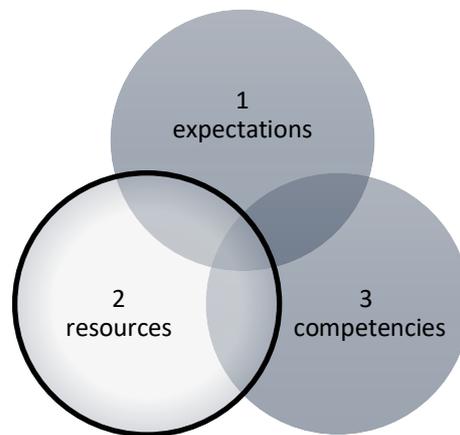


Figure 7.3. Bergman’s conceptual model with Section 2 highlighted.

Funding. Funding opportunities for learning and teaching developments and initiatives are growing scarcer, and this is occurring at a time when economic pressures are rising along with the growth in student numbers (Kift, 2016). This lack of national funding has a flow-on effect to institutions that may reduce, or remove altogether, internal funding opportunities.

One of the implications that comes from a lack of funding for evaluation is the limitation of the range of data collection strategies that can be used (Bergman, 2010). In the small-scale learning and teaching project space, evaluators tend to use methods that they are familiar with, for example, use of funding to incentivise participants to attend focus groups and generate evaluative data. When funding is limited, this valuable source of feedback (formative evaluation activity) is often cut, leading to missed evaluation opportunities as was seen in case two, Phase 2 (see Paper 4, Chapter 5). In that case, the project manager reported that they would need to “pay” participants for their time if they were to ask them for formative feedback. They therefore did not do this and the evaluation of that project was impaired.

Phase 1 of this study also revealed that many project leaders perceived that there was a need to single out a lack of financial resources as a factor that inhibited their ability to evaluate their projects. Some participants felt that if they had a budget for they would pay for an experienced evaluator to support evaluation of their project. This practice derives from practice in the larger funded projects which often mandate evaluation and where project leaders buy-in this expertise (Southwell et al., 2005). Although the findings of some studies support the specific funding of

evaluation activities (see, for example, Bearman et al., 2008), there is no evidence in the literature to demonstrate that specific funding leads to achieving better evaluation praxis for anyone other than the evaluator. It likely restricts the ability to develop evaluation capacity unless the external evaluator uses a form of participatory evaluation. In the case of smaller projects, this expertise can be developed in-house or projects can make use of a critical friend to provide informal, formative feedback (as in one of the cases in Phase 2 of this study and as recommended by Hum et al., 2015). In such a scenario, development of evaluation capacity within an institution is thereby supported and may lead to successful evaluation.

Phase 2 of this study revealed several potential strategies that could enhance the praxis of evaluating learning and teaching projects. One of these was to make evaluation support mechanisms and options more explicit. This strategy may break down the perception that limited funding is an inhibitor to evaluation praxis, if other (non-monetary) support options are available.

Timeframe. The resource of funding links closely with the resource of time. A study of an inter-institutional grant funding scheme indicated that “evaluation schedules in the [grant] proposals were often overly optimistic and ... were beyond the resource and time-scale of the projects described” (Bearman et al., 2008, p. 3). Other studies have also revealed that there was not enough time to implement the initially planned evaluative measures (Bamberger, Rugh, Church, & Fort, 2004; Harris et al., 2010; Ryan, Chandler, & Samuels, 2007).

The focus of this study is small-scale learning and teaching projects and often their duration is short (12–18 months). If sufficient planning is undertaken in the application period for the grant and the early planning stage of the project, time can be allocated for formative evaluation activities, avoiding the tendency to leave evaluation until the end of the project when it becomes a summative-only activity. Although the utility of summative evaluation is to inform decision making, formative evaluation has the power to support learning throughout a project based on its emphasis on improvement (Christie, Lemire, & Inkelas, 2017; Patton, 2014). This was exemplified in both Phases 1 and 2 of the study. Several projects claimed to have needed more time to conduct evaluation. This may indicate a lack of capability or experience in evaluation and a need for better planning mechanisms. The perceived need for more time to conduct evaluation can also be based on fear. That is, the grant holders / project leaders worry about reporting weaknesses or problems to funders (Patton, 2014) and feel they need more time to find solutions to the issues.

Planning. Another of the strategies emerging from Phase 2 was the need for a good evaluation plan. Other studies have also identified the importance of evaluation planning as a crucial factor

to a project's success (Brandon, 1998; Nesman, Batsche, & Hernandez, 2007). An evaluation of a small grant scheme at one UK institution revealed that "grant holders acknowledged that their project plans were often ambitious in scope and as a result had to think carefully how to best use limited resources to achieve their goals" (Morris & Fry, 2006, p. 49). If a project evaluation is well planned, the requirement for evaluation expertise would be identified. Then at the application stage, the grant funding body could allocate a person or unit with expertise to work with the project team to support their evaluation activities as "in-kind" support, in place of a financial contribution. The development of a robust evaluation plan that is flexible and responsive to a project's contextual needs was investigated further in Phase 3 of this study (Huber, 2017a).

Recommendations. Several additional recommendations can be made concerning resources. These are that:

5. support mechanisms should be disseminated, possibly from a centralised unit, including succinct resources on learning and teaching project evaluation;
6. a person in the project team could act as a critical friend, one who provides informal, formative feedback on areas such as evaluation and research processes;
7. easily accessible information should be made available, about evaluation frameworks, methods and approaches, including their benefits; and
8. time should be allocated for evaluation in project plans as well as a provision to revisit the project and assess impact.

3. *Competencies*

Competency in evaluation is the ability to choose an appropriate method for evaluation and to successfully carry out the evaluation processes such as consulting with stakeholders, collecting data, choosing the evaluative criteria etc (Bergman, 2010). Two proxy measures that are conceptually aligned with competency are the expressions *capability* and *capacity*, and these are used interchangeably in this research study. Evaluative capability is the extent of one's ability to conduct evaluation whereas evaluative capacity is the amount of evaluation that can be carried out within an organisation. There needs to be some level of capability in order to build capacity. The findings from this study and others in the literature associated with the terms capability and capacity are discussed in this section. Figure 7.4 illustrates the corresponding section of Bergman's model.

It has been reported in the literature that there is a need to build capacity in evaluation practice across many sectors (Bergman, 2010; Christie, 2003; LaVelle & Donaldson, 2015; Preskill & Boyle, 2008; Smith, 1993), including higher education.

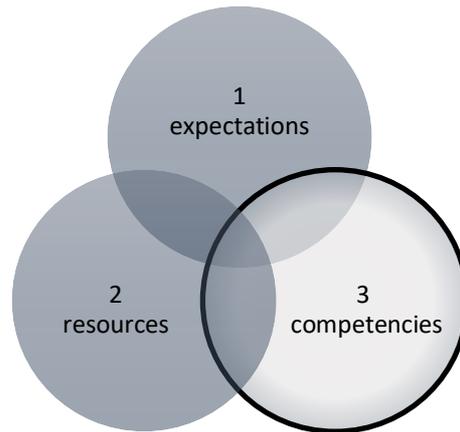


Figure 7.4. Bergman's conceptual model with Section 3 highlighted.

In Phase 1 of this study over half of the participants admitted that they and their project teams did not have sufficient skills in evaluation to correctly conduct a project evaluation. Findings from that phase indicated that some small-scale learning and teaching projects are conducted by teaching staff new to the area of learning and teaching evaluation and that they often lack the experience and expertise to choose appropriate models and approaches to evaluation. Others may be expert researchers in their own disciplines but lack the theory and methods of educational research (Morris & Fry, 2006).

There were few participants who could name an evaluation approach or framework that they were using in their projects in Phase 1 of this study. Although it was not possible to ascertain whether the other participants weren't using an evaluation approach or framework because they were unaware of their existence, it was possible to conclude that a person's understanding of the value, or relevance, of using a tried and tested evaluation method or approach is impacted by that person's perception of evaluation. Building evaluation capacity requires developing and maintaining support mechanisms. This need was highlighted in an Australian government funding body report (Southwell et al., 2005). The authors of this report reviewed the (then) Australian national project grant funding final reports and concluded that among other areas, support for evaluation design, quality processes and reporting within evaluation frameworks was needed. The result of that investigation produced targeted resources for large scale project evaluations (Chesterton & Cummings, 2007).

This need for support leading to evaluation capacity development has been highlighted in other studies (see Nesman et al., 2007) as well as through Phases 1 and 2 of this study. Recommendations were made in those phases regarding a strengths-based approach (Harvey, 2014) whereby it is possible to build on the skills that academics already have, for example, evaluation of one's own teaching, reflective practice, and creating rubrics for student assessment. This is supported by similar findings from a school-based study where it was found that teachers

believed they did not have the skills or the time to conduct evaluation. A proposition was posed that professional development on evaluation should incorporate the skills teachers already have (such as assessment of student work, facilitating small group discussion, and interviews with parents) and show them how to develop their evaluative skills in tandem, rather than assume they have no background in doing observational searches for quality (Ryan et al., 2007).

A theoretical evaluation capacity building (ECB) model has been developed for designing and implementing capacity building activities and processes (Preskill & Boyle, 2008). Although this model was developed with the professional evaluator in mind, it offers a good fit with the higher education sector as it is grounded in adult learning theory and organisational learning and change. The authors discuss the need for improving attitudes toward evaluation and how to reduce stress and anxiety around evaluation, and this aligns with the findings in Phase 1 of this study (see Chapter 4). They conclude that any attempt at ECB needs to be “intentional, systematic and sustainable” (Preskill & Boyle, 2008, p. 457). Many evaluations focus on outcomes and judgements and can give rise to a fear of failure pervading evaluation (Christie et al., 2017). Building a more supportive environment, one in which we can learn from failure, is important if we want to encourage sustainable evaluation praxis and build capacity. Furthermore, clarifying the roles of stakeholders in evaluation is key to differentiate perceptions, expectations and emotions in the evaluation process.

In Phase 2 of this study a need was identified to develop evaluation capacity and make recommendations for developing CoPs (Wenger, 1998) among grant holders and previous grant recipients. The importance of offering opportunities to share practice with others was corroborated by findings from studies that investigated how small-scale research projects can enhance teaching and learning (Dexter & Seden, 2012; Morris & Fry, 2006). The need for development of evaluation skills and the use of support networks was also highlighted in a national review of learning and teaching funding agencies (Southwell et al., 2005). Creating networking opportunities builds on the exchange of information between novice and expert and again leads to a learning scenario. This need for dialogue and reflection to support ECB aligns with a recommendation by Preskill & Boyle (2008). There is a significant (and growing) body of literature on professional learning communities and their value (see, for example, Watson, 2014). However, we need to be cognisant that as the larger project funding opportunities dwindle through lack of government support (Kift, 2016), fewer people gain the opportunity to experience being part of a larger project and therefore cannot pass on the evaluation knowledge and skills to the next generation of project evaluators. As our evaluation experts leave the academy we need to investigate new ways to pass on this knowledge, in fact, to keep it alive.

Communities of practice are one avenue through which evaluation expertise can be distributed. However, such communities require a certain level of facilitation. These could be supported within an institution's existing structure from a research, evaluation, or learning and teaching office (see for example Morris & Fry, 2006). An office that is not directly invested in the evaluation outcomes would make a good choice because there is still a perception of evaluation being an audit mechanism, (this will be discussed in more detail later in this chapter). This would offer an environment that is less judgemental, less threatening, and more objective, hopefully lowering this perceived inhibitor and enabling the participants of the CoP to become receptive to more open discussion and to feedback.

Recommendation. One additional recommendation can be made concerning competencies. This is the need to:

9. develop an evaluation CoP whereby grant recipients can engage in collaborative reflection. Include previous grant winners and institutional influencers.

The three independent tensions of expectations, resources, and competencies have been identified and discussed. These tensions are interrelated, as shown in the sections of the model numbered 4–6 in Figure 7.2. The next three subsections describe these interrelations and any further recommendations that can be synthesised from the findings.

4. *Expectations/resources*

Figure 7.5 illustrates the area for discussion in this section, the tensions that arise when expectations and resources intersect. In an analysis of a national student equity programme, a number of recommendations were made for improvement of policy and practice (Zacharias, 2017). One of these recommendations (number 10), was to develop a national framework to enable systematic evaluation of the influence of these funded initiatives, i.e. if evaluation is expected, guide the grant holders in the process of conducting the evaluation. A similar recommendation from my study resulted in the development of the SPELT framework (Huber, 2016).

Another example of this intersection between expectations and resources, is when it comes to identifying who the stakeholders are. One recommendation to emerge from Phase 1 of this study identified a need for the clarification of who they are and what their roles are in the organisation, along with straightforward mechanisms through which to contact these people, while at the same time identifying the purpose of any interactions. A resource that clearly explains the difference between stakeholders and study audiences is clearly needed as many participants in this study

could not differentiate between the two. Such a resource could help evaluators identify the correct person(s) in the roles of stakeholders and/or study audiences. As participants in both Phase 1 and Phase 2 mentioned, engaging stakeholders who are at an executive level of a university often meant that they had limited time to engage with the project. As a result, that potential link of using and promoting the evaluation results via an executive stakeholder ended up being a missed opportunity.

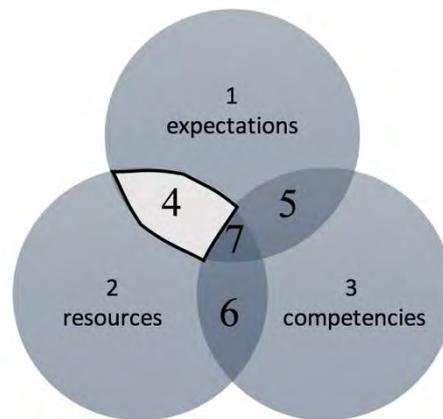


Figure 7.5. Bergman's conceptual model with Section 4 highlighted.

As a key resource, the grant application guidelines are important for setting the scene and managing expectations of evaluation, and many participants in this study were guided in their evaluation activities (or in some cases non-activity) by these. Major funding bodies such as the (former) OLT, the JISC in the UK, and the NSF in the USA (see Chapter 1 for further details) provide extensive resources to support grant recipients in the management and evaluation of their projects. However, information regarding how to best identify and utilise the stakeholders is not provided. For internally funded projects, the focus of this study, such local resources would be invaluable.

Phase 1 of this study called for constructive feedback to be given to project leaders on evaluation/project reporting (Chapter 4). Phase 2 called for clearer explanation of the purpose of evaluation and indeed to mandate evaluation in small-scale projects (Chapter 5). However, mandating of evaluation is not always welcome in these small projects as demonstrated by a participant in Phase 1 who claimed they would not apply for a grant if they *had to* evaluate it (Huber, 2016a). There was also a participant in Phase 3 who admitted that they just “forget” to do the evaluation and no one had ever followed up on it (Huber, 2017a). Mandating evaluation does set clear expectations but if it is to be mandated there needs to be a check-in process whereby the project leaders are supported in their evaluation efforts.

Students are often the stakeholders in small-scale learning and teaching projects, both implicit – students as participants, and explicit – students as partners. To get student input on a project, there is an expectation from the institution around the need for human ethics research approval. This can be a time-consuming process and, as discovered in Phase 2 of this study (Chapter 4), not every project leader understands the need for early application for ethics approval (if at all). It has been found that obtaining human ethics research approval is one of the most challenging processes in conducting a project (Hum et al., 2015). By not engaging students as a stakeholder group, dissemination prospects are then limited. Furthermore, I did not come across any examples in this study where students (as major stakeholders) were involved in the design of the evaluation. Again, this is a missed opportunity and a recommendation for future project holders.

Recommendations. Two additional recommendations can be made concerning the intersection of expectations and resources. These are that:

10. support mechanisms should be provided to help identify stakeholders and study audiences; and
11. stakeholders such as students should be involved in the design of the project evaluation to enhance use.

5. *Competencies/expectations*

Figure 7.6 illustrates Bergman’s model and the area for discussion in this section, the tensions that arise when competencies and expectations intersect.

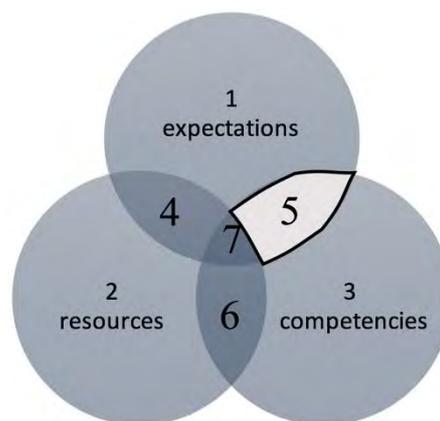


Figure 7.6. Bergman’s conceptual model with Section 5 highlighted.

This study has provided evidence of a misalignment in the praxis of evaluation in small-scale learning and teaching project evaluation. The perceptions of the project leader have been shown to affect this misalignment as “past experiences lead the perceiver to develop expectations, and these expectations affect current perceptions” (Johns & Saks, 2008, p. 76). Therefore, novice evaluators who lack the experience (or competence) may develop their own misinterpretation of

the funding body's expectations, that is, they may perceive that evaluation is to be an accountability measure or summative in nature. This was evident in Phase 1 (described in Chapter 3) and Phase 2, case two (in Chapter 4) where no evaluation or low quality evaluation were evidenced. The lack of deep understanding of the multiple purposes of evaluation can lead to these misconceptions.

When a CoP is used for sharing evaluative skills and knowledge, expectations and understanding of requirements can be discussed to ensure everyone is in agreement or at least has a shared understanding. The CoP supports learning and competency building (Wenger, 1998) and can also foster conversations around teaching that can lead to enactment of systemic institutional change (Hum et al., 2015). Another example of this intersection between expectations and competencies was found in a study where, through lack of experience, the initial evaluation plan (expectation) was overly ambitious and resulted in a failed evaluation outcome (Nesman et al., 2007). Care needs to be taken, in any evaluation, not to overcommit and underdeliver. The development of Phase 3 of this study and of the SPELT framework are in response to meeting this need (see Chapter 5). Another way to ensure the expectations are aligned to the competency level is to provide newly arrived academic staff at an institution with abstracts or project summaries of previous grant awardees to enable an understanding of the kind of initiatives that can be undertaken as well as relevant and useful contacts (McAlpine & Gandell, 2003).

This interplay between competencies and expectations can play out on behalf of the evaluators but also through the people or groups who call for or fund the evaluation. They may (wrongly) assume that the grant holders (or project leaders) have the relevant skills to select appropriate evaluative methods or approaches (Brandon, 1998) when in fact, as evidenced in this study, they do not. Unless they call for, and follow up on, explicit evaluation information to be supplied in both the grant application and any formative or summative reporting, the likelihood of quality evaluation practice occurring is lowered. It is not enough to simply require evaluation in an application for project funding (such as is detailed in McAlpine & Gandell, 2003 and Dexter & Seden, 2012). This study has revealed that novice evaluators often expect more guidance about what and how they should be evaluating when in fact grant funders are not always forthcoming in this regard (Huber & Harvey, 2016a).

There is often an expectation by funders that evaluation and/or project outcomes be disseminated and counted as a measure of impact (Hicks, 2017). The ability to carry this out successfully will depend on the project leader's competency in this area. For novices in the learning and teaching space, the correct channels to disseminate outcomes are not always

apparent. The SPELT framework identifies this important step and provides some reflective prompts on how to meet this expectation.

Recommendations. Two additional recommendations can be made concerning the intersection of competencies and expectations. These are that:

12. funding bodies (or grant committees, depending on context) should follow up on reporting requirements and provide timely feedback; and
13. grant applicants and awardees need to be informed from whom and where they can get help (e.g., with evaluation planning, developing evaluation questions and criteria for judging, dissemination opportunities and identifying a “critical friend”).

6. Resources/competencies

Figure 7.6 illustrates Bergman’s model and the area for discussion in this section, the tensions that arise when resources and competencies intersect.

