Portfolio

0902171

Martin Locock

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Project Proposal

Lessons learned for managing projects in a Higher Education environment: organisational and individual experience

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DSAW7010 project proposal

Lessons learned for managing projects in a Higher Education environment: organisational and individual experience

Context

Organisation

The University of Wales Trinity Saint David (UWTSD) can trace its history back almost 200 years, but in its present form it is a large and complex organisation with 1,500 staff, 40,000 students, and three main campuses. The main purposes of the organisation are teaching and research, but it also considers it has a mission to promote the economy and sustainability of the region. Its core activities are funded by the government and tuition fees. It seeks research grants and other funding to support related activities that fall within its mission, contributing 1% of the overall budget of £104 million (UWTSD 2016). The Wales Institute for Work-Based Learning (WIWBL) is part of the Faculty of Business and Management offering higher level qualifications through blended learning to students in employment.

Situation

In line with UWTSD's strategy, since 2010 WIWBL has taken advantage of the opportunity to seek funding from the European Social Fund for a series of five projects allowing it to offer fully funded or subsidised courses to employees in specified sectors. The funding allowed it to recruit teaching and support staff, and undertake marketing and programme development, enrolling more than 800 students. Running these projects in accordance with the WEFO regulations and requirements was a significant challenge, and each project encountered issues that imperilled their ability to meet their performance targets. Staff involved in management of the projects had a variety of past experience within and outside higher education and were required to address the challenges faced.

Justification

Why is the research project needed?

All projects involve risk, and organisations wishing to undertake projects will seek to minimise risks through developing best practice and learning lessons from past experience. There has been relatively little research into how lessons are learned and then learned from in future practice; instead, organisations continue to repeat similar mistakes. This research project is intended to explore what mechanisms an institution puts in place to learn, and how well they work in practice. For the reflective practitioners involved in project delivery, projects are also an experience from which they may derive lessons which affects their future behaviour. One aspect of working on projects that has not been recognised is the emotional labour required from key staff in coping with uncertainty, change and challenge, and this research aims to provide some insight into this element.

How does it fit into context?

UWTSD is committed to undertaking further project activity in the future.

> "In terms of project application and funding models, the institute will only pursue bids where there is clear evidence of legacy benefits to the [WIWBL] and University at the completion of the project." (UWTSD 2017).

It is therefore critical to ensure that the institution develops effective methods of learning lessons from past experience and codifying it into future practice to ensure that legacy benefits are achieved.

Intended impact

Direct impact

The research's direct impact will be a change in UWTSD's approach to planning and delivering projects in the future so that the correct conclusion are drawn from past experience and are carried forward as best practice, and practitioners will be made aware of the challenges they are likely to face.

Wider impact

The research will be published in a project management journal as a contribution to the developing understanding of the discipline, and in particular highlighting the emotional labour involved in running projects.

Intended activity

Summary

This study will examine the University's experience between 2010 and 2015 in operating European Social Fund projects delivering work-based learning for the private sector in southwest Wales. The projects were LATERAL (Liberating Aptitudes by Technology Enhanced Recognition and Accreditation of Prior Learning),; Mentoring Our Workforce; Elevate Cymru (South West), the regional hub for a pan-Wales project, the University Network for High Performance Skills, and Safe Workforce: Sustainable Workplace, developed to address the recognised need for businesses to improve their health and safety performance by addressing behavioural safety by changing the culture. For comparative purposes, the experience of project leads elsewhere in Higher Education will be sought to identify common features and assess the generalisability of the results.

The study will compare the management of the projects from an institutional and professional viewpoint, highlighting the lessons learned for future practice. The official account of the aims and outcomes of the projects will be drawn from the project proposals, closure and evaluation reports, with a particular focus on the points where significant changes to the delivery were considered.

Participants drawn from the academic managers involved will undertake a semi-structured interview to reflect on how these critical points emerged, what response resulted, the effectiveness of progress tracking and active lesson learning. They will also be asked reflect on their personal experience of undertaking the project and what challenges they faced. The interviews will be transcribed, coded in NVivo 11, and common themes will be drawn together in a Grounded Theory approach to propose best practice for projects of this type.

An anonymous online survey of project managers in HE will be undertaken to establish whether formal project management methodologies are used, and what processes are in place to review projects on completion and identify lessons learned.

The data will then be analysed to determine how different projects have attempted to capture lessons learned, how many of project's challenges had been anticipated from the outset, and what the individuals learned from their experiences. The results will be summarised in an academic paper for submission for publication in a journal.

The aims of this research will be achieved by:

- Exploring the institutional and personal experience of delivering the LATERAL, Mentoring our Workforce, Elevate (West) and Safe Workforce: Sustainable Workplace projects
- Exploring the personal experience of project leads involved in other projects in HE
- Critically evaluating participant's experience in relation to the projects and how potential issues affecting project performance were identified and addressed in the course of the projects
- Identifying and analysing different approaches to progress monitoring and capturing lessons learned
- Reflecting on the institutional and personal learning derived from the projects
- Critically evaluating participant's experience in relation to the projects

The research will consider a range of issues arising from the intrusion of project activity into the HE domain of Work-Based Learning and more generally.

Methods to be used and justification

The research is proposed as a staged programme of reflection on practice through:

- A literature review considering existing research on work based-learning, project management practice and lessons learned, and emotional labour
- Analysis of publicly-available project closure reports and evaluation reports
- Selection, approach and briefing of participants
- Semi-structured interviews with anonymised staff from the projects
- Transcription of interviews and identification of key content

- Online survey of project management practitioners
- Reflection on the results and their implication for future practice

The main method of data collection will be by individual structured interviews with members of staff using a standard set of questions. This format will encourage participants to reflect on their experience and talk at length if they wish about their practice and learning. In this way it is hoped that common themes may emerge arising from the intrinsic challenges of managing projects, at a more generalised level than the very specific operational lessons reported in the closure reports. The qualitative content of these narratives will prove as valuable as the objective outcomes. In order to preserve a rich resource of text, the interviews will be recorded and transcribed, allowing key points to be reported in the participant's own words.

The use of semi-structured interviews is intended to gather rich qualitative data from the respondents based on their recollections and reflection on their experience. The focus of the study is on the project process and its effect on those involved, rather than conventional indicators of project performance.

The online survey is intended to gather semi-quantitative data about the nature of project management practice in the HE environment, and in particular to establish how far formal project management approaches have been adopted. It will also provide complementary data about the prevalence of issues relating to emotional labour in the field.

Timeline

Ethical approval: November 2017

Online survey: December 2017

Interviews: November-December 2017

Analysis and reporting: January-February 2018

Presentation to UWTSD: May 2018

Ethics and insider research

Interviewees may be reluctant or unwilling to share negative or personal aspects of their experience. Reassurance about the validity of all comments, the value of candour in discussing the topics, and the arrangements for anonymity and confidentiality, should provide comfort in sharing as much they choose, without placing pressure on them to share more than they wish.

The online questionnaire will be wholly anonymous.

Insider research – the researcher will need to treat the information and opinions of the participants as confidential and potentially sensitive, and will need to ensure that

arrangements for anonymisation are robust and properly applied. The researcher will benefit from deep knowledge of the context form their own involvement in one of the projects, but will be aware of their personal opinions and experiences and will seek to minimise their influence on the findings.

Expected learning outcomes

What approaches have been tried to capture lessons learned in the HE setting?

Which approaches have worked best?

How many of the challenges faced by projects in implementation had been identified in advance as part of the planning?

How well have institutions absorbed lessons learned from projects?

How have individual practitioners been affected by their experience of working on projects?

References

OGC 2009 Office of Government Commerce *Managing Successful Projects with PRINCE2*, London: TSO (5th edition; 1st edition 1996).

UWTSD (2016) *Consolidated Financial Statements, 31 July 2016*

UWTSD (2017) *Faculty of Business and management: Strategic Plan 2017-2022*

DSAW7010 Work-Based Learning Project

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Workplace Study

Lessons learned for managing projects in a Higher Education environment: organisational and individual experience

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ABBREVIATIONS

APEL	Accreditation of Prior Experiential Learning
CQFW	Credit and Qualifications Framework for Wales
CRM	Customer Relationship Management
EI	Emotional Intelligence
ESF	European Social Fund
HE	Higher Education
HEI	Higher Education Institution
HEA	Higher Education Academy
HESA	HESA is the preferred name for the UK Higher Education statistical agency but it does not officially consider its name to be an abbreviation
KPI	Key Performance Indicator
LATERAL	Liberating Aptitudes by Technology Enhanced Recognition and Accreditation of Prior Learning
MoW	Mentoring Our Workforce
MSP	Managing Successful Programmes
OGC	Office of Government Commerce
PM	Project Management
PMI	Project Management Institute
PMU	Programme Management Unit
PRINCE2	Projects IN Controlled Environments (2nd edition)
RAL	Recognition and Accreditation of Learning
SRHE	Society for Research into Higher Education
QA	Quality Assurance
QSR	QSR appears to be a preferred styling with no official expansion
UoG	University of Glamorgan
USW	University of South Wales
UWTSD	University of Wales Trinity Saint David
SWSW	Safe Workforce: Sustainable Workplace

TA	Transactional Analysis
TSO	The Stationery Office
UK	United Kingdom
WEFO	Wales European Funding Office
WHEELOS	Wales Higher Education European Liaison Officers
WIWBL	Wales Institute for Work-Based Learning

1   INTRODUCTION

'Work-based learning' is a term that is used in the education and training community to cover a range of activities, including work placements, apprenticeships and on-site training sessions (see Figure 1); this research project concerns part of this broad domain, specifically Higher Skills work-based learning provision by HEIs at levels 4-7 (equivalent to undergraduate and masters level), as delivered by the University of Wales Trinity Saint David's Wales Institute for Work-Based Learning.[1] In this context, work-based learning involves the application by learners of new learning to their workplace, regardless of location and method of teaching.

The teaching of adult learners requires a different approach to the conventional 18 year old undergraduate, what Knowles has called andragogy (Hagen and Park 2016): adults expect to have a clear purpose and relevance to their learning, to have choice, and to be involved in determining the mode of study. The work-based element adds another factor to this by bringing in the employer as an interested party (Basil et al., 2015: 1009).
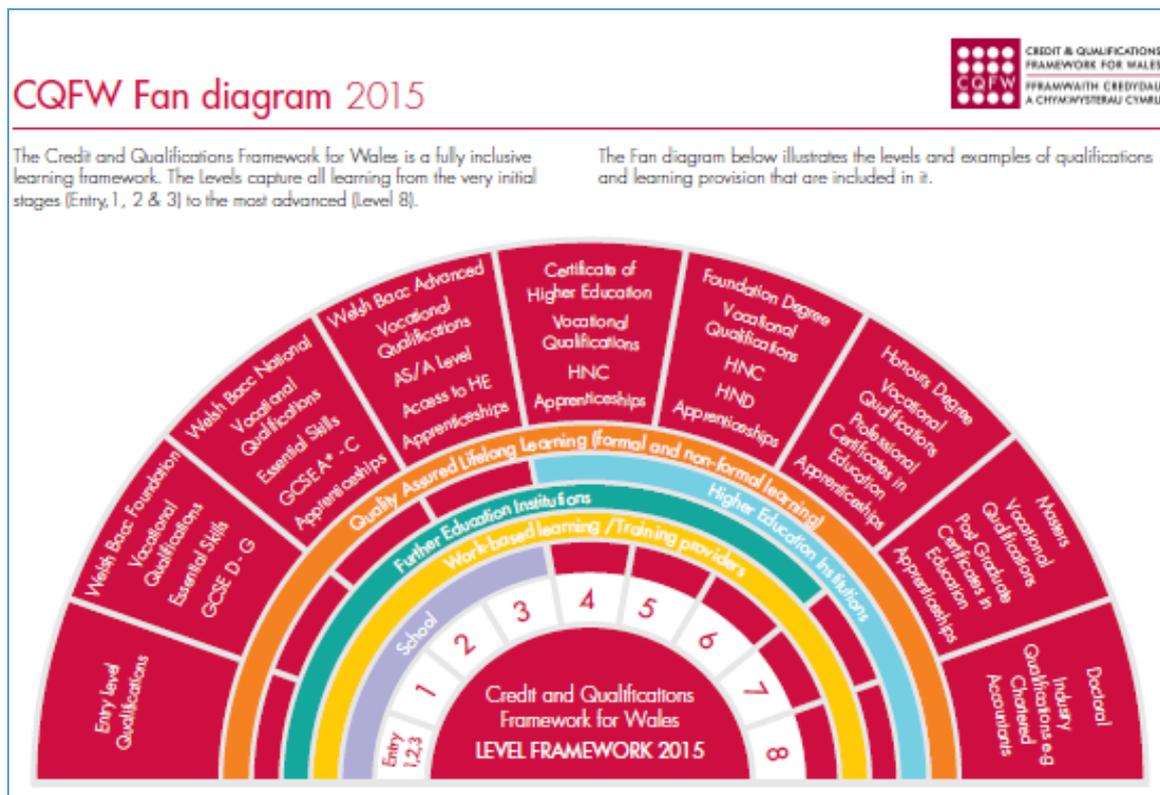
Figure 1: CQFW diagram showing Level Framework including (yellow) Work-based learning provision