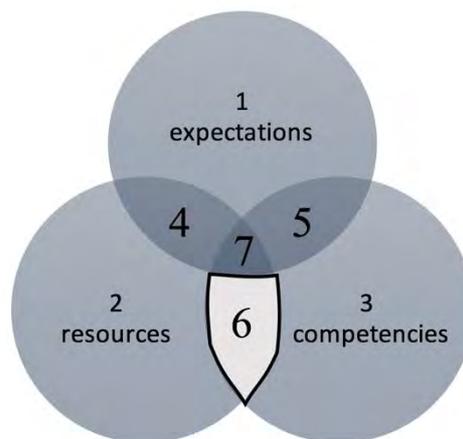


Figure 7.7. Bergman’s conceptual model with Section 6 highlighted.

Although resources exist to support different approaches to evaluation, in today’s information age many find it difficult to navigate to the appropriate resource, one that is timely and relevant to their contextual needs (Bergman, 2010). Many evaluation approaches are complex and not suitable for smaller scale projects (Stoner, Meadan, Angell, & Daczewitz, 2012), a fact that was highlighted in a review of a seminal resource for large learning and teaching projects (Chesterton & Cummings, 2007). In that review, a call was made for clarification of ways in which the resource could be used depending on the evaluation expertise and experience of the user. Some institutions create and maintain their own evaluation resources. However, many central units responsible for grant administration are overcommitted and under-resourced and rely on links out to other institutions’ resource repositories.

There are governmental resources such as those provided by the former Office for Learning and Teaching in Australia, but if these lose funding they lose the ability to be maintained. Furthermore, these resources tend to be aimed at bigger projects and are not always able to be adapted to smaller projects, particularly by novice evaluators. From this study, it is possible to conclude that there are no resources specifically aimed at supporting small grant holders in their evaluation endeavours, and this resulted in the development of the SPELT framework and associated online evaluation planning tool (Huber, 2017a).

An added benefit of utilising the SPELT framework is to introduce some consistency in the small learning and teaching innovation space. Universities are no longer stable environments in terms of personnel (Hicks, 2017). Encouraging public dissemination of project outcomes (SPELT step 6) is vital to ensure that institutional knowledge is retained and sustained. However, care needs to be taken on the format of such dissemination practice, as final reports are not always the best way to publicise findings. Internal presentations and informal seminars via CoPs are also valuable channels.

There is evidence in the literature that the lack of financial incentives is a barrier to the growth of professional evaluators in the field (Worthen & Sanders, 2011). Although the evaluation in the space defined in this study is not carried out by professional evaluators, parallels can be drawn to these findings. My study has demonstrated that the negative perception of evaluation inhibits a person's praxis and influences their practice. Therefore, if we wish to build evaluation competence in the higher education field we need to find ways of overcoming these negative perceptions.

Crowdsourcing is the process of getting work completed or ideas generated, voluntarily or at low cost, from an online community or group of people, with the principle that more heads are better than one (Estelles-Arolas & Gonzalez-Ladron-de-Guevara, 2012). Crowdsourcing information to support evaluation activities is another method that could build in efficiencies and overcome the perception of needing more time for evaluation as well as contributing toward capability building. Activities could include piloting of test survey items, getting feedback on reports, and even validating analyses of data (Azzam & Jacobson, 2015).

Efficiencies. Efficiency and continual improvement is what drives the economy and keeps us at the forefront of development (Linich & Bergstrom, 2014). Companies, institutions, and individuals investigate and trial new approaches to save time and/or money in order to find more effective ways of working. Time is a factor when considering evaluation activities with many practitioners perceiving that they do not have time to do the evaluation, that it is an extra, a luxury so to speak. A recommendation arising from the initial review of the literature (see Chapter 2)

suggests that use should be made of existing evaluation systems such as those intended to assess teaching and course design or delivery. This would enable a more seamless integration of evaluation into embedded systems and avoid the need for additional technologies or administration to be introduced.

Learning analytics is a growing trend in universities with the New Media Consortium's Horizon report for higher education suggestion that the use of such analytics is in the one-year-to-adoption category (Johnson et al., 2016). Many institutions now have strategies and procedures for collecting learning and teaching data. This could be advantageous for evaluation and again introduce efficiencies through use of this accessible and available data. Looking at data collection through another lens, evaluative data could also be harvested and used to identify how future projects could build on the findings of previous projects, thus completing the quality assurance/quality enhancement loop. Grant applicants can be given access to such data possibly leading to evaluation capacity building as well as deepening their learning and teaching knowledge base, as they are made aware of other initiatives and findings within their institution (Huber & Harvey, 2016b). A similar finding was discussed in an evaluation of an internal learning and teaching development grant scheme where the authors emphasised local dissemination to departmental colleagues as a way of increasing the impact and value of evaluative findings (Hum et al., 2015). The SPELT framework and associated evaluation planning tool developed through Phase 3 of this study is another channel for aggregating evaluation data within an institution to sustain the idea of building in efficiencies and strengthening the evaluation capacity of staff. Caution must be used however to ensure that there is ethical approval to use such data as it may have been collected for other purposes.

Recommendations. Three additional recommendations can be made concerning the intersection of resources and competencies. These are that institutions should:

14. provide targeted evaluation resources specifically aimed at supporting small grant holders in their evaluation endeavours;
15. make use of existing evaluation systems such as those used to assess teaching and course design or delivery to build efficiencies into the evaluation process; and
16. provide evaluative data from previous projects for prospective grant applicants so they can identify how their project builds on previous work.

7. Conceptualisation

The final section of the Bergman model focuses on the central intersection of each of the tensions. Figure 7.8 illustrates this section.



Figure 7.8. Bergman's model with Section 7 (now named 'conceptualisation') highlighted.

Terminology. The goal of research is to seek a conclusion in order to generate new knowledge in a particular area. Evaluation, while sharing a number of subtle similarities with research, is usually specific to a context or requirement, and findings are judged against criteria and therefore lead to decisions (Alkin, 2011; Alkin & Taut, 2003) or actions (Patton, 2014). A dominant theme evident in the data collected in Phase 1 of this study was that of the intersection and conceptual conflation between research and evaluation. A similar finding was noted in a research study about the project evaluation methods used in papers from two international conferences on technology-based learning in education (Alexander & Hedberg, 1994). The authors of that study identified a confusion between the terms assessment and evaluation and clarified assessment (or data collection) as being one component of evaluation. Research underpins the role of an academic and is part of who they are and what they do. It is not surprising therefore that there would be overlap and conflation between the subtle nuances of research and evaluation. This was discussed in detail in an earlier paper (Huber & Harvey, 2016a) and I concluded that these misconceptions and the conflation of terms negatively impacted on the praxis of evaluation in small-scale learning and teaching projects.

To understand further why such (mis)conceptions exist and how we can approach solutions to the issues such conceptions bring about, we can refer to a phenomenographic study carried out on academics' conceptions of research (Brew, 2001). Findings of that study indicate that there are four variations in which researchers conceptualise what they do. These variations are described as domino, layer, trading, and journey conceptions. Each conception type is discipline

independent. Furthermore, Brew did not format these conceptions as hierarchical, as is done with student conceptions of learning, but rather in a matrix where each variation is categorised as having either an orientation outward, focusing on external products, or an orientation inward, focusing on internal processes. The variations are further differentiated according to whether the researcher is in the focus of awareness or is essentially absent from it. Mapping these four conceptualisation types onto evaluative data may result in further understanding of *how* the conceptualisation of evaluation impacts on praxis.

A significant finding in Brew's study was the issue of communication (Brew, 2001). Although it was assumed that there was a common language (of research), different conceptualisations meant that individuals were often at cross-purposes when discussing research. "Whenever a process of inquiry is talked about or engaged in, what is said and done is dependent upon underlying conceptions about the nature of research" (Brew, 2001, p. 283). I propose that the same can be said about evaluation since it too is a process of enquiry. Practitioners' conceptions of evaluation shape what they do and how they evaluate. Others have also discussed the language of evaluation and how it can "shape our perceptions, define our 'realities' and affect our mutual understanding" (Patton, cited in Kirkhart, 2000, p. 7).

There is a growing body of work on improvement science, and more recently leading evaluators have begun to investigate how this overlaps with the field of evaluation (Christie et al., 2017). I propose that the simple notion of using a term such as improvement science may in fact reduce the perceived negative connotations that evaluation can often arouse, particularly in educators. This is an area that warrants future research.

Role-based conceptions. Phase 2 of this study revealed that, although project leaders (the ones who conceptualise the project and write the grant application where they define the planned evaluation strategies) were experienced and widely read in evaluation theory and practice, the actualisation of the plans was not realised. In two of the three cases investigated, a project manager had responsibility for the day-to-day running of the project and had different understandings and experience with the evaluation (compared with that of the project leader). This contributed to the misalignment of evaluation praxis. In a seminal study on the praxis of evaluation theorists and evaluation practitioners the researcher found a similar phenomenon and concluded that "the gap between the common evaluator and the notions of evaluation practice put forth by academic theorists has yet to be bridged" (Christie, 2003, p. 34).

One of the themes from the data collected in Phase 2 was that of *the value of evaluation*. There was a clear difference in how project team members valued or perceived evaluation

(Huber & Harvey, 2016b). Many small-scale projects do not have both a project leader and a project manager. In fact, many small-scale projects are run with a team of only one, in which case the different conceptualisation of evaluation within a project team is not an issue. However, having a critical friend or a colleague with whom to discuss thoughts about evaluation is advisable (Hum et al., 2015) lest misconceptions deepen (Stufflebeam, 2011).

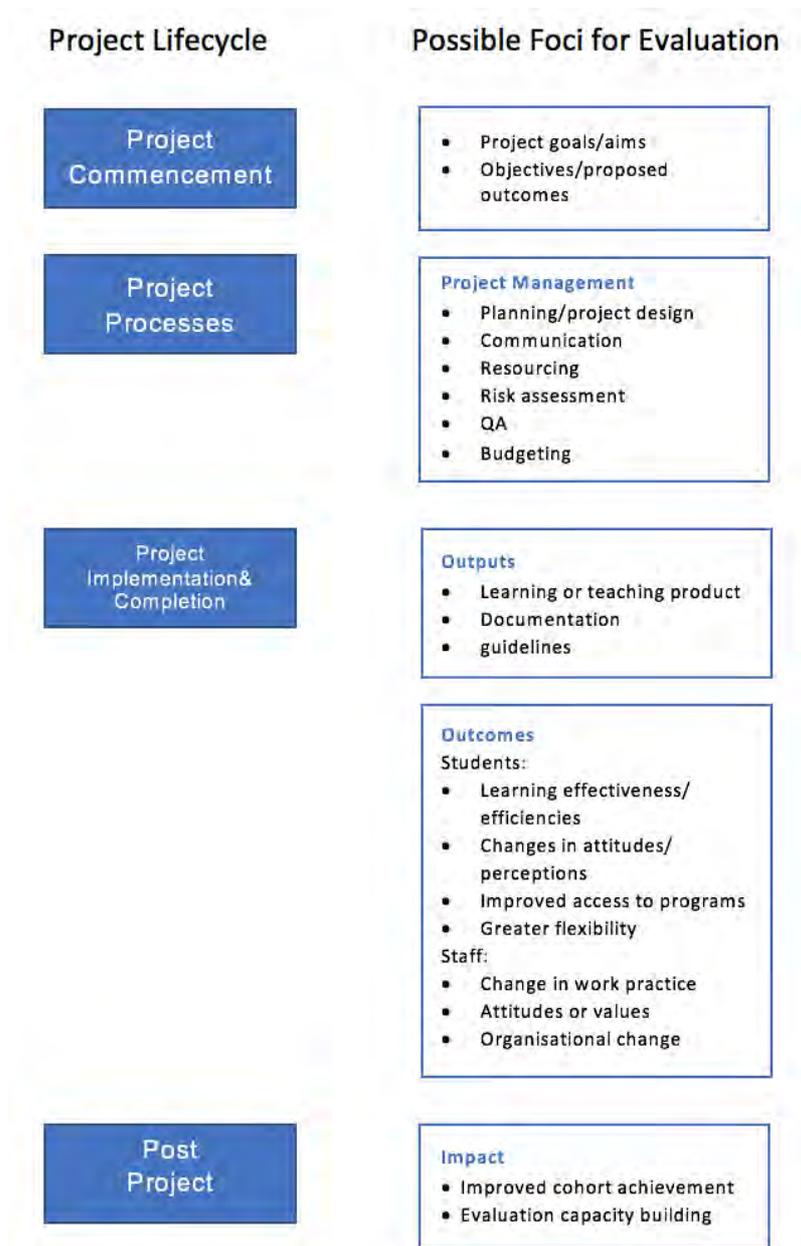


Figure 7.9. Possible foci for evaluation in a learning and teaching project (adapted from Chesterton & Cummings, 2011).

This sharing of evaluation knowledge and practice between novice and experienced evaluators to build evaluation capacity has been discussed (Section 2 above, *Resourcing issues*) but there is an added benefit to such activity in that it can promote shared (positive) perceptions of evaluation.

Purpose. “Accountability, learning and improvement are three of the primary motivators for evaluation” (Vo & Christie, 2015, p. 43). Within the learning and teaching project evaluation space, there are a number of different purposes or foci, some of which are highlighted in Figure 7.9 A person’s conception of evaluation (which can arise from their understanding or experience of the purpose of evaluation) can then influence their practice. Many of the cases and participants in this study have not been clear about the purpose of evaluation in their projects. This finding led to Phase 3 of the study, the development of the SPELT framework (for planning evaluations of small learning and teaching projects) to help project leaders think through their context and choose an appropriate focus and corresponding evaluation approach (Huber, 2017a).

If evaluation is conceived only as an accountability measure, this can lead to a negative perception:

If persons whose work is to be evaluated are not involved in discussions of criteria by which their work will be judged, methods by which data will be supplied, and audiences who will receive the reports, these persons can hardly be expected to be supportive of the evaluation. (Stufflebeam, 2011, p. 112)

Phase 1 of this study revealed that 40% of the project leaders interviewed ($N = 15$) felt their work (project) was being judged (Huber & Harvey, 2016a). A few of these participants declared that they did not want to evaluate or chose not to follow up with evaluation activities so that they could avoid this perceived monitoring of their work. This conceptualisation was found to be an inhibitor to conducting evaluation; however, this perception actually arose from a lack of confidence in their evaluation skills and/or learning and teaching expertise. There was a lack of understanding about the different purposes of evaluation other than accountability and therefore they did not, or could not, see the value of evaluation to them or their project.

Evaluation as a learning process has long been discussed in the literature (Hoole & Patterson, 2008; Rog, 2015; Shula & Cousins, 1997; Torres, Preskill, & Piontek, 1996). Learning that takes place during the evaluation process can often be unintended, particularly when stakeholders are involved in the cycle of reflection and self-evaluation (DeLuca, Poth, & Searle, 2009). In a study on evaluation use, the authors suggest that “when individuals participate in an evaluation process that is collaborative and guided by dialogue and reflection, learning occurs not only at the individual level but also at the team and organization levels” (Preskill & Torres, 2000, p. 26). Such an approach to evaluation “can take organization members down a path of learning that is both intentional and transformative” (Preskill & Torres, 2000, p. 35). When an action research approach to project evaluation is taken, evaluators conduct ongoing (formative) discussions with stakeholders to create productive partnerships, for example in a work-integrated learning scenario

(Harris et al., 2010). This engagement and ongoing discussion with stakeholders, although desirable, is not always practical. In Phase 2 of this study, participants reported that stakeholders for their project were often high-ranking academics with little time to engage with the details of the project and provide the necessary feedback. What can we do to encourage this integration and support the idea that evaluation can support learning and lead to improvement?

Recommendations. Two additional recommendations can be made concerning conceptualisations. These are that institutions should:

17. consider modifying the language used when discussing evaluation. Reflection may be a better fit with learning and teaching, or a term such as *improvement science* may fit with a wider range of disciplines; and
18. provide models or exemplars identifying how to incorporate evaluation into the research cycle.

Knowledge contribution

The critical review of the literature that underpinned this study identified a number of issues for evaluation practice in the higher education sector. This study has filled the identified gap, namely that more research is needed on the praxis of evaluation.

This study has provided empirical evidence that supports the conceptual model proposed by Bergman (2010) of the interrelationships between sites of tension when producing an objective evaluation. It has provided practical suggestions, in the form of recommendations, about how to overcome these tensions and therefore produce a contextually sensitive environment where quality evaluation can take place in the small-scale learning and teaching project space. The recommendations from each phase of the study have been mapped with those presented in this chapter to ensure a comprehensive coverage. The set of 18 recommendations can be synthesised (and reduced to 11 recommendations) under two headings; one for the project/grant awardees and one for the funding body (institution).

Recommendations for small grant awarding bodies

1. Mandate evaluation and its reporting; follow up on reporting requirements and provide constructive feedback.
2. Provide clear expectations for the type(s) of evaluation required/accepted.
3. Require stakeholders to sign off on the evaluation plan.

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4. Provide support, possibly from a centralised unit, including succinct resources and their dissemination, about learning and teaching small-scale project evaluation. These resources might be:
 - a. easily accessible information about evaluation frameworks, methods, and approaches, including their benefits;
 - b. model(s) identifying how to incorporate evaluation into the research cycle, e.g., the SPELT framework which has been specifically designed for small-scale learning and teaching projects;
 - c. support for identifying stakeholders and study audiences; and
 - d. information about where and from whom project leaders can get help.
 5. Develop an evaluation CoP with other grant recipients to engage in collaborative reflection. Include previous grant winners and institutional influencers.
 6. Provide evaluative data from previous projects for prospective grant applicants so that they can identify how their project might build on previous work.

Recommendations for small grant applicants and awardees

7. Involve stakeholders such as students in the design of the project evaluation to enhance use.
8. Make use of existing evaluation systems such as those used to assess teaching and course design or delivery to build efficiencies into the evaluation process.
9. Engage a person in the project team to act as a critical friend, one who provides informal, formative feedback on areas such as evaluation and research processes.
10. Consider modifying the language used when discussing evaluation. For example, reflection may be a better fit with learning and teaching.
11. Build in a time allocation for evaluation in project plans as well as provision to revisit the project and assess its impact.

Summary

To conclude this chapter, the reader is reminded of the initial research questions, aims, and objectives that framed this study and how the findings have related to each of these.

1. *What evaluation forms and approaches have been used in one university's internally funded learning and teaching projects?*

The literature review had indicated little extant literature about how small-scale learning and teaching projects have been evaluated. This question was designed to investigate the type of evaluation that was taking place in practice such that recommendations could be made about how to implement a successful evaluation in this context. However, results indicated that not all

projects were in fact evaluated and this was in some cases due to *expectations*, lack of specific *competencies*, and lack of suitable *resources*. Only three participants in Phase 1 could name their evaluation approach, and these approaches (developmental evaluation and action research) fall into the form that has been named interactive (or participatory) evaluation by Owen (2006).

One research outcome from Phase 1 was the potential for considering this participatory approach to be one that would offer a good fit with the higher education sector. However, at the conclusion of this research I now reflect that a one-size-fits-all approach may not be the best way forward and a more effective strategy would be to provide a planning framework to enable project leaders to reflect on the best evaluation approach for their context.

2. *Is there alignment between evaluation theory and practice?*

The findings of this research study indicated that the evaluation practice in small learning and teaching projects is not always aligned to evaluation theory. The evaluation practitioners in this study appeared cognisant of the theories of evaluation and indeed the practice of evaluation but various contextual factors (or tensions) impeded the translation of this knowledge into practice. The three main tensions (expectations, resources, and competencies) have been discussed from the perspective of the new research evidence contributed by this study, along with how each impacts on evaluation praxis.

3. *What is understood by evaluation?*

The findings related to this question have been analysed and discussed in this chapter under the subheadings of *expectations* (Section 1) and *conceptualisation* (Section 7). Participants in this study understood evaluation to have a range of meanings according to their own context and one influencing factor on how they formed their understanding was the information provided by the grant funding bodies. Not all participants understood that evaluation can lead to learning and improvement. There was also strong evidence of conceptual conflation between the terms research and evaluation. And finally, not all members of a project team understood evaluation to mean the same thing.

4. *How does a project leader's perception of evaluation affect their praxis?*

This study indicated that perception of evaluation is influenced by a person's *competency* level, experience, and *expectations*. This is also discussed in this chapter in the section about *conceptualisation*. The *resources* of time and money were discussed in detail and were found to strongly impact on praxis through the perceived belief that both were needed in order to effectively evaluate a project.