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[1] For the abbreviations used, see p. 5, List of abbreviations.

(Source: http://gov.wales/docs/dcells/publications/150928-fan-diagram-en.pdf)

This study examines the UWTSD's experience between 2010 and 2015 in operating four European Social Fund projects delivering fully-funded work-based learning for the private sector in southwest Wales. The projects varied in scope, complexity and targets, and encountered differing challenges in implementation. For comparative purposes, the experience of project leads elsewhere in UWTSD and in other universities in Wales will be sought to identify common features.

The study compares management of the projects from an institutional and professional viewpoint, highlighting the lessons learned for future practice. The aims and outcomes of the projects have been extracted from the project proposals, closure and evaluation reports, with a particular focus on the points where significant changes to the delivery were considered.

Participants drawn from the lead academic managers involved in each project have been interviewed to reflect on how these critical points emerged, what response resulted, the effectiveness of progress tracking and active lesson learning. They were also asked to reflect on their personal experience of undertaking the project and what challenges they faced. The interviews were transcribed and common themes drawn together to propose best practice for projects of this type.

An anonymous online survey of project managers in HE in Wales had been undertaken to establish whether formal project management methodologies are used, and what processes are in place to review projects on completion and identify lessons learned. Unfortunately no responses were received and instead publicly-available information was used to address the question.

The aims of this research were to inform best practice in the fields of project management in HE and work-based learning, by:

- Exploring the institutional and personal experience of delivering projects in HE
- Critically evaluating how potential issues affecting project performance were identified and addressed
- Analysing different approaches to progress monitoring and capturing lessons learned
- Reflecting on the institutional and personal learning derived from the projects
- Critically evaluating participant's experience in relation to the projects

The research considered a range of issues arising from the intrusion of project activity into the HE domain of Work-Based Learning and more generally.

A presentation on the scope of the intended research was made to UWTSD's Faculty of Business and Management on 8 September 2016, and a presentation on

the intended research and initial findings was made to WIWBL's Researcher Group on 26 October 2017.

2   LITERATURE REVIEW

The research touches on fields of study which have had varying degrees of previous analysis: from an institutional point of view, the integration of projects, formal project management techniques and post-project reviews into the management practices of organisations, and the specific issues relating to projects in the Higher Education sector; and from an individual perspective, the impact of the emotional labour of project work on those involved, and the process of reflection and its role in learning from experience. For each of these themes, I have examined recently-published studies in peer-reviewed journals and academic monographs to assess the current state of knowledge. In general, much of the literature is narrative or descriptive, rather than analytical, and as a result contributes to a body of insights and conceptual models rather than formally examined theories.

2.1   Projects and organisational memory

Organisational memory is recognised as a key component of a successful enterprise, embodying the sum of individuals' experiences and incorporating them into the developing shared culture (Muskat and Deery, 2017: 433). Such knowledge has been shown to contribute to improved productivity and efficiency of the workforce (Nissen and Levitt, 2004: 176).

Projects by their nature are temporary, and involve risk and change (OGC, 2009). In contrast to previous generations of management theory, where stability was treated as the norm, the need for organisations to adapt and change has led to an increased concern with how projects can be used effectively in this context (Mullins, 2016: 422). The management of projects is recognised as a sub-discipline of business management and has been the subject of descriptive and narrative work but relatively little analysis; Söderlund (2004:184) highlights one of the key questions for future research as "What determines the success or failure of project organizations". What analysis there has been has had limited effect on the teaching of practice:

> "Much of the project management training is built on hands-on experience and tool-practicing. There is little evidence that the research literature has had a substantial impact on project management education"
>
> (Shenhar and Dvir, 2007: 96)

This is especially true for the implementation of formal project management methodologies such as PRINCE2 (OGC, 2009), Managing Successful Programmes (OGC, 2007) and Agile Project Management (Chin, 2004). Although these have a theoretical coherence, even in contexts where PRINCE2 might be expected to be

adopted in full, such as ICT projects in local government, a looser version has been adopted (Hadfield, 2006). Wells (2012: 56) has reviewed managers' views of the implementation of project management methodologies and has found that their perceived value depends on the level of responsibility and experience of those asked: practised middle managers who were engaged in implementation reported little benefit. O'Shea's survey of project management in Australian businesses explored the practical application of PRINCE2-type methodologies and found that elements of their practice had been widely adopted despite lack of specific training in their use (2008: 67). Frustration with the process-driven account of traditional project management research has led to the emergence of the Rethinking Project Management school, recognizing that project management is more than a set of tools and techniques to control activities; rather it has been seen to inhabit the domain of complexity, organizational strategies and adaptation (Svejvig and Andersen, 2015: 279).

Every project is in its totality unique to its particular location, time and context (Webster and Knutson, 2010: 2); but this does not mean that there are no underlying principles that can be recognised. Good management relies on building and learning from institutional memory (Calkins, 2001: 238). Post-project assessment has been recognised as a critical management tool to embed organisational learning (Schroeder, 2013: 37). Although it is generally recognised that organisations should review projects upon completion in order to learn from experience, most do not undertake such reviews, and if they do, it fails to influence future practice.

Much of the practice of project management methodologies has developed to reduce the institution's exposure to risk by the structured formalised identification of lessons learned to be incorporated into future activity (PMI, 2012); ideally this results in the routinisation of practices to minimise risk (Söderlund *et al.*, 2008: 524). "Learning from experience" is one of the PRINCE2 project management methodology's seven principles, and the production of a Lessons Learned report forms an essential part of the Closing a Project phase (OGC, 2009: 12; 210). A Post Implementation Review is seen as an essential part of government-funded projects (HM Treasury: Public Sector business cases, 2015: 32).