5. *What can be done to overcome barriers to successful project evaluation praxis?*

From each of the discussion sections based on Bergman's model, a set of recommendations has been proposed. Each of the 11 recommendations highlights steps that can be taken to overcome the identified barriers to successful project evaluation. The recommendations have been grouped according to the two major stakeholder groups: funders of the small grants and grant awardees.

6. *What is required to develop a framework to support the evaluation of small, internally funded learning and teaching projects?*

Section 2 of the Bergman model (Figure 7.3) focuses on the tensions associated with *resources*. These tensions have been categorised in terms of funding, timeframe, and planning. Support strategies have also been discussed and incorporated into the final set of recommendations (numbered 2, 4, 5, and 6). The SPELT framework was developed in response to the observed need for support mechanisms, and a set of recommendations have been presented, for others wishing to develop such a framework.

In conclusion, this series of research questions have successfully framed the study to achieve valuable contributions to new knowledge in the area of evaluation of small-scale learning and teaching projects. A set of 11 recommendations has been provided to ensure that individuals conduct effective evaluation of their innovations and for institutions to support the implementation of learning and teaching development funding. A new framework (SPELT) for evaluation planning has been developed and can be interacted with via a simple online interface (Appendix X). The next chapter will present some implications for future research that have emerged throughout this study.

Publication

An earlier draft of this chapter was presented at the EduLearn Conference in Barcelona, July 3-5, 2017 and published in the proceedings. The paper is not included in the body of this thesis as the work has since been further developed and the current version is presented as the body of this chapter. The paper is included as Appendix XI.

Paper 6

Huber, E. (2017). Addressing tensions that exist when making objective evaluative judgements in small learning and teaching projects in higher education. In *EDULEARN17* (pp. 467–477). Barcelona, Spain: IATED. <https://doi.org/10.21125/edulearn.2017.1101>

Chapter 8

Conclusion

Leaders and managers of small-scale learning and teaching projects have until now had few resources to rely on to support their evaluation processes. This doctoral thesis is the first to document the daily practices of evaluation practitioners in this area and has successfully contributed new knowledge and resources to this field.

Summary of findings

I designed this three-phase study with the aim of investigating the praxis of evaluating small-scale learning and teaching projects in higher education. These small-scale, internally funded projects support investigations into educational innovations, which in turn have the ability to enhance the student learning experience, encourage teacher development, and contribute to the enactment of systemic institutional change (Hum et al., 2015).

The study was underpinned by a theoretical framework of realism, which asks, “What works for whom and in what circumstances?” Realism (also referred to as pragmatism) was chosen because importance is placed on the questions asked rather than the methods used (Creswell & Plano-Clark, 2011). Research carried out within the paradigm of realism is concerned with participant’s perceptions that offer “a window to reality beyond those perceptions” (Healy & Perry, 2000, p. 120). Two methodologies were used for this study, combining action research (in Phases 1 and 3) and case study research (in Phase 2). Taking a multi-phase research design and an action-research approach meant that I investigated a series of research questions and modified them according to the findings from each phase. I then developed a set of recommendations aimed at improving the practice of evaluation in small-scale learning and teaching projects.

Starting with a critical review of the literature about project evaluation in higher education, I found minimal published work on the area of interest (internally funded small-scale learning and teaching project evaluations). This highlighted the need for this research to fill the knowledge gap. An important finding from this review was that there was evidence suggesting that project evaluation is not being carried out systematically. Eight critical themes emerged from the review to inform and strengthen project evaluation strategies. Time and participation emerged as two overarching factors to unite the themes. The literature review concluded with six issues of

evaluation practice and their implications for future research. These items informed the design of the three phases of this study. I concluded from the review of the literature that alignment of evaluation theory with practice warranted more focused attention.

The first phase of the study focused on 15 completed projects and investigated what evaluation had been carried out and what issues had arisen. Four key themes were evident from the data: conceptualisations, particularly with the overlap between evaluation and research; capability building within the sector; resourcing in terms of time and money; and an action-oriented approach to evaluation.

These themes were discussed and supported with verbatim quotations from the project leaders, and findings from Phase 1 of the research indicate that *how* evaluation practitioners perceive evaluation varies widely. I concluded that there is misalignment between evaluation theory and the practice of learning and teaching project evaluation and that the project leader's perception of evaluation can inhibit this relationship.

Phase 2 built on these findings through a case-study approach. Three small-scale projects and their evaluation endeavours were followed over an 18-month period to investigate the contextual factors that influence praxis. One key finding from Phase 2 indicated a disjunct in how evaluation is conceptualised between the project leader and the project manager. The importance of this finding manifests in reporting of project outcomes and therefore the perceived success of a project. For example, if the instigator of the project (the project leader) plans the evaluation but does not follow through on the implementation of the evaluation (perhaps assuming this is the project manager's role and will be carried out by them) then evaluation may not occur. Similarly, if the project manager does not share the understanding and/or value of evaluation with the project leader, outcomes may be impacted.

In addition, factors that influence the praxis of evaluation were also identified: time frame, previous experience of leading a project, and the requirement for evaluation (or lack of) from the project's grant funding body. I concluded Phase 2 by theorising that there is not and should not be a one-size-fits-all approach to evaluation in the context of small-scale internally funded learning and teaching projects and that there are several factors that influence a practitioner's praxis. This phase of the research supported earlier findings that there is a need for more evaluation support mechanisms that are flexible and adaptable.

Findings from both of these phases contributed to the design and development of the third and final phase in which a new evaluation planning framework called SPELT was developed and

trialled with two cohorts of project evaluators using two cycles of action research. The SPELT framework was underpinned by a number of influential scholars' work on evaluation. SPELT was adapted into an interactive online tool offering a flexible and contextual application and is a key output from this body of research. This new tool offers a valuable contribution to the field of good evaluation practice as it offers ease of access via a clear and simple online interface, does not take long to complete, and prompts the users to reflect on their practice.

The findings from each of the three phases along with the critical review of the literature were written up and published as separate, peer-reviewed, journal articles. These publications are "book-ended" by two conference papers of early drafts of the study's design (Chapters 1 and 3) and the discussion of the overarching findings (Chapter 7). Publishing this body of work has enabled the findings to be widely disseminated.

Education has been likened to "a soft, slimy, swamp of real-life problems" (Schon, 1987, p. 3). Evaluation has at its heart the desire to judge problems or issues and find solutions. It is fitting, therefore, to investigate the slimy, swampy issues surrounding evaluation of education or learning and teaching projects, identify the problems or issues, and find solutions. This study of the praxis of evaluation has highlighted some of the key issues by integrating current literature and findings from across each of the three phases and mapping them to a conceptual model of tensions that arise when conducting an objective evaluation (Bergman, 2010). The main issue that has been highlighted through this body of work and discussed in this thesis, is that of conceptualisation. Conceptualisations are often formed through one's (mis)understanding of the purpose of evaluation. Our conceptualisations of evaluation are also influenced by the language we use and the role we play in a project. The lack of evaluation capability in the small-scale project evaluation space has been investigated and a number of recommendations made to support the development of evaluation practitioners in higher education.

The recommendations were divided into two groups: the project leaders (who are grant awardees) and the project funders. The former group can use the strategies identified in the recommendations to assist them in their evaluative efforts and help them develop their evaluative skills and praxis. The latter group can make use of the recommendations to learn more about the needs of the grant awardees, manage their expectations and support good practice where necessary. These two groups make up the audience for this study. However, I believe the findings and recommendations are transferable to other sectors that offer small grants for introducing new innovations.

In this study I have demonstrated the complex interactions between the various evaluation subsystems and described the contextual factors that influence evaluation praxis in higher education learning and teaching projects. The findings and recommendations that have been discussed in this thesis provide new knowledge in this field and form a step toward a quality evaluation agenda in the learning and teaching project space.

Limitations

Limitations of this study have been identified and are now summarised. First, the research methods used in this study (case study research and action research) have their protagonists particularly when it comes to generalisability of findings (Charles & Mertler, 2002; Dexter & Seden, 2012). A leading scholar of case study research, Robert Yin, refutes this viewpoint by arguing that although case studies may not be able to generalise results to populations, they can generalise to theoretical propositions. The goal of case study research is to “expand and generalise theories (analytic generalisation) and not to enumerate frequencies (statistical generalisation)” (Yin, 2009, p. 15). With action research, there are no cause and effect relationships (McNiff, 2001). It is a systematic and methodologically rigorous mode of enquiry that enables practitioners to learn from cycles of act-observe-reflect-plan/change (Wadsworth, 2010). The aims of action research are not only to provide evidence but also to show how the evidence can improve the world (McNiff, 2001).

Second, this study was based at just two universities with a small number of participants studied ($n = 15$ in Phase 1; $n = 5$ in Phase 2; $n = 14$ in Phase 3). Future research could examine the findings by investigating the evaluation praxis across a number of institutions, and thus a larger sample. Use of the online interactive tool that was produced in this study as an output from Phase 3, could be used to aggregate data from across several institutions.

The conceptual model (Bergman, 2010) used in the discussion chapter and the way in which I have utilised it, has its limitations. The author conceptualised the areas of tensions based on his many years of experience as a researcher in the area of societal sustainability and corporate responsibility. The model was not designed specifically for higher education, however my body of work has tested its application to the small project learning and teaching context. In his conceptual paper, Bergman discusses other dimensions such as context, data collection and data analysis. I too have discussed my findings in relation to context but not specifically on data collection or analysis. Bergman also discusses in detail the role of stakeholder negotiation in the interplay of the tensions. I have only briefly touched on this dimension and it is therefore an area for potential further investigation.

Further research

Multiple research implications have been identified as a result of this study. As has been discussed in Chapter 7, there is an identified need for evaluation capacity building (ECB) in the higher education sector. Four key research implications, and how they can impact on evaluation praxis and may guide future research directions, are now presented.

The evaluation purpose

According to Owen (2006), there are a number of categories or *forms* that evaluative enquiry can take according to the purpose or orientation. Although Owen's work is aimed at program evaluation, parallels can be made to project evaluation, and in fact some of the Australian Government's Department of Education grant funding resources have been adapted from Owen's work (see Chesterton & Cummings, 2011). In the case of small-scale projects whose main aim is to trial learning and teaching innovations, Owen's interactive (or participatory) form of evaluation may be a good fit. In this form, there is an assumption that "those with a direct vested interest in [programmatic] interventions ... should also control the evaluation of these interactions" (Owen, 2006, p. 44). There are a few suggested evaluation approaches that can be used with the interactive form, including action research and developmental evaluation. If this approach was presented to the grant recipients, it may produce a positive orientation toward evaluation; possibly clarify their conceptualisation of evaluation; and lead to better understanding, valuation, and praxis of evaluation. Further investigations are required to test this hypothesis.

Evaluation resources

Findings from this study have shown that there is a growing need for evaluation capacity building, but whilst there is a wide range of evaluation resources available, there is little evidence about how they are being used and the extent of their effectiveness in this context. Phase 1 of the study revealed a need for ECB and I called for further investigation into the practicalities of incorporating various models into practice. In Phase 2, I investigated the evaluation practices in depth and found a need for more explicit evaluation support mechanisms to be provided. The development of a flexible planning framework as a first step toward meeting these needs was suggested, then trialled, in Phase 3 of this study (Chapter 6).

The framework has recently been deployed in one Australian metropolitan university in the form of an interactive online tool. Further investigation is now required to judge its usefulness and effectiveness. Additional research questions could focus on how the interactive tool has helped in planning evaluation and what its role is in value adding. For example, has the tool clarified and supported the process of evaluation? Has it helped provide feedback and informed ongoing project development? Has it enhanced the process of summative reporting to funding

bodies? Has it had any impact on workloads? Is it flexible enough to meet the needs of *all* small-scale learning and teaching grant holders (Rog, 2012)? Can the data collected from its use across a program be used to feed forward and support evaluation capability building across an institution, and, if so, how?

Further investigations are also required to see whether such self-help style resources (as the interactive online tool) are sufficient or whether the use of feedback from peer networks and experienced practitioners as recommended in this study, are also needed to contribute to the evaluation capacity building of an institution.

Conceptualisations of evaluation

Conceptualisation of evaluation has been identified as one of the major challenges to good evaluation practice. New ways of exploring how to further examine and understand this challenge are needed.

In the discussion section of this thesis, I introduced Brew's work on academics' conceptions of research and how these conceptions impacted on the way in which they discussed and enacted their research. There are four variations in how researchers conceptualise what they do. A similar exercise to investigate whether these variations align with how practitioners conceptualise evaluation, and then to map the resultant conceptualisation types onto evaluative data, may result in further understanding of *how* the conceptualisation of evaluation influences praxis.

Further investigation could also be carried out to understand how the framing of evaluation may influence both the process and outcomes of evaluation.

Terminology

I introduced the improvement science literature in the discussion (Chapter 7) and proposed that the choice of terminology may have different connotations in different contexts, disciplines, or projects. Reflective practice is another example of a term that could replace evaluation. The use of such terms and how they influence conceptualisation is another area for further investigation.

Impact on student learning

One final area for future research would be to investigate the ethics of conducting these small learning and teaching projects in regards to student learning. I acknowledge that there is an element of risk involved in trialling a new technology, innovation or idea with a cohort of students. The reporting and evaluation of the project may be influenced by the tensions involved

between the desire to produce successful learning outcomes and learning opportunities (for the teacher) when things don't go as planned.

Final reflections

I reserve the final words of this thesis to reflect on my PhD journey. It began with a thought, a notion that something was amiss in the field within which I practise. Then came a long and winding road through practice, through theory, through the scholarly literature. Refining questions, discussing designs, wading through data, responding to feedback, writing, and rewriting.

And here I am at my destination. Many questions have been answered. Some have not. More questions have been posed. My final question to myself is "What difference have I made?" I hope that through the many conversations I have had with practitioners, experts, and novices, I have sparked ideas and positive thoughts about the value of evaluation. Many people have now used the interactive online tool based on SPELT and some have told me how simple and effective it has been for them. So I will continue to peddle my evaluative wares through the slimy swamps of education spreading the good word. Shifting perceptions. Encouraging discourse.

Evaluation can lead to change for the better. Paradigmatic or tiny, change is a shift in understanding. This is what we want for our students, so let's begin with ourselves.

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Appendix I

Human Ethics Approval Documentation

This appendix contains the following items:

1. Initial application
2. Phase 1 information and consent form
3. Phase 1 email to participants
4. Amendment for Phase 2
 - 4.1 Rationale
 - 4.2 Approval
5. Phase 2 information and consent form
6. Phase 2 email to participants
7. Amendment for Phase 3
 - 7.1 Rationale
 - 7.2 Approval
8. Phase 3 information and consent form
9. Phase 3 additional documentation
 - 9.1 Phase 3 preparation - Focus group questions
 - 9.2 Email to focus group participants
10. Final amendment (new cohort in Phase 3)
 - 10.1 Rationale
 - 10.2 Approval
11. Phase 3 revised information and consent form
12. Email confirming UTS Human Ethics Research approval

1. Initial Application

Fhs Ethics Tue, Dec 6, 2011 at 9:04 AM

To: Dr Marina Harvey

Cc: Mrs Elaine Lesley Huber

Dear Dr Harvey,

Re: "The Evaluation of Learning and Teaching Projects in Higher Education" (Ref: 5201100864)

The above application was reviewed by The Faculty of Human Sciences Human Research Ethics Sub-Committee. The Sub-Committee wishes to thank you for a thorough and well prepared application. Approval of the above application is granted and you may now proceed with your research.

The following personnel are authorised to conduct this research:

Dr Marina Harvey - Chief Investigator Mrs Elaine Huber - Co-Investigator

Please note the following standard requirements of approval:

1. The approval of this project is conditional upon your continuing compliance with the National Statement on Ethical Conduct in Human Research (2007).
2. Approval will be for a period of five (5) years subject to the provision of annual reports. Your first progress report is due on 1st December 2012.

If you complete the work earlier than you had planned you must submit a Final Report as soon as the work is completed. If the project has been discontinued or not commenced for any reason, you are also required to submit a Final Report for the project.

Progress reports and Final Reports are available at the following website:

http://www.research.mq.edu.au/for/researchers/how_to_obtain_ethics_approval/human_research_ethics/forms

3. If the project has run for more than five (5) years you cannot renew approval for the project. You will need to complete and submit a Final Report and submit a new application for the project. (The five year limit on renewal of approvals allows the Sub-Committee to fully re-review research in an environment where legislation, guidelines and requirements are continually changing, for example, new child protection and privacy laws).

4. All amendments to the project must be reviewed and approved by the Sub-Committee before implementation. Please complete and submit a Request for Amendment Form available at the following website:

http://www.research.mq.edu.au/for/researchers/how_to_obtain_ethics_approval/human_research_ethics/forms

5. Please notify the Sub-Committee immediately in the event of any adverse effects on participants or of any unforeseen events that affect the continued ethical acceptability of the project.

6. At all times you are responsible for the ethical conduct of your research in accordance with the guidelines established by the University. This information is available at the following websites:

<http://www.mq.edu.au/policy>

http://www.research.mq.edu.au/for/researchers/how_to_obtain_ethics_approval/human_research_ethics/policy

If you will be applying for or have applied for internal or external funding for the above project it is your responsibility to provide the Macquarie University's Research Grants Management Assistant with a copy of this email as soon as possible. Internal and External funding agencies will not be informed that you have final approval for your project and funds will not be released until the Research Grants Management Assistant has received a copy of this email.

If you need to provide a hard copy letter of Final Approval to an external organisation as evidence that you have Final Approval, please do not hesitate to contact the Ethics Secretariat at the address below.

Please retain a copy of this email as this is your official notification of final ethics approval.

Yours sincerely,

Dr Peter Roger

Chair Faculty of Human Sciences Human Research Ethics Sub-Committee

Faculty of Human Sciences - Ethics Research Office Level 3, Research HUB, Building C5C
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2. Phase 1 Information and Consent Form



Department of Education
Faculty of Human Sciences
MACQUARIE UNIVERSITY NSW
2109

Phone:

Fax:

Email:

Chief Investigator's / Supervisor's Name: Marina Harvey

Chief Investigator's / Supervisor's Title: Dr

Information and Consent Form

Name of Project: A Meta-Evaluation of Learning and Teaching Projects in Higher Education.

You are invited to participate in a study of the evaluation of learning and teaching projects in higher education. The purpose of the study is to investigate the evaluation strategies used in learning and teaching projects in higher education settings and determine some recommendations for enhancing evaluation strategies. The study will produce an interactive evaluation, planning and implementation tool, which aims to build efficiencies into the evaluation process

The study is being conducted to meet the requirements of a Doctorate of Philosophy under the supervision of Dr Marina Harvey, Learning and Teaching Centre,

If you decide to participate, you will be asked to take part in one interview, either in person or by phone. This interview will last between 30 and 60 minutes. Questions will be based around the evaluation strategies used in your learning and teaching project funded by an internal or external grant. The interview will be recorded and these recordings will be transcribed for analysis. You will be provided with the transcript for verification.

Any information or personal details gathered in the course of the study are confidential. No individual will be identified in any publication of the results. *The data will only be accessible by the researcher and the supervisor.* A summary of the results of the data can be made available to you on request by contacting the Co-Investigator of this project, Elaine Huber on or . There are no perceived risks in this research.

Participation in this study is entirely voluntary: you are not obliged to participate and if you decide to participate, you are free to withdraw at any time without having to give a reason and without consequence.

I, *(participant's name)* have read *(or, where appropriate, have had read to me)* and understand the information above and any questions I have asked have been answered to my satisfaction. I agree to participate in this research, knowing that I can withdraw from further participation in the research at any time without consequence. I have been given a copy of this form to keep.

Participant's Name: _____
(Block letters)

Participant's Signature: _____ Date: _____

Investigator's Name: _____
(Block letters)

Investigator's Signature: _____ Date: _____

The ethical aspects of this study have been approved by the Macquarie University Human Research Ethics Committee. If you have any complaints or reservations about any ethical aspect of your participation in this research, you may contact the Committee through the Director, Research Ethics (telephone (02) 9850 7854; email ethics@mq.edu.au). Any complaint you make will be treated in confidence and investigated, and you will be informed of the outcome.

(INVESTIGATOR'S [OR PARTICIPANT'S] COPY)

3. Phase 1 Email to Participants

A Meta-Evaluation of Learning and Teaching Projects in Higher Education.

As a successful awardee of a Learning and Teaching grant, you are invited to participate in a study of the meta-evaluation of learning and teaching projects in higher education. The purpose of the study is to investigate the evaluation strategies used in learning and teaching projects in higher education settings and determine some recommendations for enhancing evaluation strategies. The study will produce an interactive evaluation, planning and implementation tool, which aims to build efficiencies into the evaluation process.

The study is being conducted to meet the requirements of a Doctorate of Philosophy by Elaine Huber, () under the supervision of Dr Marina Harvey, Learning and Teaching Centre,

If you decide to participate, you will be asked to take part in one interview, either in person or by phone. This interview will last between 30 and 60 minutes. I envisage this interview will take place sometime between January 3rd and February 24th, 2012.

If you would like to participate in this study, please reply to this email (by December 23rd, 2011) and indicate your availability. I will contact you to schedule a convenient time and location and provide you with the information and consent form.

Kind regards,

Elaine Huber

4. Amendment for Phase 2

4.1 Rationale

This research study aims to investigate the evaluation strategies used in learning and teaching projects in higher education settings and determine some recommendations for enhancing evaluation strategies. In phase one of this study, we collected data from completed learning and teaching projects about the evaluation strategies used.

The aim of the next phase of this study is to pilot and test a modified evaluation framework developed from phase one, by evaluating through a number of lenses (Brookfield, 1995), how effective this modified framework is (or is not) as an evaluation tool. The evaluation of two learning and teaching projects will be studied over 12 months in an embedded case study design (Yin, 2009). The sample will be drawn from awardees of internal learning and teaching grants funded by the Provost at Macquarie University, one from the Competitive grant scheme and one from the Innovation and Development grant scheme. Participation will be voluntary (all grant awardees will be approached using a standard email - see appendix A) and project leaders who agree to participate in this study, will work closely with the evaluator during the project and in the closing of the project, to incorporate the modified evaluation framework and to complete guided reflection sessions. The following project stakeholders will also be interviewed: the project coordinators, any project team members, the project funders and the project beneficiaries. Each of these acts as a source of evidence to inform each case study. These interviews will be in the form of guided conversations, using a focused interview style (Merton, Fiske & Kendal, (1990) in Yin, 2009).

4.2 Approval

Fhs Ethics Mon, May 21, 2012 at 2:30 PM

To: Dr Marina Harvey

Cc: Mrs Elaine Lesley Huber

Dear Dr Harvey,

RE: 'The Meta-Evaluation of Learning and Teaching Projects in Higher Education' (Ref: 5201100864)

Thank you for your confirmation regarding the amendment request. I am pleased to advise you that the condition is met and the amendments have been approved.

This approval applies to the following amendments:

1. Proposed data collection;
2. Revised Information and Consent form
3. Questions for the case study interviews;
4. Email invitation for phase 2 - to be sent from the Office of the Provost.

Please accept this email as formal notification that the amendments have been approved.

Please do not hesitate to contact us in case of any further queries.

All the best with your research.

Kind regards, FHS Ethics

Faculty of Human Sciences - Ethics Research Office Level 3, Research HUB, Building C5C
Macquarie University

NSW 2109 Ph: [+61 2 9850 4197](tel:+61298504197)

Fax: [+61 2 9850 4465](tel:+61298504465) Email: fhs.ethics@mq.edu.au <http://www.research.mq.edu.au/>

5. Phase 2 Information and Consent Form



Department of Education
 Faculty of Human Sciences
 MACQUARIE UNIVERSITY NSW
 2109
Phone:
 Fax:
 Email:

Chief Investigator's / Supervisor's Name: Marina Harvey

Chief Investigator's / Supervisor's Title: Dr

Information and Consent Form

Name of Project: A Meta-Evaluation of Learning and Teaching Projects in Higher Education.

You are invited to participate in a study of the evaluation of learning and teaching projects in higher education. The purpose of the study is to investigate the evaluation strategies used in learning and teaching projects in higher education settings and determine some recommendations for enhancing evaluation strategies. The study will produce an interactive evaluation, planning and implementation tool, which aims to build efficiencies into the evaluation process.

The study is being conducted to meet the requirements of a Doctorate of Philosophy under the supervision of Dr Marina Harvey, Learning and Teaching Centre,

If you decide to participate, you will be asked to take part in a case study. This will involve guided reflection sessions at regular intervals (no more than once a month for the duration of your project), one interview after your progress report and one at the end of the project. These interviews will last between 30 and 60 minutes. The interviews will be recorded and these recordings will be transcribed for analysis. You will be provided with the transcript for verification.

Any information or personal details gathered in the course of the study are confidential. No individual will be identified in any publication of the results. *The data will only be accessible by the researcher and the supervisor.* A summary of the results of the data can be made available to you on request by contacting the Co-Investigator of this project, Elaine Huber on or . There are no perceived risks in this research.

Participation in this study is entirely voluntary: you are not obliged to participate and if you decide to participate, you are free to withdraw at any time without having to give a reason and without consequence.

APPENDIX I

I, *(participant's name)* have read *(or, where appropriate, have had read to me)* and understand the information above and any questions I have asked have been answered to my satisfaction. I agree to participate in this research, knowing that I can withdraw from further participation in the research at any time without consequence. I have been given a copy of this form to keep.

Participant's Name: _____
(Block letters)

Participant's Signature: _____ Date: _____

Investigator's Name: _____
(Block letters)

Investigator's Signature: _____ Date: _____

The ethical aspects of this study have been approved by the Macquarie University Human Research Ethics Committee. If you have any complaints or reservations about any ethical aspect of your participation in this research, you may contact the Committee through the Director, Research Ethics (telephone (02) 9850 7854; email ethics@mq.edu.au). Any complaint you make will be treated in confidence and investigated, and you will be informed of the outcome.

(INVESTIGATOR'S [OR PARTICIPANT'S] COPY)

6. Phase 2 Email to Participants

A Meta-Evaluation of Learning and Teaching Projects in Higher Education.

As a successful awardee of a Macquarie University Learning and Teaching grant, you are invited to participate in a study of the meta-evaluation of learning and teaching projects in higher education. The purpose of the study is to investigate the evaluation strategies used in learning and teaching projects in higher education settings and determine some recommendations for enhancing evaluation strategies. The study will produce an interactive evaluation, planning and implementation tool, which aims to build efficiencies into the evaluation process.

The study is being conducted to meet the requirements of a Doctorate of Philosophy by Elaine Huber, () under the supervision of Dr Marina Harvey, Learning and Teaching Centre,

If you decide to participate, you will be asked to take part in a case study. This will involve guided reflection sessions at regular intervals (no more than once a month for the duration of your project), one interview after your progress report and one at the end of the project. These interviews will last between 30 and 60 minutes.

If you would like to participate in this study, please reply to this email (by June 15th 2012) and indicate your response. I will contact you on my return to schedule a convenient time and location for our first meeting and provide you with the information and consent form.

Kind regards,

Elaine Huber

7. Amendment for Phase 3

7.1 Rationale

This research study aims to investigate the evaluation strategies used in learning and teaching projects in higher education settings and determine some recommendations for their enhancement. In phase one of this study, we collected data

from completed learning and teaching projects about the evaluation strategies used.

The second phase of this study followed three case studies and carried out focussed interviews regarding what worked and what did not in regards to their evaluations.

Findings from these phases have indicated that projects undertake evaluation in different ways and in some projects not at all. As this study has progressed, an existing evaluation framework (Chesteron & Cummings, 2007) has been developed and modified informed by findings. This amendment request is aimed at gathering feedback on the modified framework, from a new cohort of participants, before it is put into use.

The modified evaluation framework will be presented to the new participants in a focus group and the questions detailed in Appendix B will be used. The participants will be academics and professional staff from Macquarie who have experience working on learning and teaching projects. This new cohort is being approached to add a further lense (Brookfield, 1995) to the research study. The same method of approach as in the original ethics application will be used (email to all previous grant awardees). Their details are available from a public website: http://staff.mq.edu.au/teaching/grants/internal_lt_grants/

Brookfield, S.D. (1995). *Becoming a critically reflective teacher*. San Francisco: Jossey-Bass.

Chesterton, P. & Cummings, R. (2007). ALTC grants scheme - evaluating projects. Retrieved 5 March 2011, from <http://www.altc.edu.au/extras/altc-gsep/index.html>

7.2 Approval

Fhs Ethics Wed, Sep 24, 2014 at 11:23 AM

To: Dr Marina Harvey

Cc: Mrs Elaine Huber

Dear Dr Harvey,

RE: 'The Meta-Evaluation of Learning and Teaching Projects in Higher Education ' (Ref: 5201100864)

Thank you for your recent correspondence regarding the amendment request.

The amendments were reviewed and approved on the 17th September. We apologize for the delay in sending this notification.

This approval applies to the following amendments:

1. Addition to the original application (modified evaluation framework) and further recruitment as stated in Section 6;
2. Document: Appendix B Phase 3 Preparation - Focus Group Questions Email to focus group participants

Please accept this email as formal notification that the amendments have been approved. Please do not hesitate to contact us in case of any further queries.

All the best with your research.

Kind regards,

FHS Ethics

Faculty of Human Sciences - Ethics Research Office Level 3, Research HUB, Building C5C
Macquarie University NSW 2109

Ph: +61 2 9850 4197 Fax: +61 2 9850 4465

Email: fhs.ethics@mq.edu.au <http://www.research.mq.edu.au/>

8. Phase 3 Information and Consent Form



Department of Education
Faculty of Human Sciences
MACQUARIE UNIVERSITY NSW
2109

Phone:

Fax:

Email:

Chief Investigator's / Supervisor's Name: Marina Harvey

Chief Investigator's / Supervisor's Title: Dr

Information and Consent Form

Name of Project: A Meta-Evaluation of Learning and Teaching Projects in Higher Education.

You are invited to participate in a study of the evaluation of learning and teaching projects in higher education. The purpose of the study is to investigate the evaluation strategies used in learning and teaching projects in higher education settings and determine some recommendations for enhancing evaluation strategies. The study will produce an interactive evaluation, planning and implementation tool, which aims to build efficiencies into the evaluation process

The study is being conducted to meet the requirements of a Doctorate of Philosophy under the supervision of Dr Marina Harvey, Learning and Teaching Centre,

If you decide to participate, you will be asked to take part in a focus group. This will involve a short presentation of an evaluation framework followed by a discussion on the framework. The session should take no more than 60 minutes of your time. The session will be recorded and transcribed for analysis. You will be provided with the transcript for verification.

Any information or personal details gathered in the course of the study are confidential. No individual will be identified in any publication of the results. *The data will only be accessible by the researcher and the supervisor.* A summary of the results of the data can be made available to you on request by contacting the Co-Investigator of this project, Elaine Huber on or . There are no perceived risks in this research.

Participation in this study is entirely voluntary: you are not obliged to participate and if you decide to participate, you are free to withdraw at any time without having to give a reason and without consequence.

I, *(participant's name)* have read *(or, where appropriate, have had read to me)* and understand the information above and any questions I have asked have been answered to my satisfaction. I agree to participate in this research, knowing that I can withdraw from further participation in the research at any time without consequence. I have been given a copy of this form to keep.

Participant's Name: _____
(Block letters)

Participant's Signature: _____ Date: _____

Investigator's Name: _____
(Block letters)

Investigator's Signature: _____ Date: _____

The ethical aspects of this study have been approved by the Macquarie University Human Research Ethics Committee. If you have any complaints or reservations about any ethical aspect of your participation in this research, you may contact the Committee through the Director, Research Ethics (telephone (02) 9850 7854; email ethics@mq.edu.au). Any complaint you make will be treated in confidence and investigated, and you will be informed of the outcome.

(INVESTIGATOR'S [OR PARTICIPANT'S] COPY)

9. Phase 3 Additional Documentation

9.1 Phase 3 Preparation - Focus Group Questions

1. What do you understand the term 'evaluation' as applied to a learning and teaching project?
2. How do you feel about evaluation?
3. What do you like about this framework (what works well)?
4. What parts of this framework do you think need improvement?
5. What is missing from this framework?
6. Is the framework practical? (if not, what is needed to make it more so)
7. Could you start to evaluate your project once you have completed the framework template?

9.2 Email to Focus Group Participants

Subject: A Meta –Evaluation of Learning and Teaching Projects in Higher Education.

You are invited to participate in a study of the meta-evaluation of learning and teaching projects in higher education. The purpose of the study is to investigate the evaluation strategies used in learning and teaching projects in higher education settings and determine some recommendations for enhancing evaluation strategies. The study will produce an interactive evaluation, planning and implementation tool, which aims to build efficiencies into the evaluation process.

The study is being conducted to meet the requirements of a Doctorate of Philosophy by Elaine Huber, under the supervision of Dr Marina Harvey, Learning and Teaching Centre,

If you decide to participate, you will be asked to take part in a focus group. This will involve a short presentation of an evaluation framework followed by a discussion on the framework. The session should take no more than 60 minutes of your time. At the end of the session you will be free to take the framework and use it on your own project if you wish.

The study will take place on [date here]. If you would like to participate in this study, please reply to this email and I will contact you with further details of the time and location for the focus group and provide you with the information and consent form.

Kind regards,

Elaine Huber

10. Final Amendment (New Cohort in Phase 3)

10.1 Rationale

This amendment is requested to invite a new cohort of participants to this research study due to insufficient response from the Macquarie sample. For the research to continue and progress it is essential for additional participants to be recruited.

There is no change to the make-up of participants who will be invited (academic or professional staff members who are leading a learning and teaching project), other than their place of work. One of the researchers has recently started work at UTS and would like to invite staff there to participate.

The Human Ethics Secretariat at UTS has confirmed that upon approval of this amendment, it is to be forwarded to the DVC (Professor Shirley Alexander) who will need to approve the commencement of this study (Laugery, R. personal communication, 24 February 2015).

10.2 Approval

From: Fhs Ethics

Subject: RE: HS Ethics Amendment 4 - Approved with Condition/s (5201100864)

Date: 16 March 2015 4:20 pm

To: Dr Marina Harvey

Cc: Mrs Elaine Lesley Huber

Dear Dr Harvey,

RE: 'The Meta-Evaluation of Learning and Teaching Projects in Higher Education ' (Ref: 5201100864)

Thank you for your recent correspondence regarding the amendment request.

The amendment request has been reviewed and I am pleased to advise you that the amendments have been approved.

This approval applies to the following amendments:

1. Additional recruitment - To recruit potential participants at UTS;
2. Supporting documents noted
 - Appendix B - Phase 3 Preparation - Focus Group Questions, Email to focus group participants;
 - Revised Information and Consent form.

Please note that this approval is subject to the following conditions:

1. Please forward the approval/confirmation from UTS when this is available for records;
2. Please use the university new brand on the form. Could the form then be forwarded to FHS Ethics please?

Please accept this email as formal notification that the amendments have been approved.

Please do not hesitate to contact us in case of any further queries.

All the best with your research.

Kind regards,

FHS Ethics

Faculty of Human Sciences - Ethics

Research Office

Level 3, Research HUB, Building C5C

Macquarie University NSW 2109

Ph: +61 2 9850 4197 Fax: +61 2 9850 4465

Email: fhs.ethics@mq.edu.au <http://www.research.mq.edu.au/>

11. Phase 3 Revised Information and Consent Form



MACQUARIE
University

Department of Education
Faculty of Human Sciences
MACQUARIE UNIVERSITY
NSW 2109

Phone:
Fax:
Email:

Chief Investigator's / Supervisor's Name: Marina Harvey
Chief Investigator's / Supervisor's Title: Dr

Information and Consent Form

Name of Project: A Meta-Evaluation of Learning and Teaching Projects in Higher Education.

You are invited to participate in a study of the evaluation of learning and teaching projects in higher education. The purpose of the study is to investigate the evaluation strategies used in learning and teaching projects in higher education settings and determine some recommendations for enhancing evaluation strategies. The study will produce an interactive evaluation, planning and implementation tool, which aims to build efficiencies into the evaluation process

The study is being conducted to meet the requirements of a Doctorate of Philosophy under the supervision of Dr Marina Harvey, Learning and Teaching Centre, Macquarie University

If you decide to participate, you will be asked to take part in a focus group. This will involve a short presentation of an evaluation framework followed by a discussion on the framework. The session should take no more than 60 minutes of your time. The session will be recorded and transcribed for analysis. You will be provided with the transcript for verification.

Any information or personal details gathered in the course of the study are confidential. No individual will be identified in any publication of the results. *The data will only be accessible by the researcher and the supervisor.* A summary of the results of the data can be made available to you on request by contacting the Co-Investigator of this project, Elaine Huber on or . There are no perceived risks in this research.

Participation in this study is entirely voluntary: you are not obliged to participate and if you decide to participate, you are free to withdraw at any time without having to give a reason and without consequence.

APPENDIX I

I, *(participant's name)* have read *(or, where appropriate, have had read to me)* and understand the information above and any questions I have asked have been answered to my satisfaction. I agree to participate in this research, knowing that I can withdraw from further participation in the research at any time without consequence. I have been given a copy of this form to keep.

Participant's Name: _____
(Block letters)

Participant's Signature: _____ Date: _____

Investigator's Name: _____
(Block letters)

Investigator's Signature: _____ Date: _____

The ethical aspects of this study have been approved by the Macquarie University Human Research Ethics Committee. If you have any complaints or reservations about any ethical aspect of your participation in this research, you may contact the Committee through the Director, Research Ethics (telephone (02) 9850 7854; email ethics@mq.edu.au). Any complaint you make will be treated in confidence and investigated, and you will be informed of the outcome.

(INVESTIGATOR'S [OR PARTICIPANT'S] COPY)

12. Email Confirming UTS Human Ethics Research Approval

From: Anna Neo **Subject:** RE: ethics approval

Date: 27 March 2015 4:53 pm **To:** Elaine Huber

Cc: Shirley Alexander , Jo McKenzie

Dear Elaine

I refer to your email to Shirley Alexander regarding your request to conduct a focus group cum workshop for a small group of staff at UTS for Phase 3 of your PhD studies. On behalf of Shirley, I would like to inform you that she has no objection to your request. Regards Anna.

Anna Neo Executive Assistant to Professor Shirley Alexander Deputy Vice Chancellor & Vice President (Education and Students) University of Technology, Sydney P O Box 123 Broadway NSW 2007 Australia Tel: + 61 2 9514 1465 Fax: + 61 2 9514 1459

From: Elaine Huber **Sent:** Sunday, March 22, 2015 5:13:20 PM **To:** Shirley Alexander **Cc:** Jo McKenzie **Subject:** ethics approval

Dear Shirley,

I recently spoke with Human Ethics Officer (Racheal Laugery) about conducting a focus group (cum workshop) for a small group of staff here at UTS. This research is for phase 3 of my PhD studies.

I was told that as I already had ethics approval from MQ then I just needed your approval to approach staff here (as they would be from more than one faculty). I have since had an amendment approved from MQ to include a cohort from UTS. They (MQ Human Ethics Committee) would also like to see written confirmation from UTS that this ok.

I've attached here the original application, the amendment, the focus group questions, the wording of the email/invitation and ICF. Plus the MQ ethics approval notification. In the document titled Appendix B, I have added in a sentence to the email invitation (highlighted in yellow) to indicate that I am currently working here at UTS as I thought it important to clarify this.

Please let me know if you require any further information.

Kind regards,

Elaine

Appendix II

Summary of Literature Used in Chapter 2

Note: The following items are included in the reference list for Paper 2 (see Chapter 2) unless used in the body of this thesis and then they are also included in the reference list preceding these appendices.