Other guidance on project management makes the same point using differing terminology – project appraisal, project review, project evaluation review, retrospective or sunset review, Santayana review[2] or autopsy (Baguley, 2008: 168; Field and Keller, 1998: 351; Watson, 2002: 108; Chin, 2004: 79; Westcott, 2005:

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[2] The 'Santayana review' is named to reference George Santayana's quotation "Those who cannot remember the past are condemned to repeat it" (Santayana, 2005: Chapter 12 (online edition not paginated)).

104). Although varying in scope and process, all are intended to capture the learning (positive and negative) from undertaking a project before the opportunity is lost. Ideally, these reviews and reports are then shared with the institution's QA or portfolio management unit to improve project management and technical standards (Bentley, 2002: 317). A recurrent question is how much effort an organisation could or should minimise its exposure to risk through careful review at the planning stage, when the most serious impacts which may be encountered are unpredictable 'black swan' events (Suárez-Lledó 2011: 89).

Nevertheless institutions have been found to struggle to benefit from these lessons (Williams, 2008: 249).

> "Corporate memories are exceptionally short. Even if the individuals on a particular project are retained by the organisation, the working knowledge to complete similar projects is lost after a period of two years"
>
> (Nokes and Kelly, 2007: 81).

Biggs and Smith have suggested that the idealised process of Project Cycle Management, with its emphasis on evaluation and reflection as an integral part of the process, is at odds with the reality of hierarchical institutional culture which prioritises central authority knowing best (2003: 1984).

It is unclear how well-embedded formal project management methodologies in general, and lessons learned reviews in particular, have become within organisations, irrespective of the theoretical recognition of their value. A survey of Research and Development companies running projects found that 'in practice over 80% of R and D projects have no review' (Zedtwitz, 2002: 259). It is unsurprising, then, that organisations report that 58% of change initiatives are not successful (Schroeder, 2013: 38).

The current research was therefore intended as a case study to explore how lessons were learned during and at the end of each project, what those lessons were, and whether they have been carried through into corporate memory and organisational learning.

2.2   Work-based learning projects in the Higher Education sector

There has been a general trend since the end of the 20th century towards 'projectification': the increased use of projects by organizations in the private, third and public sector to deliver outputs, organizational change and social change (Jensen et al., 2016: 21; Maylor et al., 2006: 667) alongside the development of New Managerialism as an approach to public sector service provision which focuses on changing institutions to become more customer driven (Deem 2004: 110). The

extent to which universities have been willing or able to embrace this type of entrepreneurialism has been limited and variable (Hordern, 2013: 57).

Universities in the past have conformed as organisations to what Mullins calls a 'process culture', being risk averse and slow to change, but the dynamic global marketplace has led to greater risk appetite (Mullins, 2016: 541) and greater competition (Sharrock, 2012: 325). The need to look for diverse sources of funding, beyond the state and student, creates a need for entrepreneurial management (Mainardes *et al.*, 2011: 137). In Germany, the adoption of a project economy as a strand of higher education funding to supplement a fixed level of state contribution brought in an additional 12% of revenue (Rollwagen, 2010: 17). Projects, with their associated risk and disruption, may sit uneasily within the system imperatives of corporate bureaucracy which prioritises 'low risk strategies, […] control, conformity and compliance' (McNay, 2007: 47), and may contribute to pressures on research integrity through commercial interests and sponsors' expectations (McNay, 2007: 65).

In the field of work-based learning, the need for new approaches to curriculum development and delivery was recognised as part of the drive to link higher education to the workplace (Saunders, 1995: 211; Boud and Solomon, 2001: 18; Evans *et al.*, 2006: 19-20; Wilson et al. 2016: 21; Foster et al. 2017: 85). The resulting expansion of work-based learning higher skills provision has largely been delivered by projects, rather than an extension of core university activities (McCracken, 2010: 34).

The current research will explore the specific issues that arise from projects in Higher Education and work-based-learning provision, building on the study of Jones and Washington (2016), which highlighted the tension between conventional academic processes and the needs of work-based learners to accommodate their participation in Higher Education within a life filled with other constraints and priorities. The issue is rendered highly topical by the introduction of Graduate Level Apprenticeships which are based on the WBL in HE model (Foster et al., 2017: 94).

2.3   Emotional labour

Emotion work or emotional labour has been identified as a part of the cognitive workload associated with the need to actively manage emotions arising in the course of one's occupation, particularly on occasions where the behavioural norms of the workplace are in conflict with the individual's emotional state (Hochschild, 1979: 570) what has also been called emotional dissonance (Morris and Feldman, 1997: 259; Andela et al., 2015: 323). It has been most fully explored in the context of the caring and health professions (Mann, 2005) and in service industries (Mann, 1997), but is a general feature of working in organisations (Mullins, 2016: 126). The project life cycle has been recognised as subject to intense emotional experiences (Lindgren et

al. 2014: 1404), with potential for negative impacts on those responsible (Asquin et al, 2010).

The implicit requirement that organisations place on their staff's behaviour at work has been labelled 'the psychological contract' (Conway and Briner, 2005: 19). More recently, the term Emotional Regulation has been adopted in order to explore how different individual attitudes and strategies affected the amount of emotional labour involved (Grandey and Melloy 2017: 411). Emotional Labour in this formulation is concerned with behaviour contrary to one's emotional state, Emotion Regulation is the individual's processing of the situational context to determine the state, which may be surface acting (disengaging core identity from the context), or deep acting (engaging with the context and attempting to modify the feelings).

It has been recognised as part of management with an "increase in emotional labour as workers shoulder responsibility for solving problems" (Docherty et al. 2006: 197). Goleman et al. (2002: 186) highlighted the need for 'team closedowns', giving an opportunity to 'celebrate the past, mourn the end of an era and discuss hopes for the future'; White *et al.*, (2001: 50) have critiqued models of group dynamics such as Tuckman's forming-norming-performing-adjourning/mourning: "Positive and effusive or sad, disappointed, or rejecting expressions of emotion typically are seen to threaten the work to be done". Bonebright (2010: 119) has reviewed the development and limitations of the Tuckman model but without considering the issue of emotional labour as a factor. Emotional dissonance has been recognised as a key component to emotional labour's effect on long-term performance (Andela et al. 2015: 328). The psychological impacts of dealing with change have been addressed in terms of mental resilience as a key variable in employee performance, with proactive personalities coping much better with a dynamic working environment (Kuntz et al. 2017: 232).

A Swedish study of emotional labour and project managers in the private sector demonstrated that they experience a high exposure to emotional dissonance (Lysak and Zlatar, 2013: 51), and typically adopted a surface strategy of concealing their true emotions. (Interestingly they also highlighted that dissonance can occur when the expected display is to show no emotion when emotions are felt) (*Ibid.*, 56).

There have been no specific studies of the emotional labour involved in working on projects in higher education, and this research will seek to explore the issue.

2.4 Processes of personal learning from experience

A project may be perceived as a success in itself, while not delivering the expected benefits to the sponsor, or may be considered a failure although meeting its objectives, let alone determining the causes for its success or failure. As a result, what Schön calls 'reflection on action' (Johns 2013: 2) requires the practitioner to sift

through the details of the project to try to identify key decisions (or moments of indecision) that had a critical effect on the outcome in order to identify and potentially absorb the lessons learned. Such honest reflection may be obstructed by an institutional need to present a positive narrative on all of its activities, regardless of actual impact, or, naturally, a focus on starting the next project.

There have been several models proposed for how professional practitioners might learn from their experience. Gibb's Reflective Learning Cycle envisages distinct stages of feeling, thinking, and analysis in the aftermath of an event (Husebø et al. 2015). Part of being a reflective practitioner is continual openness to learning from experience, either at the time (what Schön (1982: 153) calls *reflection-in-practice*) or afterwards (*reflection-on-practice*). Schön's concept has been further refined by Ellström (2006: 46-48), who sets out four types of action: skill- based (routine), rules-based, knowledge-based, and reflective. Thus he recognises that in practice people will move effortlessly between these types as the situation demands.

This research will explore how those involved learned from experience and incorporated that learning into future practice.

3 METHODOLOGY

The research was undertaken as a staged programme of reflection on practice through:

- A literature review considering existing research on project management practice and lessons learned, projects in Higher Education and work-based learning, emotional labour, and critical reflection
- Analysis of the UWTSD project closure reports to WEFO, independent evaluation reports, summary statistics and other material relating to the programme
- Selection, approach and briefing of participants from work-based learning and other projects in the Higher Education sector
- Semi-structured interviews with anonymised staff
- Transcription of interviews, coding and identification of emergent themes
- Online survey of project management practitioners in Higher Education bodies in Wales
- Reflection on the results and their implication for future practice

3.1 Research paradigm

Although these projects have objectively definable deliverables, the learning derived by the institution and individuals is a matter of perception and interpretation. The research is therefore framed as subjectivist, on the basis that reality is a construct composed by the viewpoints of researchers, and interpretivist, constructing a truth by drawing together data and applying an interpretative framework in order to draw conclusions focusing on generating qualitative data, through interviews reflecting the viewpoints of individuals and the meanings they have drawn from their experiences. A mixed methodology is used, mainly qualitative with some quantitative elements to examine the generalisablity of the results, followed by a grounded theory exercise to identify emergent themes (Page, 2007: 78; Hutchinson et al. 2010: 298).

At least two years have passed since the closure of most of the projects and the interviewees are therefore reporting on their current views after reflection and further experience; in one instance the project has closed recently. The data therefore comprise *ex post facto* commentary.

A grounded theory approach will be adopted to seek additional insights that may emerge from the discourse (Byron and Laurence 2015). The reliability of the conclusions drawn will be assessed by comparison with nominal and ordinal data gathered through survey, providing some indication as to whether the case studies in question are unrepresentative 'black swans' or can be taken as generalizable (Flyvberg, 2016: 232).

3.2   Ethics and Insider research

The research was 'insider research' undertaken by a researcher embedded within their own institution, with the risk that it might fail to challenge its assumptions and biases (Costley *et al.*, 2010: 3-6).

The researcher treated the information and opinions of the participants as confidential and potentially sensitive, and ensured that arrangements for anonymisation were robust and properly applied. The researcher had access to a large body of contextual information created by the organisation relating to the planning, delivery and evaluation of the projects, and was involved in the delivery on one of them. The researcher has chosen to limit information presented here on the specifics to information already in the public domain to avoid any issues of confidentiality and data protection. The researcher's own opinion about the organisation's lessons learned processes are not the focus of the research, and are presented as author commentary so that any bias will be evident. It is considered that this potential bias is mitigated by the desire of the research to reflect a range of individual viewpoints rather than to reach a consensus conclusion. This issue is explore further below (see section 3.8 below, *Auto-ethnographical reflection*).

The research was initially proposed as a staff research project in 2016 comprising semi-structured interviews with key project staff members. Application EC90 was approved by the UWTSD Ethics Committee on 20 December 2016. Two interviews with participants took place under this approval and the data was carried forward into the current study.

In September 2017 the research was re-contextualized as the Work-Based Project as part of the researcher's MA in Professional Practice. The proposal was amended to include a quantitative element to make the findings more robust, and a revised version of the 2015 E1 Ethics Form was approved in October 2017 (Appendix 2).

An alternative approach would have been to seek a new approval under the 2017 regulations and new EC1 form (v5), but WIWBL's Ethics representative advised that an amendment of the previous version was more efficient and equally valid.

3.3   Research questions and hypotheses

In order to focus the collection and analysis of data, specific research questions have been devised, accompanied by Null (H_0) and Alternative (H_1) hypotheses:

What approaches have been tried to capture lessons learned in the HE setting? Which approaches have worked best?

$H_0$1 Higher Education Institutions have not attempted to capture lessons learned

$H_1 1$ Higher Education Institutions have attempted to capture lessons learned

Evidence: Interview responses, survey responses, documentation

How many of the challenges faced by projects in implementation had been identified in advance as part of the planning?

$H_0 2$ Challenges had not been identified in advance of the project

$H_1 2$ Challenges had been identified in advance of the project

Evidence: Interview responses

How well have institutions absorbed lessons learned from projects?