Author(s) Title	Methodology	Critical review of Key Findings	Funding Source / Audience	Evaluand
RELEVANT STUDIES				
Abell, Lannin, Marra, Ehlert, Cole, Lee, Park, Rogers and Wang (2007) Multi-site evaluation of science and mathematics teacher professional development programs: the project profile approach	The authors develop an approach to professional development (PD) program evaluation across 9 externally funded projects. Each project is profiled using 6 criteria: Project background; Project Design; Participants and their schools; Quality of implementations; Satisfaction survey; Outcomes and Recommendations. In the second part of this paper, this profile approach was mapped to a popular model of PD evaluation (Guskey, 2000) clarifying the need to extend this model.	Accountability is a common driver for evaluation particularly as funding bodies strive to obtain measurable gains for their investments in teacher content knowledge, change in practice and of course student learning. The authors of this study insist that individual project profiles are needed to take into account the unique contextual variables of a project whilst comparing projects across a funded program.	Externally K-12	Project and Program
Bamberger, Rugh, Church and Fort, (2004)	There are different reasons why time, data and budget constraints are present and the paper looks at the differing scenarios and reasons for this. Then 6 steps are presented as a framework for this approach, the strength of which is the	To begin, the Shoestring evaluator should meet as early as possible with clients and key stakeholders to ensure that the reasons for commissioning the evaluation are fully understood. Then the program	External Other	Process

<p>Shoestring Evaluation: Designing Impact Evaluations under Budget, Time and Data Constraints</p>	<p>combination of techniques into an integrated six-step approach.</p> <p>(1) planning and scoping the evaluation, (2-4) options for dealing with constraints related to costs, time and data availability, (5) identifying the strengths and weaknesses (threats to validity and adequacy) of the evaluation design, and (6) taking measures to address the threats and strengthen the evaluation design and conclusions.</p>	<p>theory model on which the project is based needs to be defined.</p> <p>With Steps 2 and 3, the evaluation design may need to be simplified and the authors provide suggestions on ways in which to do this. With data constraints, the authors suggest some possibilities, including reconstructing baseline data on the project or control groups by using secondary data (such as analytics data, publically available data) or by using recall. Other options include working with key informants and using participatory methods.</p> <p>With Steps 5 and 6, the authors identify four threats (statistical conclusion, internal, construct and external validity) and then offer examples of ways to address each of the threats. And finally, they offer a checklist for assessing the validity and adequacy of multi-method shoestring evaluation design.</p>		
<p>Bearman et al. (2008)</p> <p>Evaluation of an inter-institutional granting scheme for collaboration in educational technologies</p>	<p>Four methods of evaluation: an audit of all project documentation (30 projects); a standardised objective rating of the educational technology artefacts by two experts (8 products reviewed); participant interviews (from 5 projects); and a staff survey (n=28)</p>	<p>Quality of the output was high but teams struggled to complete their projects, associated reporting requirements and project evaluation.</p>	<p>External Higher Ed.</p>	<p>Program</p>
<p>Botcheva, Shih, and Huffman (2009)</p>	<p>The article describes the process rather than offering a set of guidelines or principles. ‘This</p>	<p>The authors highlight three ingredients that are important in their process-approach to culturally</p>	<p>External</p>	<p>Process</p>

APPENDIX II

<p>Emphasizing Cultural Competence in Evaluation: A Process-Oriented Approach</p>	<p>process is not static or part of a set of prescribed steps, but rather is adaptive and achieved through ongoing reflection, correction and adaptation' (p. 177).</p> <p>In this approach, evaluation moves from a paradigm where the evaluator makes all the decisions to a model based on collaboration with primary stakeholders, not dissimilar to participatory evaluation.</p> <p>The paper then goes on to describe an evaluation of an HIV/Aids program in Zimbabwe which uses this approach. In the case study they apply the three tenets of culturally competent evaluation and then go on to explain the real-world constraints and challenges. These include items familiar to all evaluations, budget, time, resistant organisational culture and different investment in evaluation by the stakeholders.</p>	<p>competent evaluation, collaboration, reflective adaptation and contextual analysis. They conclude that 'evaluators ought to think of optimising cultural competency rather than 'achieving' it' (p. 180) and thus there is a continuum of cultural competence in evaluation.</p>	<p>Public Health</p>	
<p>Brandon, (1998)</p> <p>A meta-evaluation of schools' methods for selecting site-managed projects</p>	<p>A meta-evaluation of 17 schools who apply for funding from a state-wide initiative. The authors were interested in finding out how the schools evaluated which projects were put forward for funding. Five evaluation criteria (and corresponding evaluation questions were developed, the first four from the CIPP approach to evaluation (Stufflebeam, 1983) and the fifth based on the belief that projects are most likely</p>	<p>Findings showed that answers to three of the questions were less than adequate:</p> <ol style="list-style-type: none"> 1. Schools should be shown the advantages of allowing as many of their staff and faculty as feasible to participate in project selection. This would improve the chance that the best projects would be identified to meet needs and would help ensure that project funding is well spent. 	<p>External</p> <p>K-12</p>	<p>Process</p>

	<p>to succeed when they are based on theories of education and have been shown to have succeeded elsewhere (Ellis & Fouts, 1993; Slavin, Karweit, & Madden, 1989). Two data collection methods were used: a self-report survey questionnaire (for first four questions) and a literature review (for fifth question).</p>	<p>2. Findings showed inaccurate estimates of project costs; misjudging the managerial, administrative, or logistical requirements of the projects; and underestimating the level of staff, parent, or community understanding or motivation required for successful project implementation.</p> <p>3. Empirical evidence about project success was not found for about half of the schools.</p>		
<p>Clarke and Hall (2008)</p> <p>Will the lessons be learned? Reflections on local authority evaluations and the use of research evidence</p>	<p>This paper was a reflection on project evaluation of a complex multi-site multi-level program called Sure Start carried out by academic researching it is a meta-analysis of a program evaluation.</p> <p>The article explores the nature of evidence hoped for and a discussion of what evidence is actually practicable to collect. It also explores how information from the evaluation was used.</p>	<p>The authors found that evaluation at the local level was based more on performance management and monitoring rather than integrating findings into planning and best-practice approaches. They argue that experimentation implies a possibility of failure, which was not really looked favourably upon, in fact there was a large issue over the need to be seen as efficient and effective. They recommended case-studies to illuminate issues for reflection. The authors discuss the tension between local vs. national agendas. This and the ever ‘changing goalposts’, has resulted in less innovative or action research approaches being adopted.</p> <p>The authors conclude that it is crucial to clarify and explicitly agree upon the purpose of an evaluation if it is to be carried out successfully. However, they remind us that for learning and development to occur, one must be realistic about</p>	<p>Local Government/ Community</p>	<p>Project and Program</p>

APPENDIX II

		evaluation. Indeed, universities play an important role since ‘unpublished lessons are more likely to be forgotten than learned’ (p. 265).		
<p>Cybulski 2010</p> <p>Building academic staff capacity for using eSimulations in professional education for experience transfer</p>	<p>Report from an externally funded project. The project team conducted a variety of evaluation approaches and methods in support of achieving the project objectives, including: ongoing informal evaluation through timely, well organised team meetings and milestone conference events, a comprehensive strategy of surveying all students for all eSimulation offerings, and two experimental approaches to formalising knowledge transfer and learning amongst partner project members. In addition, other technical, design and summative evaluation occurred. Experiences with these evaluation endeavours are reported.</p>	<p>The independent audit found two key issues relevant to this literature search: that promised documentation of formative evaluation did not eventuate, and evaluation methods that were used were not encompassing, e.g. comprising a summative survey instrument only.</p>	<p>External Higher Ed.</p>	<p>Project</p>
<p>DeStefano, (1990)</p> <p>Evaluating effectiveness: Federal expectations and local capabilities</p>	<p>This is a position paper set in the context of the office of special education and rehabilitation service (OSERS) this article looks at the funding system and program evaluation requirements. It investigates what the expectations, both perceived and expected, are held for the type and quality of the evaluation data.</p>	<p>Federal (funder) expectations favour quantitative assessment of a Program to see the extent of its achievement of objectives. The absence of interest in implementation and process data does not correlate with the need of the federal government (in this scenario) to identify and replicate successful projects. In addition, the lack of standardised evaluation criteria exacerbates the problem of collection and comparison or cross-site aggregation of evaluation data. Given the above, it's unlikely that a locally run</p>	<p>External K-12 & Community</p>	<p>Process</p>

		evaluation is going to provide the information needed for both the local and federal perspective and requirements. This leads then to question whether the evaluation has identified the audience correctly, and both the primary and secondary audiences.		
Geva-May and Peretz, (1992). Serving the needs of various groups of Stakeholders	This study was designed to investigate how evaluations can meet the variety of interested parties represented by stakeholders. It goes on to find out why there is such a non-utilisation of evaluation findings. A group financed the design and development of a business English course and furthermore financed a formative evaluation of the program to give feedback to a number of parties: administration (financing body), students, teachers and curriculum development team.	Concluding remarks - when factors such as low personal involvement and (cost) benefit versus high risk and dependency are at play, the probability of non-utilisation increases.	External VET	Program
Harris, Jones, and Coutts (2010) Partnerships and learning communities in work-integrated learning: designing a community services student placement program	This paper describes and analyses the design and implementation of a higher education student placement program in the community services sector, over 5 years. Appraisal of the project is informed by stakeholder evaluations. The partners (HE and workplace) agreed to adopt an action research model of project evaluation using formative evaluation through ongoing discussions with the stakeholders. Their views were explicitly sought at the end of each round	Identified challenges include the fact that universities often use sessional staff to coordinate the program and therefore time has to be spent on acquainting staff with objectives and processes each semester. 'From a stakeholder ethos model this represents a missed opportunity for universities to learn from, and to incorporate, students' and industries' reflections on current curriculum.' (p. 556). In conclusion, the authors found that learning and development (for all involved parties) has come	N/A Higher Ed.	Program

APPENDIX II

	of the project and fed into ongoing improvements and redesign.	from pursuing an action research approach to evaluation.		
<p>Hashimoto, Pillay and Hudson, (2010).</p> <p>An evaluation framework for sustaining the impact of educational development</p>	<p>An Egyptian Educational Development project (funded by an international aid agency) was used as a case-study. Two research questions: (1) how can an entire educational development project be evaluated? and (2) how can the capacity development in educational reform be evaluated? Participants included six different groups of stakeholders: funding body, local admin, researchers, teachers, parents and students. The analytic technique used was pattern matching (Yin, 2009) to enhance its internal validity.</p>	<p>There were three emergent themes to the study, context, outcome and process evaluation. Results found that there was a need for adopting a systematic participatory evaluation approach involving individuals and groups at the different levels of an educational system; and that the linchpin of a sound process evaluation is employing skilled people (p. 108). Conventional monitoring and evaluation practices do not have the ability to sustain a project beyond its lifetime but process evaluation does, particularly if conducted by local participants.</p>	<p>External</p> <p>K-12</p>	<p>Project</p>
<p>Lawrenz and Huffman, (2003).</p> <p>How Can Multi-Site Evaluations be Participatory?</p>	<p>This article takes a look at 5 NSF funded multi-site programs, and asks the question whether they can be considered truly participatory since participatory evaluation requires stakeholder groups to have meaningful input in all phases including evaluation design, defining outcomes and selecting interventions. Criteria used to evaluate whether these programs were participatory in their evaluation practices drew on two frameworks, Cousins and Whitmore's three-dimensional formulations of collaborative enquiry (1998) and Bourke's participatory evaluation spiral design using 8 key decision points (1998).</p>	<p>Findings showed that the programs were spread across a continuum from no participation to full participation. So the authors next asked 'in what ways can participation contribute to the overall quality of the evaluation' (p. 476). They suggest four specific dimensions of quality evaluation: objectivity, design of the evaluation effort, relationship to site goals and context and motivation to provide data.</p> <p>They propose a model for participatory multi-site evaluations, which they name a 'negotiated evaluation approach'. The approach consists of three stages, creating the local evaluations (each project), creating the central evaluation team and</p>	<p>External</p> <p>Higher Ed.</p> <p>K-12</p> <p>Community</p>	<p>Program</p>

		negotiation and collaboration on the participatory multi-site evaluation. This enables the evaluation plan to evolve out of the investigations at the sites and results in instruments and processes, which are grounded in reality of the program as it is implemented.		
Lawrenz and Huffman, (2002) The Archipelago Approach To Mixed Method Evaluation	<p>A nationally funded project is evaluated using the archipelago approach to highlight the benefits of this mixed-methods evaluation design. Science teachers in 13 high schools across the nation were recruited and consideration was made to the level of mixing the methods in an area that traditionally used a more ‘logical-positivist’ research approach. The three approaches used were:</p> <ol style="list-style-type: none"> 1. Quasi-experimental design – both quantitative and qualitative assessments of achievement. About half of the evaluation effort in terms of time and money were spent on this approach. 2. A social interactionism approach – gathered data through site visits to schools and classrooms and observations made through open-ended field notes and this data produced narratives descriptions of each site. About one third of the evaluation effort focused on this approach. 	<p>The archipelago approach extends the idea of triangulation, which is predominantly linear, to take into account the complex, unequally weighted and multi-dimensional manner of many projects. When considering the underlying truth about the effectiveness of the program, achievement was viewed as likely to be the strongest indicator and therefore most effort went into this approach. The learning environment was considered the next strongest indicator and the teacher’s experience as the least.</p> <p>‘This approach created a way for the authors to preserve some unique aspects of each school while at the same time considering that the schools were linked in some fundamental way’. (p. 337). It is hoped that this approach can lead evaluators to think less in either/or ways about mixing methods and more in complex integrative ways.</p>	External High School	Process

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	3. A phenomenological study of six of the teachers during implementation of the new curriculum via in-depth interviews.			
Lempert (2010) Why Government and Non-Governmental Policies and Projects Fail Despite ‘Evaluations’: An Indicator to Measure whether Evaluation Systems Incorporate the Rules of Good Governance	This article uses three principles for effective evaluation systems: a functional management control system; transparency and accountability of the evaluation role; protecting the professionalism and objectivity of the evaluators. Then develops a set of 25 Yes/No questions, which can be used to test whether an evaluation system is effective and to test its weaknesses. International development projects are the target of this indicator but the authors state that it can also be applied to domestic government agencies, private businesses and civil society organisations. The paper uses one detailed case study to test the 25 questions. It also briefly examines some other organisations with the indicator.	Findings reveal that many organisations fail to protect the public interest and use evaluation processes to cover up mistakes and to advertise for more funding. The author also discusses the fact that those who are in a position to make changes have little incentive to change and those that are best protected by change have little understanding of how to go about instigating a change. It is hoped that this instrument can begin to facilitate the conversations and be used as a starting point for those people wishing to challenge the status quo.	External International Development	Process
Mouly and Sankaran (1999) Project Administration by Indian Federal R&D Agencies	A survey of scientists and engineers in research and educational institutions in India investigated the strengths and weaknesses of the existing system of administering research and development (R&D) projects. 21 in depth interviews with stakeholders was conducted to develop themes for the survey which was completed by 17 respondents. 8 of those	Topics addressed include proposal submission, peer review, project reporting, budgeting, interagency interaction, and project evaluation. Under the latter topic, respondents felt that the evaluation of the completed project report should be as strict as the evaluation of the project proposals.	External Higher Ed.	Process

	surveyed were invited for a further interview from across 6 institutions.			
Nesman, Batsche and Hernandez (2007) Theory-based evaluation of a comprehensive Latino education initiative: An interactive evaluation approach	This paper describes a 5 year initiative to develop, implement and evaluate program(s) that would increase Latino student access to Higher Education. Theory of change and logic models were used to guide the program as these have been previously shown to be most effective when trying to create social change within comprehensive community initiatives. A conceptual model was developed which incorporated context, guiding principles, implementation strategies, outcomes and evaluation and resulted in a vision statement for the program. The paper also describes the interventions which were to be implemented, and goes on to describe the evaluation approach in more detail. They use an embedded case-study design and mixed methods with a developmental approach which allowed for adaptation over time as the project moved through the varying stages of completion.	Key questions were developed associated with each goal from the funding agency ie Process, Impact and Sustainability. One of the key findings under <i>process</i> was that the initial plan “had been overly ambitious and that it would not be possible to accomplish this large number of interventions with the available resources” (p. 272). This resulting in a paring back of outcomes with some initiatives being prioritised and some being dropped altogether. The authors also wrote about lessons learned from this approach. If theory-based evaluation is to be maximised, it does require training of program participants on logic model development and theory of change approaches early in the process of implementation. This training can lead to the development of interactive and productive relationships between evaluators and implementers. Adopting a developmental approach was also highly beneficial in this project.	External K-12 Higher Ed. Community	Program
O’Neill, T. (1995). Implementation Frailties of Guba and Lincoln’s Fourth	This evaluation was based on a city-wide school science project. The team wished to evaluate the project, to reveal strengths and weaknesses of the project approach as well as impressions amongst stakeholders. Having used the work of	The author works through a number of issues he has with the constructivist approach to evaluation postulated by Guba and Lincoln. Two issues of interest were stakeholder passivity (p. 13) and evaluation usage (p.16). The author felt that not	External K-12	Project

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<p>Generation Evaluation Theory.</p>	<p>Guba and Lincoln (Fourth Generation Evaluation, 1989) in their evaluation approach, the study shares obstacles to achieving these ideals. The three main groups of stakeholders identified were governance stakeholders, project workers, and teachers supported by the project. Students taught by project teachers, and principals of their schools were considered secondary stakeholders.</p>	<p>all stakeholders behaved in the idealised way that Guba and Lincoln suggested, instead they were sometimes passive and nonchalant towards the evaluation. The author also disagreed with Guba and Lincoln’s claim that their approach leads to action and instead “there was still an onus on the evaluator to actively facilitate usage (p. 17). The author concludes by suggesting that exemplars could have helped with the practical implications of their theoretical approach (p. 19).</p>		
<p>Ryan, Chandler and Samuels (2007)</p> <p>What should school-based evaluation look like?</p>	<p>This article reports on an instrumental, mixed-method case study of an evaluation of a culturally responsive school-based evaluation initiative involving four schools and the challenges involved. A grounded-theory approach is used as an analysis strategy. The project used the following data sources, semi-structured interviews with project staff and school consultants; Semi-structured focus groups with school principals and team leaders from each site; quantitative document analysis of the evaluation plans and reports, examining how they reflected the distinct elements of culturally oriented evaluation.</p>	<p>Findings showed that schools began to develop a deeper understanding of the meaning of culture and the importance it played when it came to implementing school improvement initiatives. The authors recommended that schools be more inclusive in their discussions about the meaning of data among key stakeholder groups. There was also discussion on building evaluative capacity in schools and organisational constraints. The major challenge for schools was time – setting aside time for regular evaluation and reflection on the data when faced with a busy teaching and administrative schedule was difficult. The authors posed the proposition that PD on evaluation should incorporate the skills teachers already have and show them how to develop their evaluative skills in tandem. I.e. assessment of student work, facilitating small</p>	<p>External</p> <p>K-12</p>	<p>Process</p>

		group discussion and interviews with parents, rather than assume they have no background in doing observational searches for quality.		
Sheard and Markham (2005) Web-based learning environments: developing a framework for evaluation	This study uses a trailing methodology (Finne et al., 1995), which utilises a framework combining formative and summative evaluation. Key aspects of this approach are: clarification of roles and responsibilities of evaluators and stakeholders; creation of a mutual understanding between these two parties so as to be clear of issues to focus on in the evaluation; reflection and discussion on issues arising at frequent and informal meetings; and interpretation of evaluation results jointly by evaluators and stakeholders. This co-generative model supposedly produces better utilisation of results since stakeholders are better motivated to act on findings. Data was collected from students in a 3 rd year computing unit using a series of rolling online surveys over a 12 month period. Log file analysis was also completed. In the second year of evaluation, 18 students were involved in observations of use, surveys and interviews.	Although this paper is about product evaluation (a web-based learning environment), a key point to note was that the methodology used was adaptive and collaborative. Another was that it involved a team with expertise in evaluation, knowledge of the functional aspects of [the product] and the educational purpose of [the product] i.e. people with different perspectives and experience. Key consequences of this approach were: the participants owned the outcomes of the evaluation; frequent meetings of the evaluation team enabled adaptation when and as required; and the learning experience gained by all people involved in the evaluation. This evaluation approach points to the importance of a flexible approach that utilises the skills of the key stakeholders.	N/A Higher Ed.	Product
Sirilli and Tuzi (2009)	This article describes the results of a survey carried out in Italy on managers of research projects (approximate duration of 46 months) financed by the Italian Ministry of Education, Universities and Research. 52 Project managers	The paper discusses information on the type of project (research, technology transfer and infrastructure building), its socioeconomic impact, it's impact in spatial and temporal terms, and involvement of the various actors in the broader	External Higher Ed. Industry	Project

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<p>An evaluation of government-financed R&D projects in Italy</p>	<p>were invited to participate and 36 responded. Results from the interviews were compared with results from evaluation of project documentation and results from the Court of Auditors.</p>	<p>innovation process. Interviewees were also asked to give their opinion on the significance of a series of indicators used for evaluation. The research showed that the results could be used as a starting point for evaluation and further exploration rather than suggestions for building indications for project evaluation.</p>		
<p>Smeal, Southwell and Locke (2011)</p> <p>Learning and teaching from the edge to centre stage: Critical factors in embedding sustainable university-wide engagement in external awards and grants funding initiatives</p>	<p>This study uses the five criteria from the “3D” framework for effective dissemination of innovation developed by Gannaway, Orrell, Chalmers and Abraham, (2005), to investigate how one Australian University has experienced above national average success in all areas of external funding.</p>	<p>A literature review yielded only 3 relevant articles and factors identified by these studies were grouped into three main areas, distributed and distributive leadership, clear and shared vision and goals and institutional infrastructure to support vision and goals. Items that were relevant to evaluation include provision of support for quality processes, monitoring and evaluation, and access to resources.</p> <p>It was also found that tailored professional development for those making significant contributions to learning and teaching focussed on reflection on practice, evaluation of practice and evidence of impact of practice.</p>	<p>N/A</p> <p>Higher Ed.</p>	<p>Program</p>
<p>Stoner, Meadan, Angell and Daczewitz (2012)</p>	<p>The Multiattribute Utility (MAU) approach was used to evaluate a project federally funded by the Institute of Education Sciences. The purpose of the evaluation was a formative one, measuring the extent to which the first two (of 3) goals of the project were being met and was</p>	<p>Four primary benefits of using this approach were identified and one concern. The MAU (a) was based on the core values of the PiCS project;</p>	<p>External</p> <p>K-12</p> <p>Higher Ed.</p>	<p>Process</p>

<p>Evaluation of the Parent-implemented Communication Strategies (PiCS) project using the Multiattribute Utility (MAU) approach</p>	<p>completed after the 2nd year of the project. MAU was chosen as an approach because it was participant oriented, allowing the parents representatives to have a voice in the evaluation. There are 7 steps for a MAU evaluation and each is discussed in the paper.</p>	<p>(b) engaged all stakeholders, including parents, in developing the evaluation framework; (c) provided a certain degree of objectivity and transparency; and (d) was comprehensive.</p> <p>The primary concern was the length of time and labour required to conduct the evaluation. For this reason, the authors believe it may not be applicable for evaluating smaller projects.</p>		
RESOURCES				
<p>Henson (1997) The Art of Writing Grant Proposals, Part II.</p>	<p>The author presents five strategies for writing effective grant proposals, particularly relevant when funding opportunities are becoming harder to attain.</p>	<p>One recommendation is to develop a project evaluation process, and within this, include an external evaluator and also to evaluate both the product and the process.</p>	<p>N/A guidelines</p>	
<p>Hannah (1996) What NSF Expects in Project Evaluations for Educational Innovations.</p>	<p>The National Science Foundation (NSF) sponsors a range of programs to fund innovative approaches to teaching and learning. The aim of the paper is to act as a resource for grant applicants.</p>	<p>This paper focuses on NSF's expectations for project evaluation beginning with a definition of evaluation and a discussion of why evaluation is needed. Also describes planning, formative, and summative evaluation stages and concludes with some specific NSF expectations. guidelines</p>	<p>External K-12 Higher Ed.</p>	<p>Project</p>

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<p>Stevens, Lawrenz, and Sharp (1993).</p> <p>User-Friendly Handbook for Project Evaluation: Science, Mathematics, Engineering, and Technology Education.</p>	<p>This handbook was developed to provide principal investigators and project evaluators with a basic understanding of selected approaches to evaluation. It is aimed at people who need to learn more about both what evaluation can do and how to do an evaluation, It builds on firmly established principles, blending technical knowledge and common sense to meet the special needs of National Science Foundation programs and projects.</p>	<p>Includes sections on how to select an evaluator and an overview of the evaluation process</p>	<p>External guidelines</p>	<p>Process</p>
<p>Oliver, MacBean, Conole and Harvey, (2002)</p> <p>Using a toolkit to support the evaluation of learning</p>	<p>The authors detail the background to their online toolkit. Its design was based on the premise that academics need help in deciding which methodology to use when evaluating their own technology-based projects for learning.</p> <p>Then they evaluate their toolkit with.....</p>	<p>The two-part evaluation of the toolkit's impact found that this approach does enhance design, supports reflection and prompts users to consider the most appropriate, not just the most familiar, approach to evaluation. They also find that such a toolkit is of use to users with little or no prior evaluation experience.</p> <p>However the toolkit takes 4.5hrs to complete and the authors agree that it is not suited to small projects with less resources to spend on their evaluation.</p>	<p>N/A Higher Ed.</p>	<p>Project</p>
<p>Phillips, R., Bain, J., McNaught, C., Rice, M., and Tripp, D. (2000).</p>	<p>The aim of this resource was to guide a group of university staff through the evaluation of a Computer-facilitated Learning project by a process of action inquiry and mentoring,</p>	<p>Sections include basics of evaluation including terminology; introduction of a learner centred framework; Action inquiry and reflective practice; evaluation and project processes.</p>	<p>N/A Higher Ed.</p>	<p>Project</p>

Handbook for Learning Centred Evaluation of Computer-Facilitated Learning Projects in Higher Education.	supported by the practical and theoretical material contained in this handbook. http://researchrepository.murdoch.edu.au/id/eprint/12141/1/handbook.pdf			
Harvey, J. (1998). Evaluation Cookbook. Learning technology Dissemination Initiative	A practical guide aimed at lecturers who are interested in evaluating materials for their effectiveness in achieving specific learning objectives. http://www.icbl.hw.ac.uk/ltidi/cookbook/contents.html	Sections include preparing to evaluate (the why and who for questions), practical advice for all stages of the evaluation, reflection on findings, report writing, and a series of exemplars.	Higher Ed.	project
MODELS, APPROACHES & GENERAL EVALUATION DISCUSSION				
Alexander, S., and Hedberg, J. G. (1994) Evaluating technology-based learning: Which model?	Analysis was undertaken of all papers in two major international conferences (during the year of study) to identify how evaluation of interactive multimedia projects was being undertaken and reported. Papers were classified under four main models, objectives-based; decision-based; values-based and naturalistic.	Findings indicated that there were inadequate evaluation models and approaches used in this area. Recommendations are made to increase the amount of evaluation but also the mix of approaches. Correct alignment of an appropriate evaluative method will lead to improved technology-enabled educational project outcomes.	Higher Ed.	Models and Products
*Preskill and Boyle (2008) A Multidisciplinary Model of Evaluation Capacity Building	This paper offers a comprehensive theoretical model for designing and implementing evaluation capacity building (ECB) activities and processes. The model draws on the fields of evaluation, organisational learning and change and adult learning.	The paper covers ECB triggers (internal and external), expectations and assumptions. The 10 teaching and learning strategies (from the model) are discussed, as is the importance of the design and implementation of any initiative. Next follows a section on transfer of learning and	N/A	Model

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		acknowledgement that dialogue, reflection and articulating clear expectations for what and how to transfer knowledge and skills are critical for longer-term impacts of ECB (p. 453). The sustainable practices covered by each of the 8 elements in the model are discussed and finally the diffusion element is explored. The authors conclude that for ECB to be transformational, efforts must be intentional, systematic and sustainable. (p. 457)		
Kelly and Kaczynski (2008) Teaching Evaluation From an Experiential Framework: Connecting Theory and Organizational Development With Grant Making	This paper outlines an experiential approach to teaching evaluation. This is a postgraduate course which connects evaluation theory and practice with organisational development. Students identify funding sources for their chosen issue and then develop a grant proposal.	This type of approach to evaluation education serves to deepen students' knowledge of evaluation issues, foster critical examination of diverse evaluation orientations, illuminate the relationships between evaluation and organisational development, and actively engage students in developing and submitting a grant proposal. It also promotes civic engagement as students confront social issues.	External Higher Ed.	Approach
*Yang, Shen, Cao, and Warfield (2004) Multilevel Evaluation Alignment: An Explication of a Four-Step Model	The four-step evaluation model is derived from a study of comprehensive health, economic and social intervention programs. The need for the alignment is discussed; the four-step model is explained; the benefits and the issues that one should pay attention to when implementing this alignment model are also discussed.	While these programs are often multi-level, transferable findings could be applied to a higher education based evaluative effort for example, the importance of planning and getting stakeholders on board from the very beginning to avoid the feeling of imposition of evaluation processes. Another important finding is that the concept of alignment brings the benefits of efficiency and	N/A Other	Program

		cohesion. However, these benefits should be balanced with flexibility.		
<p>Worthen, and Sanders, (2011)</p> <p>Content Specialization and Educational Evaluation: A Necessary Marriage</p>	<p>This paper discusses the topic of whether to do an evaluation well you need to be an expert in the content you are evaluating. Since educational evaluation covers so many specialisations is it fair to expect an evaluation professional to understand all this or should the content expert be trained in evaluation? The authors pose that the evaluation is best done as a team approach using an evaluation expert and a content specialist.</p>	<p>The authors use six considerations to examine the roles: Difficulty and uniqueness of the content; Reference groups and impartiality; Evaluation roles and tasks; The evaluators scope of work; Implication for training; Professional status and rewards.</p> <p>The authors conclude that although the content based evaluator appears to best suited to the field, due to the last two considerations, actually the professional evaluator would be the best choice to evaluate most educational enterprises. The authors see evaluators as methodologists and brokers, they need to be the interface between the content expert and the stakeholders.</p>	<p>N/A</p> <p>Higher Ed.</p>	<p>Discussion paper</p>

* These papers were not specifically studies of evaluation but discussions of appropriate models. They were included with the initial 22 studies in the thematic analysis.

Appendix III

Concept Map – Planning the Three-Phase Study



Appendix IV

Interview Questions for Project Leaders in Phase 2

1. What is your experience with project evaluation?
2. What and how did you plan to evaluate?
3. What did the evaluation actually look like?
4. Were there any identified barriers to evaluation?
5. Were there any ethical issues involved in the evaluation? If so how were they addressed?
6. How will/were the evaluation findings be disseminated?
7. What value did the evaluation process add to the project?

Appendix V

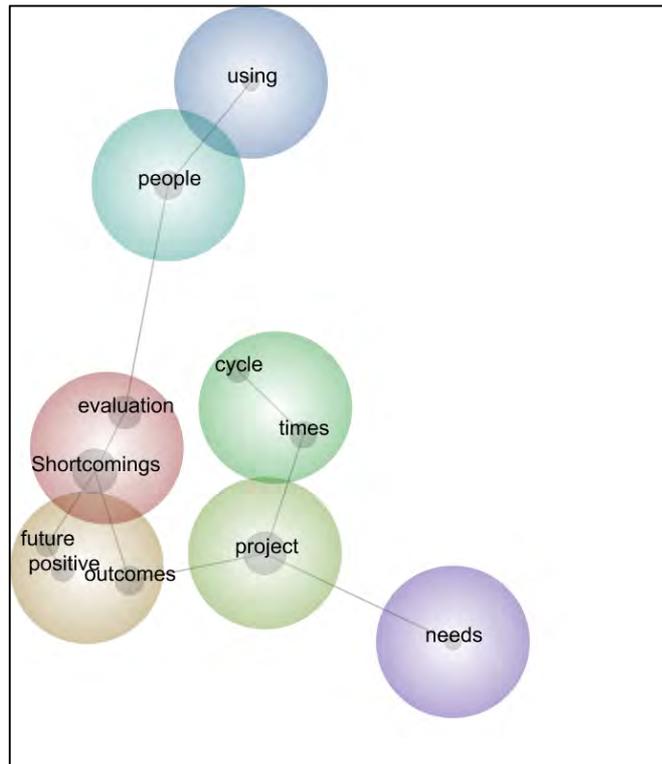
Paper 1

Pages 202-208 of this thesis have been removed as they contain published material. Please refer to the following citation for details of the article contained in these pages.

Huber, E., & Harvey, M. (2012). The Design of a Meta-Evaluation Study of Learning and Teaching Projects in Higher Education. In *Global TIME 2012* (pp. 71–77). Association for the Advancement of Computing in Education (AACE).

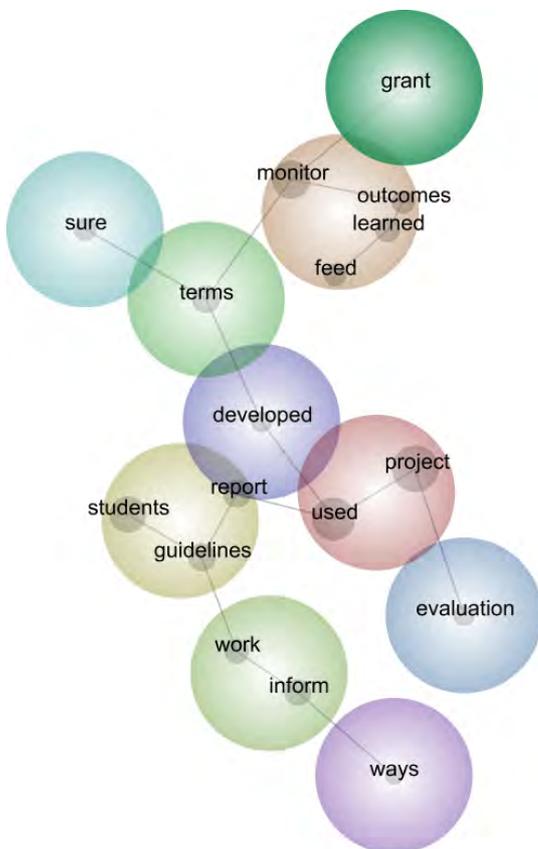
A3. Was the evaluation based on a framework (named), theory or particular method?

B3. Were there any shortcomings to the framework? How effective was it?



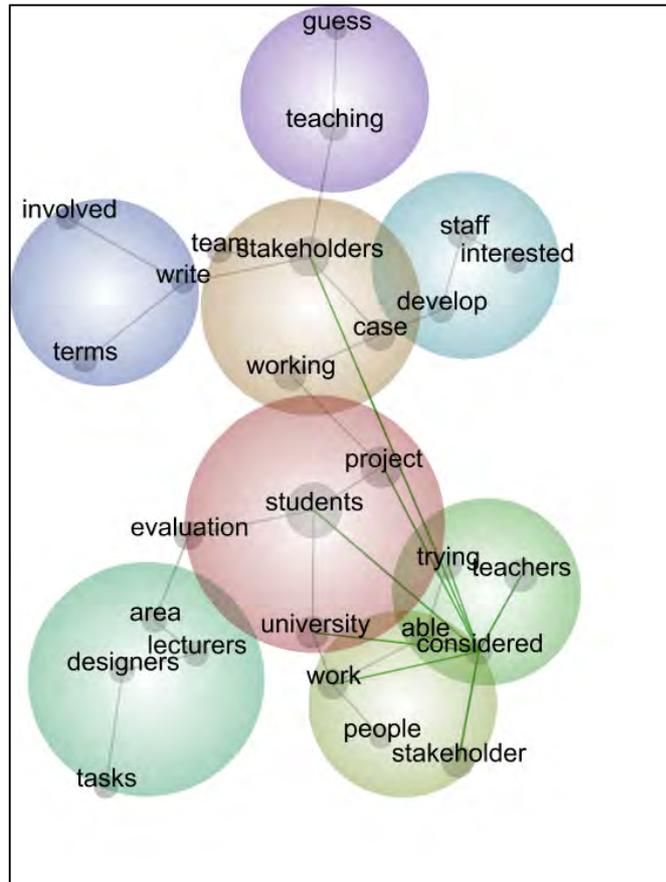
A4. Was the purpose and scope of the evaluation detailed in the report?

B4. How will the information from the evaluation be used?



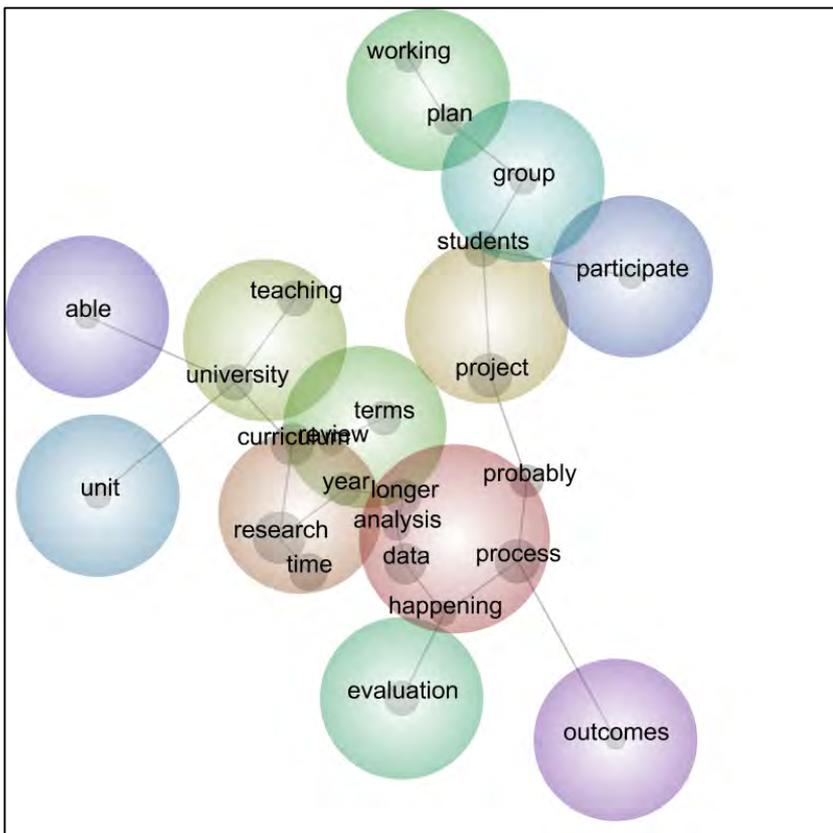
A5. Were stakeholders and study audiences identified?

B5. Primary and secondary?



A6. Was there an evaluation plan detailed in the application and/or final report?

B6. Did this go to plan? Could it have been done better?



There are no concept maps for the following questions because there was insufficient data to work with.

A7. Were the Key Evaluation Questions stated?

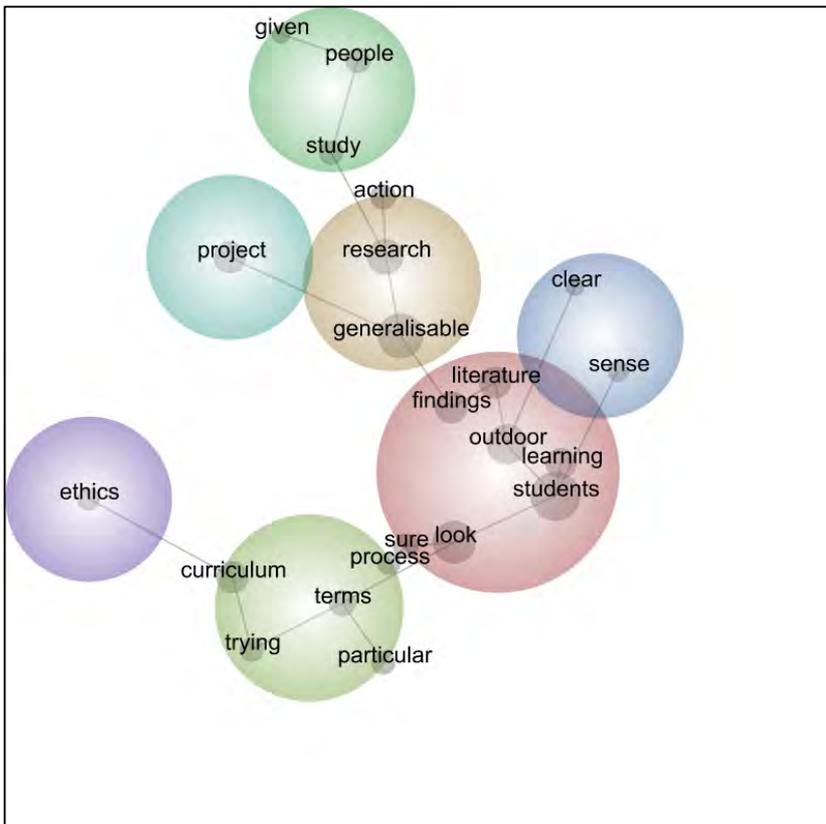
B7. Could they be answered adequately?