$H_0 3$ Institutions have not absorbed lessons learned

$H_1 3$ Institutions have absorbed lessons learned

Evidence: Interview responses, survey responses

How have individual practitioners been affected by their experience of working on projects?

$H_0 4$ Practitioners have not been affected by their experience

$H_1 4$ Practitioners have been affected by their experience

Evidence: Interview responses

3.4   Population and sample

There are 171 Higher Education institutions in the UK (GOV.UK, 2017) employing a total of 210,000 staff (HESA 2017), an average of 1,228 per HEI. UWTSD's revenue from projects consist of about 1% of turnover ((UWTSD, 2016). If this is typical, and if the proportion of staff matches the proportion of budget, that would suggest that there are 2,100 staff employed on project work in HEIs in the UK, or on average 12 per HEI. In the IT sector, project managers form about 5% of staff (Computer Economics, 2017). If this proportion holds true for HE projects, that would yield a total population of project managers in HE in the UK of 105 (Figure 2).

A survey of work-based learning in HEIs in 2011 identified 7 universities in England and Scotland with significant designated WBL provision (Lemanski et al. 2011). At that time there were six HEIs in Wales delivering work-based learning through the ESF programme (OldBell, 2013). On this basis, 7.6% of HEIs were actively engaged in work-based learning (13/171). This would suggest that 7.98 of the project managers in HE were involved in work-based learning if the proportion of project work held true for this field. There are good grounds for believing the extent of project-based work in WBL is higher than that, since the examples from Wales had significantly greater engagement with funded programmes than the remainder of their institutions and McCracken (2010) highlighted the use of projects by HEIs to enlarge WBL provision. An estimate of 30 seems reasonable, of which 4 were in WIWBL.

The population for participants for interviews comprised two groups (all were adults) (Table 1): Group 1. any individual who acted as academic lead for a WIWBL work-based learning project, 2010-2015 (population total of 5 roles, 4 individuals), and Group 2. individuals with experience as lead academics of Work-Based Learning projects in the UK or other projects in HE in the UK (total of approximately 101) (see Figures 2-3 and Appendix 3).

It was not possible to establish the precise size of the population for Group 2 since this information has not been aggregated, and is not readily discoverable from individual HEIs.

Table 1: Research participants

Group 1	Academic leads for WIWBL Work-Based Learning projects 2010-2014
Group 2	Academic leads for other projects in Higher Education
Group 3	Project management staff in HEIs in Wales, 2017
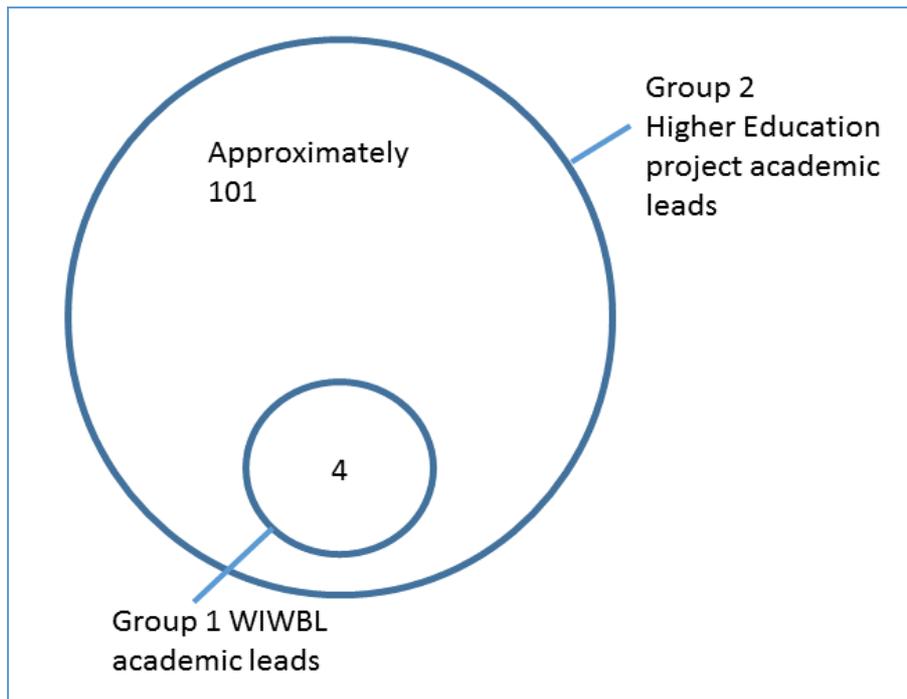
Figure 2: Population to the sampled for interview (not to scale)
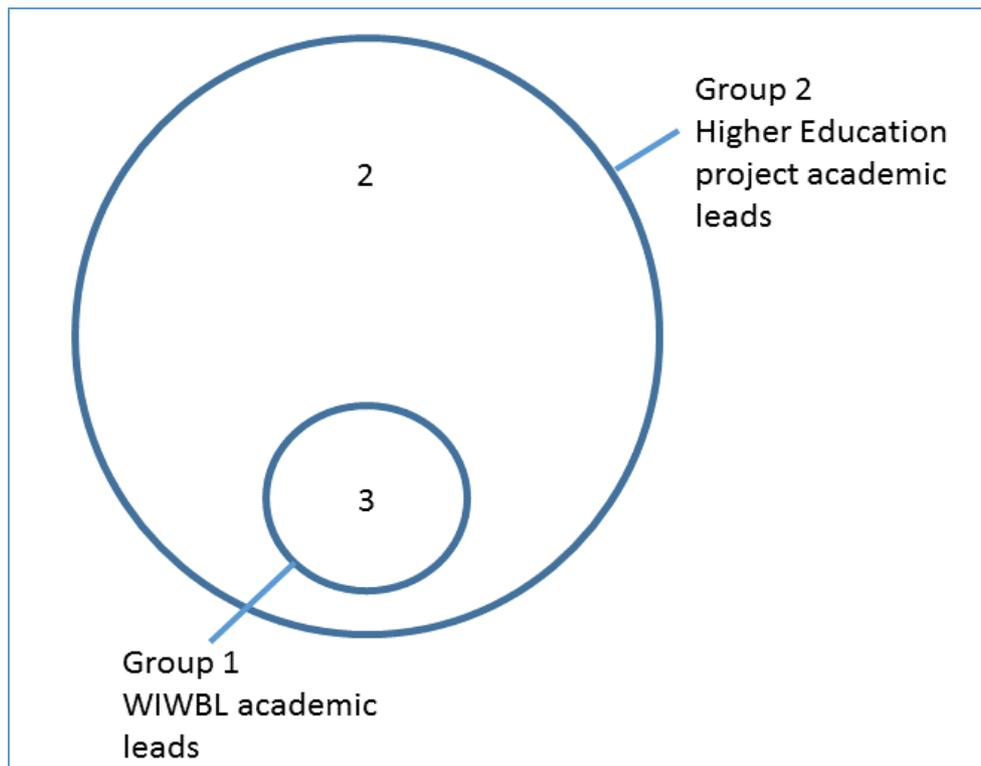
Figure 3: Samples interviewed: Group 1 (WIBWL academic leads) and Group 2 (Other HE project academic leads) (not to scale)

All individuals from Group 1 indicating their availability for interview were interviewed. Three interviews were considered a minimum viable sample size, with a confidence interval of 35 at 95% confidence level (Survey System, 2017).

Selected individuals in Group 2 were approached to provide comparative data from other projects and institutions based on their willingness to take part and availability (a 'convenience sample' (Gray, 2004: 88)).

In order to preserve anonymisation, participants from Groups 1 and 2 have not been differentiated in the text.

The population of Group 3 was defined as any staff responsible for projects in an HEI in Wales (8 HEIs). The 30 members of the WHEELOS group were contacted, but only 3 responded.

3.5   Interviews

The main method of data collection was by individual semi-structured interviews with members of staff using a standard set of questions relating to their experience of working on a specific project as academic lead. This format was chosen in the hope that it would encourage participants to reflect on their experience and talk at length if they wished about their practice and learning. In this way it was hoped that common themes would emerge arising from the intrinsic challenges of managing projects, at a more generalised level than the very specific operational lessons reported in the closure reports. The focus of the study was on the project process and its effect on those involved, rather than conventional indicators of project performance. The qualitative content of these narratives proved as valuable as data on the objective outcomes. In order to preserve a rich resource of text, the interviews were recorded and key passages transcribed, allowing observations to be reported in the participants' own words.

Interviews took place in an office, lasting approximately 40 minutes, with responses recorded by means of voice recorder and interviewer notes, and anonymised for the purposes of analysis. After the purpose of the research was explained, a standard set of questions were asked; these were open-ended so that participants could give long, detailed responses if they wish. All of the projects had been completed at the time of interview and therefore the responses are based on the interviewees' recollection of past events rather than reporting on their current situation.

3.5.1 Interview questions

What was the aim of the project?

What was your role?

At the start of the project, what did you see as the main challenges you would face?

Did the project use a formal project management methodology such as PRINCE2? Have you had any project management training?

How confident were you that the project would succeed?

How was the project's progress monitored?

What known or unforeseen issues were encountered in implementation?

What was the biggest challenge the project faced?

Did the project meet its targets? What changes were made to the targets over the course of the project?

Was there a point where the early closure of the project was considered? What were the institutional benefits derived from running the project?

How were lessons learned captured during the project and at the end? Have these informed the institution's future practice?

How was project closure planned and implemented?

How did you reflect on your experience during and after the project?

What impact has the experience had on your professional practice?

What did you find most challenging personally about the project?

Reponses to the first eleven questions were summarised to identify common themes.

Responses to the final four questions were transcribed, manually coded using QSR International NVivo 11 qualitative data analysis software and analysed to identify common themes using the Grounded Theory model (Burke Johnson et al. 2010), supplemented by relevant quotations and information derived from other responses. Taxonomic analysis was also undertaken to understand the way that words had been used by the participants.

The Grounded Theory approach was chosen in preference to the alternative adding further explicit questions to explore the emotional content of the interviewees' work. In the initial interviews it had become clear that the respondents' preferred mode of discourse concerned externalities (targets, processes, and activities) rather than their internal thoughts and emotions. It was considered that asking a direct question such as *"Did you experience moments of doubt or indecision in the course of the project?"* would make the interviewee uncomfortable and would probably not yield useful responses, since they might choose to present an overly-positive impression rather than expose what might be perceived as weakness. The potential for interviewees to answer questions based on their conscious self-interest has been recognised as a methodological problem (Brinkmann, 2013: 149).

In one case the recording of the interview only started after some of the questions had been asked. The interviewee's responses for these questions were summarised based on the interviewer's notes.

3.6   Survey

The online survey was intended to gather nominal and ordinal (Likert-type scale) data about the nature of programme and project management practice in the Higher Education sector in Wales, and in particular to establish how far formal project management approaches have been adopted (Carifio and Perla, 2007: 113).

Participants in Group 3 were identified through their membership of the WHEELOS (Welsh Higher Education European Liaison Officers) group, and were emailed an invitation to take part in the survey which could accessed via a hyperlink in the email. The group's membership is 28 individuals, drawn from the project development staff in each HEI, and are therefore in a position to understand their institution's practice in managing and overseeing projects.

The purpose of the research was explained, and anonymity assured; no data identifying the institution was requested. The survey utilised the online platform 'Survey Monkey' so that responses were submitted anonymously. The online questionnaire included questions on project management methodologies adopted (if any), processes in place to capture lessons learned, and how project activity within the organisation is controlled.

It was expected that the responses would be relatively homogenous, reporting that formal project management methodologies and review processes were rare. Since the population is smaller than 30, statistical analysis of the results will have limited reliability (Cohen et al. 2011: 144). The questionnaire was structured to gather basic factual information. It was considered unlikely that respondents would be able or willing to provide more substantial responses since they would not have access to the relevant detailed information or considered that it was confidential.

3.6.1 Survey questions (See Appendix 5 for details)

How does your institution control its projects?

Which project management methodology is used?

How are projects usually reviewed at closure?

"When planning a new project, my organisation ensures that past experience is taken into account" Strongly agree/Agree/ Neither agree nor disagree /Disagree / Strongly disagree

Responses were tabulated as a whole to compare the interviewee and survey responses.