A8. Was the evaluation plan reviewed?

B8. If yes, what benefits arose from this review?

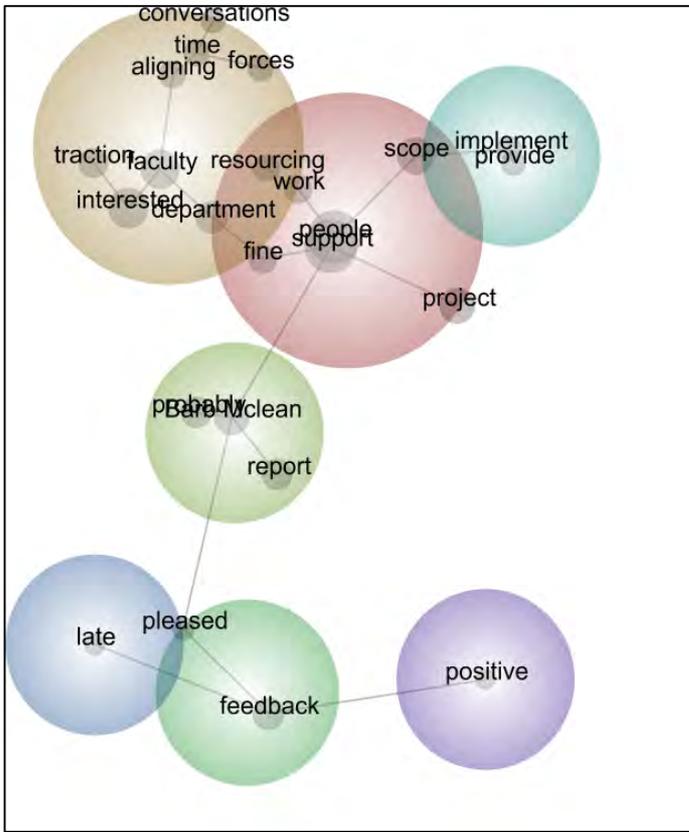
A9. Were the results useable?

B9. What amount of generalisability was there?



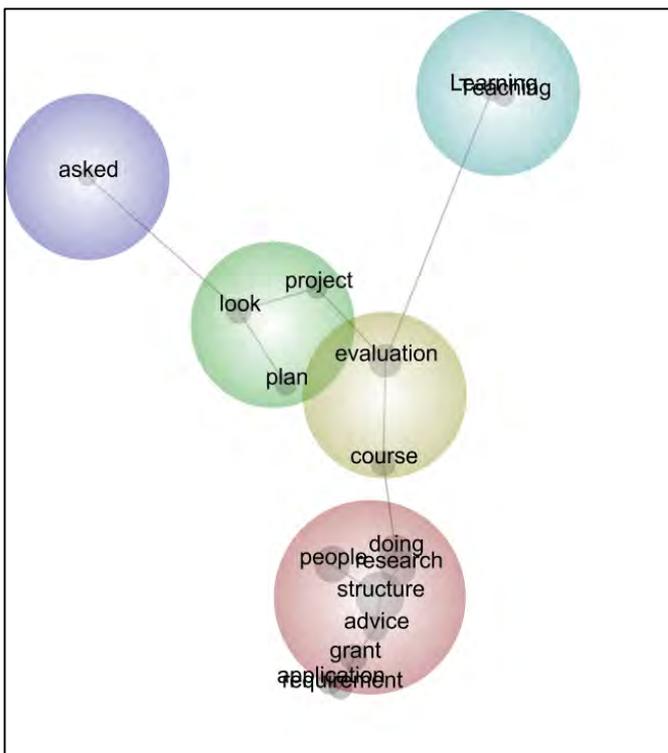
A10. What reporting strategies were used?

B10. How were these reports received?

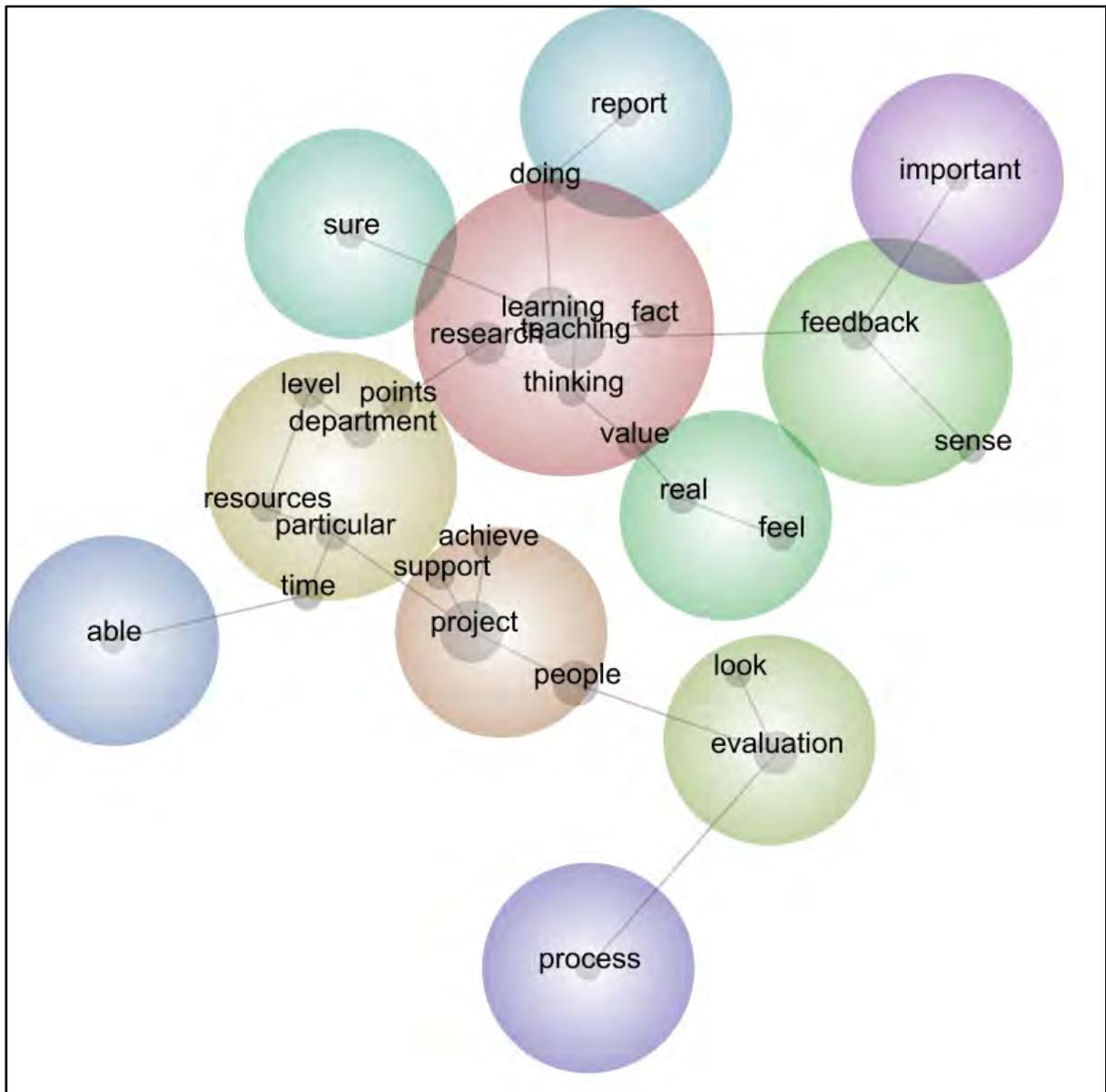


A11. Where any challenges to conducting the evaluation identified?

B11. What could have been done to help overcome these issues?



B12. What value did the evaluation process add to your project?



Appendix VII

Comparison of Themes (Leximancer Generated vs Manually Classified) Generated From all Data in Phase 1

A1. Was evaluation of the project carried out? If not, why?

B1. Which forms and approaches have been used?

Themes (concepts) from Leximancer	Manually coded themes
<ul style="list-style-type: none"> ● People (people, look, work) ● Research ● Evaluation (working) ● Teaching (time) 	<ul style="list-style-type: none"> ● Different concepts of what is meant by evaluation ● Confusion over product, process and outcomes. ● Action research and developmental evaluation – informally evaluating whilst not actually writing formal reports etc. ● Lack of money and time to do evaluation

A2. Who carried out the evaluation?

B2. If project team member, was the evaluation objective enough? Did evaluator have appropriate skills?

Themes (concepts) from Leximancer	Manually coded themes
<ul style="list-style-type: none"> ● Project (feedback, final, report) ● People (sense, team, person, research) ● Evaluation (external, question) ● Learning ● Group ● Process ● Objective 	<ul style="list-style-type: none"> ● Evaluation skills were lacking in the team ● External pair of eyes may have been beneficial ● Hard to be truly objective

A3. Was the evaluation based on a framework (named), theory or particular method?

B3. Were there any shortcomings to the framework? How effective was it?

Themes (concepts) from Leximancer	Manually coded themes
<ul style="list-style-type: none"> ● Outcomes ● Project structure ● flexibility ● People 	<ul style="list-style-type: none"> ● External eyes ● Formative and summative ● Don't be too ambitious – time is limited ● Need for a good project manager

A4. Was the purpose and scope of the evaluation detailed in the report?

B4. How will the information from the evaluation be used?

Themes (concepts) from Leximancer	Manually coded themes
<ul style="list-style-type: none"> ● Project ● Monitor ● Students (report, guidelines) ● Inform (work) ● Terms ● Grant 	<ul style="list-style-type: none"> ● To produce guidelines and / or recommendations ● Publications and conferences ● Unsure ● Feed into a larger grant

A5. Were stakeholders and study audiences identified?

B5. Primary and secondary?

Themes (concepts) from Leximancer	Manually coded themes
<ul style="list-style-type: none"> ● Students (project, university, evaluation) ● Stakeholders (working, case, work, able) ● Teachers (trying) ● Designers ● Staff ● Terms ● Teaching 	<ul style="list-style-type: none"> ● Six projects mentioned students ● Some confusion about this ● Not thought of or implicitly stated in the application.

A6. Was there an evaluation plan detailed in the application and/or final report?

B6. Did this go to plan? Could it have been done better?

Themes (concepts) from Leximancer	Manually coded themes
<ul style="list-style-type: none"> ● Process (data, longer, probably) ● Research (curriculum, time) ● Project (students) ● University (teaching) ● Terms ● Working ● Evaluation ● Group ● Unit ● Participate ● Able ● Outcomes 	<ul style="list-style-type: none"> ● Most participants spoke about the project – did IT run as planned, and not the evaluation ● No linkage between having an evaluation plan and checking the evaluation plan

There are no comparison tables for the following questions because there was insufficient data to work with.

A7. Were the key evaluation questions stated?

B7. Could they be answered adequately?

A8. Was the evaluation plan reviewed?

B8. If yes, what benefits arose from this review?

A9. Were the results useable?

B9. What amount of generalisability was there?

Themes (concepts) from Leximancer	Manually coded themes
<ul style="list-style-type: none"> ● Students (look, outdoor, literature, findings, learning) ● Generalisable (research) ● Curriculum (terms) ● People ● Project ● Sense ● Ethics 	<ul style="list-style-type: none"> ● A range of answers from none, to some, to much. ● Not many had thought about it or written about it but when pressed in interview could articulate possibilities ● Process over content

A10. What reporting strategies were used

B10. How were these reports received?

Themes (concepts) from Leximancer	Manually coded themes
<ul style="list-style-type: none"> ● Support (people, scope, project, work) ● Interested (faculty department, traction) ● Feedback ● Implement ● Late ● Positive 	<ul style="list-style-type: none"> ● 10 out of 15 received no feedback. Accountability / going through the motions ● help from the LTC to turn projects into publications and conference presentations?

A11. Where any challenges to conducting the evaluation identified?

B11. What could have been done to help overcome these issues?

Themes (concepts) from Leximancer	Manually coded themes
<ul style="list-style-type: none"> ● Structure (people, research, doing, grant, advice) ● Evaluation (course) ● Look ● Learning and teaching ● Application 	<ul style="list-style-type: none"> ● More money ● More time ● Better planning ● More help with evaluation ● Developmental evaluation

B12. What value did the evaluation process add to your project?

Themes (concepts) from Leximancer	Manually coded themes
<ul style="list-style-type: none"> ● Teaching (learning, research, doing, fact, value) ● Project (people) ● Department (particular, level, points, time) ● Evaluation ● Feedback ● Real ● Sure ● Report ● Process 	<ul style="list-style-type: none"> ● Importance of reflection [iterative nature] ● Learning about the process and not just the content ● Keeps you on the right path to achieving a goal ● Only useful if findings shared in a community

Appendix VIII

Reduction of Codes to Produce Themes (Phase 2) and Frequency

Tables for all Cases and Roles

1. Codes

Code number	Code description
1	Others who have connection to a project (e.g. steering committee, audience or reference group)
2	Changing nature of projects; contextual info
3	Project management lingo
4	Issues or challenges
5	Time taken or timing
6	Types of evaluation or evaluands
7	Perceptions or emotions or conceptions
8	Communications, dissemination activities
9	Quality
10	Feedback
11	Experience
12	Relationships, connections
13	Influence
14	Support (needing)
15	Sustainability
16	Impact
17	Findings
18	Where to from here - what's next, how is this meaningful?
19	research

2. Themes

Theme number	Theme description	Codes that make up the theme
1	Meeting the needs of and getting directions from stakeholders	1, 3, 8, 10
2	Contextual challenges	2, 4, 5, 14, 19
3	The value of evaluation	6, 9
4	Internal factors that influence practice	7
5	External factors that influence practice	11, 12, 13
6	Future-proofing	15, 16, 17, 18

3. Case 1 PM – frequency of codes

Code	Interview 1		Interview 2		Interview 3		Total	
	Count	%	Count	%	Count	%	Count	%
1	15	14	7	6	3	5	25	9
2	13	12	18	17	12	19	43	15
3	22	20	25	23	9	14	56	20
4	19	18	11	10	3	5	33	12
5	8	7	10	9	1	2	19	7
6	11	10	4	4	5	8	20	7
7	5	5	11	10	2	3	18	6
8	4	4	7	6	7	11	18	6
9	3	3	3	3	2	3	8	3
10	1	1	7	6	5	8	13	5
11	1	1	1	1	0	0	2	1
12	1	1	0	0	0	0	1	0
13	2	2	0	0	0	0	2	1
14	1	1	0	0	0	0	1	0
15	0	0	0	0	0	0	0	0
16	0	0	0	0	0	0	0	0
17	1	1	0	0	2	3	3	1
18	0	0	0	0	9	14	9	3
19	1	1	4	4	3	5	8	3
Total	108	100	108	100	63	100	279	100

4. Case 1 PM – frequency of themes

Theme	Interview 1		Interview 2		Interview 3		Total	
	Count	%	Count	%	Count	%	Count	%
1	42	39	46	43	24	38	112	40
2	42	39	43	40	19	30	104	37
3	14	13	7	6	7	11	28	10
4	5	5	11	10	2	3	18	6
5	4	4	1	1	0	0	5	2
6	1	1	0	0	11	17	12	4
Total	108	100	108	100	63	100	279	100

5. Case 2 PM – frequency of codes

Code	Interview 1		Interview 2		Interview 3		Total	
	Count	%	Count	%	Count	%	Count	%
1	6	15	4	13	8	8	18	11
2	2	5	1	3	4	4	7	4
3	7	18	3	10	9	9	19	11
4	2	5	1	3	2	2	5	3
5	0	0	3	10	7	7	10	6
6	0	0	4	13	6	6	10	6
7	7	18	4	13	21	22	32	19
8	2	5	1	3	7	7	10	6
9	0	0	2	7	4	4	6	4
10	0	0	0	0	6	6	6	4
11	2	5	0	0	3	3	5	3
12	0	0	0	0	0	0	0	0
13	0	0	0	0	1	1	1	1
14	0	0	0	0	2	2	2	1
15	0	0	1	3	0	0	1	1
16	2	5	0	0	2	2	4	2
17	3	8	1	3	4	4	8	5
18	1	3	0	0	3	3	4	2
19	6	15	5	17	7	7	18	11
Total	40	100	30	100	96	100	166	100

6. Case 2 PM – frequency of themes

Theme	Interview 1		Interview 2		Interview 3		Total	
	Count	%	Count	%	Count	%	Count	%
1	15	38	8	27	30	31	53	32
2	10	25	10	33	22	23	42	25
3	0	0	6	20	10	10	16	10
4	7	18	4	13	21	22	32	19
5	2	5	0	0	4	4	6	4
6	6	15	2	7	9	9	17	10
Total	40	100	30	100	96	100	166	100

7. Case 3 PM – Frequency of codes

Code	Interview 1		Interview 2		Interview 3		Total	
	Count	%	Count	%	Count	%	Count	%
1	8	9	1	1	5	8	14	7
2	6	7	12	17	1	2	19	9
3	12	14	9	13	5	8	26	12
4	7	8	17	24	9	15	33	15
5	7	8	7	10	1	2	15	7
6	11	13	9	13	2	3	22	10
7	12	14	5	7	6	10	23	11
8	5	6	2	3	2	3	9	4
9		0		0		0	0	0
10	8	9	2	3	3	5	13	6
11		0		0		0	0	0
12		0		0		0	0	0
13		0		0		0	0	0
14	3	4	1	1	1	2	5	2
15	1	1	3	4	3	5	7	3
16		0	1	1	8	14	9	4
17		0	2	3	8	14	10	5
18	1	1		0	5	8	6	3
19	4	5	0	0	0	0	4	2
Total	85	100	71	100	59	100	215	100

8. Case 3 PM – Frequency of themes

Theme	Interview 1		Interview 2		Interview 3		Total	
	Count	%	Count	%	Count	%	Count	%
1	33	39	14	20	15	25	62	29
2	27	32	37	52	12	20	76	35
3	11	13	9	13	2	3	22	10
4	12	14	5	7	6	10	23	11
5	0	0	0	0	0	0	0	0
6	2	2	6	8	24	41	32	15
Total	85	100	71	100	59	100	215	100

9. Case 1 and Case 2 PLs – frequency of codes

Code	PL1		PL2	
	Count	%	Count	%
1	5	4	2	5
2	5	4	0	0
3	11	9	6	14
4	3	3	8	19
5	9	8	3	7
6	21	18	7	16
7	20	17	7	16
8	8	7	0	0
9	7	6	1	2
10	8	7	1	2
11	5	4	2	5
12	8	7	0	0
13	5	4	0	0
14	0	0	2	5
15	0	0	0	0
16	2	2	2	5
17	0	0	0	0
18	1	1	0	0
19	0	0	2	5
Total	118	100	43	100

10. Case 1 and Case 2 PLs – frequency of themes

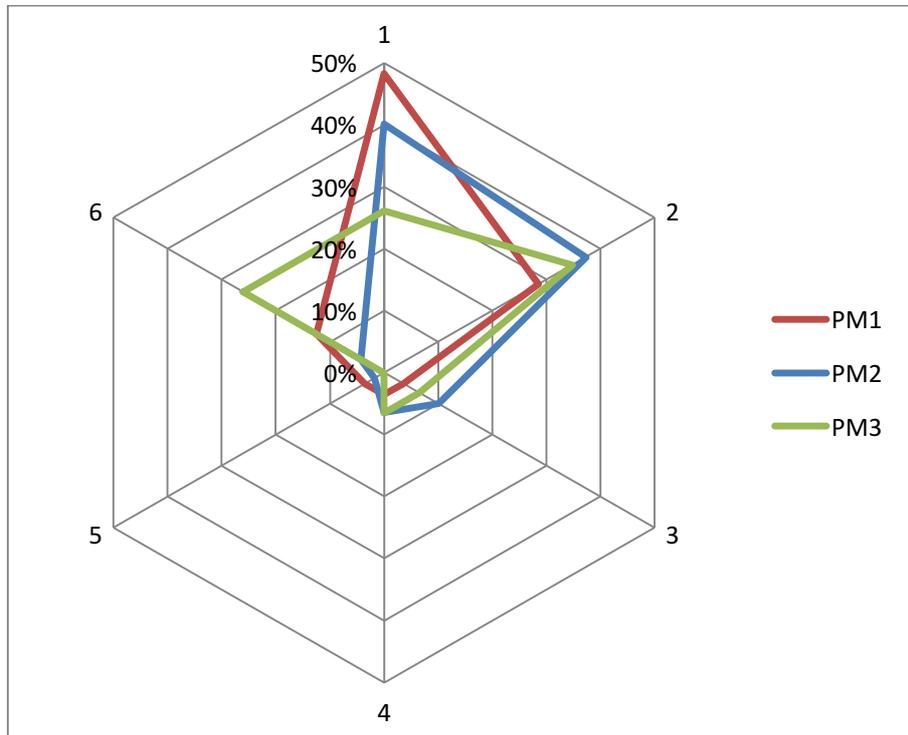
Theme	PL1		PL2	
	Count	%	Count	%
1	32	27%	9	21%
2	17	14%	15	35%
3	28	24%	8	19%
4	20	17%	7	16%
5	18	15%	2	5%
6	3	3%	2	5%
Total	118	100%	43	100%

Appendix IX
Radar Charts to Illustrate Frequency of Themes
Across the Three Case Studies

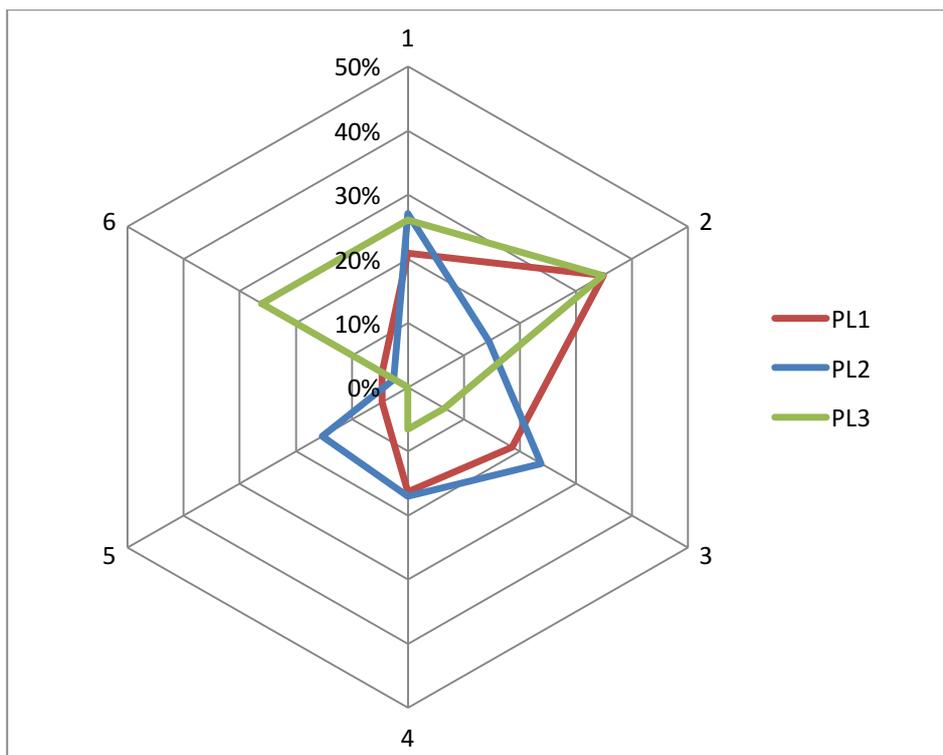
1. Summary statistics for themes in each case and each role

Theme	PM 1	PM 2	PM/PL 3	PL 1	PL 2
1.	48%	40%	26%	21%	27%
2.	29%	37%	35%	35%	14%
3.	4%	10%	7%	19%	24%
4.	4%	6%	7%	16%	17%
5.	4%	2%	0%	5%	15%
6.	13%	4%	26%	5%	3%

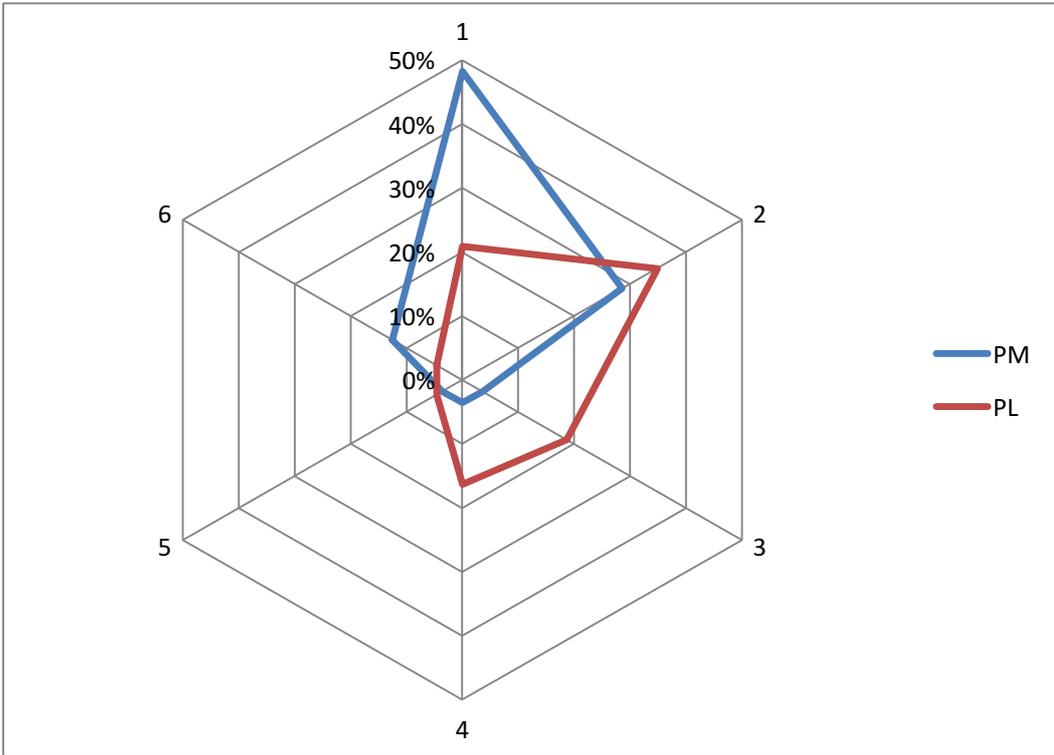
2. Radar chart showing frequency of each theme for the project managers from each case study



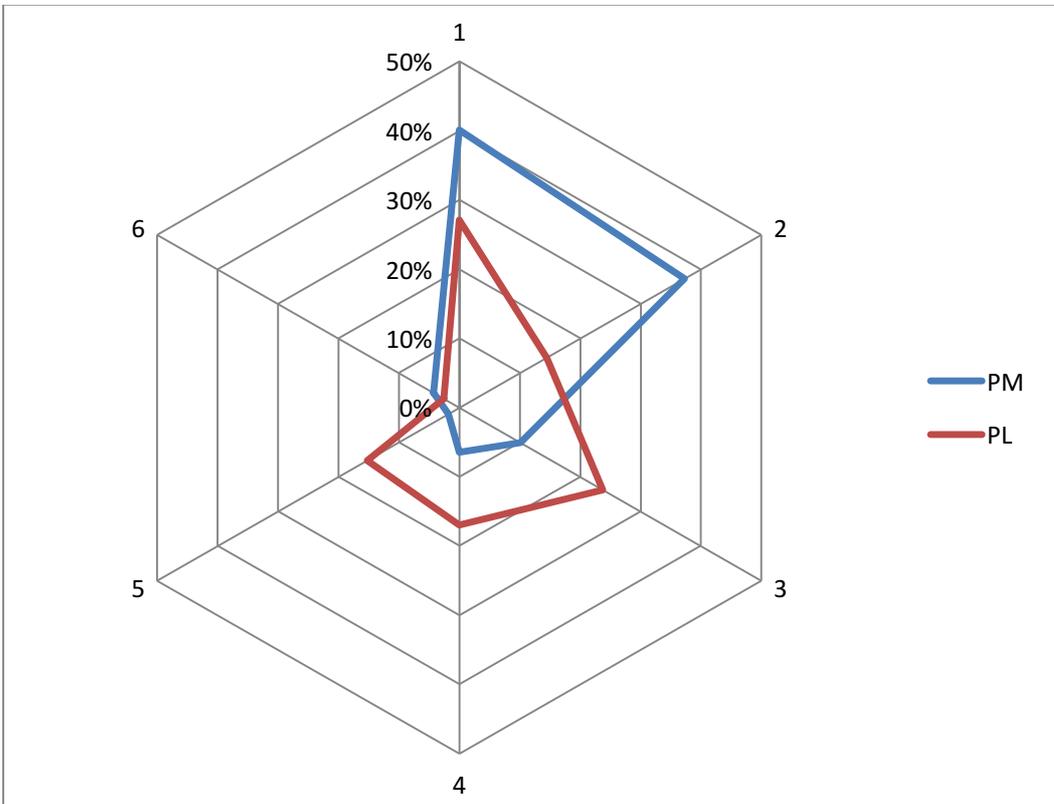
3. Radar chart showing frequency of each theme for the project leaders from each case study



4. Radar chart showing frequency of each theme for both roles in case study 1



5. Radar chart showing frequency of each theme for both roles in case study 2



Appendix X
Screenshots from the Online Interactive Version
of the SPELT Framework

Evaluation of Learning & Teaching Projects in Higher Education

This planning instrument is designed to stimulate reflection and action, and to enable you to work towards consistency in good practice with regard to evaluation of your learning and teaching innovation(s). The results from an evaluation can provide a foundation for your decision-making, and can be used to inform your practices and priorities.

Evaluation Planning

An evaluation plan sets out the proposed details of an evaluation. It should include information about:

- **what** the evaluation is trying to do (what is to be evaluated, the purposes of the evaluation and key evaluation questions)
- **how** it will be done (data collection, data analysis, reporting results).

(Betterevaluation.org)

This instrument consists of six simple steps:

- The Scope and Purpose of your evaluation
- The Stakeholders and Study audience for the evaluation
- Key Evaluation Questions
- Evaluation data collection and analysis
- Evidence of success
- Evidence of success
- Dissemination and reporting

How to complete the evaluation planning exercise

For each of the steps there are one or two questions which ask for your responses. Select the most applicable option(s) to your project or add your own response ('other').

On completion of the exercise, a summary report will be generated for your reference and sent to the email address you provide. You can use this in one or more ways: to guide your evaluation; as a reminder during your project; as part of an application for a grant; to help complete formative or summative reports.

First, please complete some information about yourself:

Name *

First Name

Last Name

Contact email address (for summary information) *

Your Faculty or Office: *

Your School or Department: *

Your subject (if applicable):

Project name: *

Step 1. Purpose and Scope



Step 2. Stakeholders



Step 3. Questions



Step 4. Data



Step 5. Success



Step 6. Reporting



Step 1. Purpose and Scope

When thinking about the purpose of your evaluation, be careful not to confuse this with the aims of the project. Here are a number of questions to guide your reflection.

- What exactly are you evaluating?
- Why is the evaluation being done?
- Are you basing the evaluation on any particular method, framework or approach?

Next consider the results from the evaluation.

- How will the information be used? This may be dependent on the audience for the evaluation so you may need to return to this question after completing Step 2. Considering usage may also help narrow down scope of the evaluation.
- Who will evaluate this project? Are they suitably skilled?
- What value will the evaluation process add to the project?

Often evaluation studies are expected to be all things to all people, whereas the reality is that the Project Lead often has limited resources (time, funds, expertise) and thus can only focus on a limited range of purposes. This is particularly so in small, internally funded learning and teaching projects where evaluation is often overlooked or left too late to be of use due to insufficient planning (Huber & Harvey, 2013).

1a. What is the purpose and scope of the evaluation? (choose all that apply or add your own) *

- Accountability to funding body
- Project design
- Project implementation processes
- Evaluation capacity building
- Impact
- Ensure diverse perspectives are included
- Other

1b. How will the information from the evaluation be used? *

- To provide feedback to the reference group/critical friend on project processes
- To influence any project redesign/improvement that may be needed (formative).
- To provide information for a funding body progress or final report
- Contribute to broader evidence base
- Inform decision making aimed at selection, continuation or termination (summative)
- Other

Step 2. Stakeholders

Step 3. Questions

Step 4. Data

Step 2. Stakeholders

The Stakeholders of a project may not necessarily be the same as those for the evaluation. Some people prefer to consider this information before defining the purpose and scope as different stakeholders may have different requirements.

Similarly, the stakeholders may not be the same group as the audiences for the evaluation information.

To clarify:

Stakeholders - individuals/groups/organisations that have something significant to gain or lose in relation to the project and therefore the evaluation.

Audiences - are individuals/groups/organisations whose information needs are specifically being addressed in the evaluation. They will overlap considerably with the stakeholders, but should be viewed here as individuals and groups who receive information from the study and therefore should guide the manner in which information is produced and disseminated.

For example, the funding body may be the audience for an evaluation report but it is unlikely they will be the primary stakeholder.

Consider also how competing interests should be prioritised. In learning and teaching projects, students and staff are usually the key stakeholders although families, employers, and members of the wider community may also be legitimate stakeholders. It's unlikely that an evaluation of a small internally funded project can meet the needs of all stakeholder groups so concentrate on one or two and align the purpose of the evaluation to their needs. This will ensure that the evaluation results have a higher probability of use (Patton, 1997).

2a. Who are the stakeholders of the project and of the evaluation? *

	Evaluation	Project
Funding body	<input type="checkbox"/>	<input type="checkbox"/>
Project Reference group (depending on terms of reference)	<input type="checkbox"/>	<input type="checkbox"/>
Professional bodies	<input type="checkbox"/>	<input type="checkbox"/>
Users of the 'product' (if project is producing something)	<input type="checkbox"/>	<input type="checkbox"/>
Lecturers	<input type="checkbox"/>	<input type="checkbox"/>
HOD / Assoc Deans / Other exec	<input type="checkbox"/>	<input type="checkbox"/>
Discipline Professionals	<input type="checkbox"/>	<input type="checkbox"/>
Program Director	<input type="checkbox"/>	<input type="checkbox"/>
Academic Developers	<input type="checkbox"/>	<input type="checkbox"/>
Students	<input type="checkbox"/>	<input type="checkbox"/>
Other	<input type="checkbox"/>	<input type="checkbox"/>

2b Who is/are the audience(s) for the evaluation results? *

- Funding body (outcomes)
 Project team (process, outcomes and product evaluation)
 Project Reference Group
 Other (current or future) grant holders
 Other

Step 3. Questions 

What are the high level questions the evaluation will seek to answer? Think of this similarly to how you would pose a research question to frame a research study. The questions will likely be linked to the purpose of the evaluation and the stakeholder needs. Consider how these questions will be developed. Input from the stakeholders a critical friend or a reference group if applicable may be required.

A further consideration is the context of the project. This information is critically important in evaluation, as it will facilitate a deeper understanding and explanation of the particular outcomes that are achieved and of the factors that have enabled them to occur. This information will also inform predictions about impacts of the project and influence the utilisation of the results (Chesterton & Cummings 2011; Alkin & Taut, 2003).

The questions below are provided as summative and formative options. Depending on the size of the project, restrict your choice to a reasonable number. A two-year project may have about four or five key questions.

3a. What are the (formative) Key Evaluation Questions? *

- What processes were planned and what have actually been put in place so far for the project?
- What factors are helping and hindering in the achievement of the outcomes?
- What measures, if any, are being put in place to promote sustainability of the project's focus and outcomes?
- How was feedback obtained on the [outputs] and how was this incorporated into any redesign.

Other

3b. What are the (summative) Key Evaluation Questions? *

- Were there any variations from the processes that were initially proposed, and if so, why?
- How might the project be improved?
- What were the observable short-term outcomes?
- To what extent have the intended outcomes been achieved?
- Were there any unintended outcomes?
- What lessons have been learned from this project and how might these be of assistance to other institutions?
- How were the [resources/outputs] produced from this project received?
- How have the team's evaluation skills been impacted by the participatory approach to evaluation?
- How effective was the dissemination plan?

Other

Step 4. Data

The data in an evaluation is collected primarily to address the key evaluation questions. Before making choices below, consider how the information will be collected and what data are most appropriate. For example staff and students will most likely be sources but will you interview all or sample them?

What are the most appropriate methods of data collection? A matrix is useful in helping to map out the Key Evaluation Questions against potential data sources and helps identify possible overlaps in data collection and the development of more efficient processes.

There are two main purposes for data analysis, description and explanation. The former provides information to the audience on the aims and outcomes of the project and how well they have been met. The latter provides evidence on the sustainability, reproducibility and transferability of the project.

The data analysis allows for conclusions to be made about the success of a project. Some evaluators go on to then provide recommendations based on the findings.

At this stage, thought should also be given into obtaining human ethics clearance, which will involve consideration of how any ethical issues will be addressed.

4a. What data and evidence will be collected? *

- Reflections and/or interviews
- Project documentation
- Meeting minutes
- Focus groups
- Evaluator observations
- Other

4b. Where will the data come from?

- Teaching staff
- Students, past or present
- Steering committee members
- Other stakeholders
- Project team members
- Other

4c. How will the data be analysed? *

- Intended processes and outcomes and extent to which these are achieved (Descriptive)
- Evidence of underlying logic of the project and extent to which the project is sustainable, transferable and/or reproducible (Explanatory)
- Other

Step 5. Success

Conducting an evaluation requires a value to be applied or judgment to be made. In order to do this, criteria need to be identified to judge whether certain standards have been met and to what extent. Such judgments will play a key role in any decision making that the evaluation is intended to inform. In general, judgments will be required for each key evaluation question (that you defined in step #3 above).

Also consider what it would take for the project to be deemed successful. Furthermore, what items are considered as failure points?

The examples below are written in the form of questions you can ask. Choose any or all that apply.

5a. What are the criteria for judgment? *

- To what extent have the project outcomes been achieved?
- How has the project team grown during the project and how much of this learning is transferable?
- How successful was the project in terms of time and budget? (In meeting the requirements of the funding body)
- How well have the needs of stakeholders (such as students, staff and the funding body) been met?
- How well have set standards in the specific field of the project been met?
- How well do the outcomes match best or good practice in the field?
- How relevant is the project to the Institution's current strategic direction?
- How sustainable are the outcomes of the project?
- To what extent have outcomes been delivered in order for others to potentially use them?
- To what extent have the outcomes been disseminated among stakeholders?
- How well have the outputs of the project been received?
- Other

5b. What are the critical success factors? *

- Human ethics approval
- Participant recruitment
- Access to required documents
- Stakeholder buy-in
- Other

Step 6. Reporting 

Dissemination strategies are useful for informing the wider community of your findings but be careful not to conflate evaluation findings with project findings.

In step 2, audiences for the evaluation study were identified. Each audience will have specific information needs and interests and reports should be tailored to these. For example the funding body may need information on how resources have been used, formative reporting could provide feedback to the project team on processes or design and engaging stakeholders may be required for greater utilisation of findings.

6a. What dissemination strategies will be used (how will this help you)? *

- formal written summative report
- written formative/progress report
- presentations at L&T forums
- presentations at faculty level
- conference presentation
- journal articles and other publications
- workshops
- websites
- communities of practice
- Other

6b. What amount of generalisability will there likely be (how will this help others)?

6c. Is human ethics clearance required to enable dissemination? *

If yes has this been obtained? Remember, this question refers to dissemination of the evaluation results which may be part of what you disseminate about your project.

6d. Recommendations for the future. How can your evaluation inform future projects (yours or others)?

Submit

Pages 234-244 of this thesis have been removed as they contain published material. Please refer to the following citation for details of the article contained in these pages.

Huber, E. (2017). Addressing tensions that exist when making objective evaluative judgements in small learning and teaching projects in higher education. In EDULEARN17 (pp. 467–477). Barcelona, Spain: IATED.

DOI: <https://doi.org/10.21125/edulearn.2017.1101>