In the event, few survey responses were received, possibly because of a reluctance to share information outside an institution, or because of pressure of other work. In order to explore whether the interviewees' responses were representative, publicly-available information about Welsh HEIs' project management practice was reviewed by examining the Business pages of the universities' websites (Aberystwyth University, 2017; Bangor University, 2017; Cardiff Metropolitan University, 2017; Cardiff University, 2017; Wrexham Glyndŵr University, 2017; Swansea University, 2017; University of South Wales, 2017). Guidance for their staff on development

and implementation was checked to determine how projects were governed and monitored and by searching for the term 'PRINCE2' in their guidance and job descriptions.

3.7   Analysis and conclusions

The results of the interviews and survey were brought together to triangulate the two sets of views (Gorard and Taylor, 2006: 43) of the treatment of projects in Higher Education and to identify the areas of common concern using a grounded theory approach and to make proposals for future practice. The findings were assessed for their reliability (the extent to which a coherent or consistent pattern emerged), validity (whether the nature of the data could be related to the research questions to be addressed), and generalisability (how widely the conclusions from the study might be applicable in other contexts) (Adams et al. 2007: 235).

3.8   Auto-ethnographical reflection

As an insider researcher, it is inevitable that I approach this topic with a viewpoint deriving from my own experience, knowledge and opinions. I have been engaged in project management for 25 years and have undertaken extensive reflection on the issues that arise.   I have therefore described below my assumptions and expectations in relation to this research as an exercise in auto-ethnographical reflection to assist the reader in considering the biases that may have been imposed in undertaking the analysis (Etherington 2004: 212).

I have worked on projects in Higher Education, public sector and commercial environments, within small and large teams, using different project management process. This included several that aligned themselves explicitly on PRINCE2, and I completed PRINCE2 Practitioner training, so I have a thorough understanding of how it is intended to be applied. At the time my conclusion was that PRINCE2 was only suitable to certain specific contexts and scale of projects, and carried excessive administrative overhead for use in small and low risk projects (Locock 2012: 102-103).

I worked on one of the work-based learning projects covered by the current research, in the role of Senior Project Officer, assisting the lead academic by taking responsibility for finance, claims, indicators, and marketing.   The key lessons I learned from the experience was the need for commitment and resilience when a strategy is the right one but not yielding the desired outcomes.

On the basis of this experience, I entered this research with the expectation that it would show that projects would be more likely to succeed if significantly greater resources were invested in research at the planning stage, that institutions not using a PRINCE2-type approach would have limited mechanisms for project monitoring, that most issues that arose in the course of project delivery were identified, or at least identifiable, at the planning stage, that institutions were poor at implementing

changes in response to lessons learned from projects, that the individuals involved would have reflected on their experience and made changes to their practice as a result, and that the biggest challenge would lie in the juggling of multiple strands of activity.

The results of the research have therefore been surprising. I had underestimated the impact of 'black swan' events wholly outside the projects' control, the maturity and robustness of inhouse monitoring and reporting processes, and the readiness of organisations to adapt their procedures when necessary. On the other hand, I had overestimated the extent to which individuals reflected on their practice. I had also underestimated the significance of social interactions and the need for concealment as a major challenge of the project manager, and the underlying reasons that this was so significant.

3.9 Adverse outcomes and risk

The main potential risks identified in the project proposal related to the robustness of the arrangements for anonymity and confidentiality, and the extent to which the participant's perception of these arrangements affected their willingness to be frank in their responses. The respondents appeared to have full confidence in the arrangements and were open in their answers, although many seemed by habit to deflect discussion of emotions.

In contrast, the low response rate to the online survey presumably reflects the desire of institutions to protect their processes and practices from external scrutiny.

The arrangements were implemented effectively and the responses appeared to be unaffected by possible concerns about confidentiality.

3.10 Data management

During the study, the data were held on a secure server, with paper copies and a physical back-up held in in a locked filling cabinet. On completion of the study, the primary digital data (recordings and transcripts), and analysis documents, were uploaded onto the UWTSD Research Data Repository. All paper copies and other digital copies were destroyed.

4.   FINDINGS

4.1   Project performance

4.1.1 Context

Between 2010 and 2015, WIWBL delivered four projects as part of the Work Based Learning Programme administered by the University of South Wales (formerly the University of Glamorgan, funded by the European Social Fund through WEFO (Wales European Funding Office). The programme received funding of £19.5m in the 2007-2013 funding round (OldBell3, 2015: 15) (project activity ran until 2015), targeted at improving the economy in the Convergence area (West Wales and the Valleys: see Figure 2) by improving the skills of the workforce under Priority 3 (Improving skill levels and the adaptability of the workforce) Theme 2 (Skills for the knowledge economy: higher level skills and systems for workforce development). The programme funded 23 projects (OldBell3, 2015: 48-49), delivering courses of 10-60 credits at levels 4-7. All ESF programmes use common definitions for key indicators in terms of outputs (participants engaging with a project) and results (participants achieving the intended end result of their engagement) (ESF Support Centre, 2016: 4; European Union regulation 1304/2013, Annex 1). The programme was intended to benefit 5,541 participants, and achieved 5,171 (93%) (Welsh Government, 2017). Administration and management of the programme was supported by a Programme Management Unit based at the University of South Wales.

UWTSD operated four projects delivering fully-funded work-based learning for the private sector in southwest Wales: LATERAL (Liberating Aptitudes by Technology Enhanced Recognition and Accreditation of Prior Learning), which provided a pathway for workers to access Higher Education by awarding credits for their experiential learning; Mentoring our Workforce (MoW), targeted at businesses wishing to develop workplace mentoring schemes; Elevate Cymru (South West hub), the regional hub for a pan-Wales project, the University Network for High Performance Skills, delivering Higher Education courses in management topics, personnel, and mindfulness; and Safe Workforce: Sustainable Workplace (SWSW), developed to address the recognised need for businesses to improve their health and safety performance by addressing behavioural safety by changing the culture. Each project developed its own branded identity (see Appendix 4).

In each case the project was overseen by the Head of WIWBL as project executive, who also represented UWTSD at the Programme Board overseeing the Work Based Learning Programme. In UWTSD, responsibility for project management is usually divided between the lead academic (with 25-55% of their time assigned to project management activities and the remainder to teaching responsibilities, mainly outside the project), acting as team leader and operations director, and a full-time Project Officer whose main role is to maintain the project documentation, procurement, finance and claims, marketing and enrolment. Recruitment, finance and student

administration is handled by university support services. Lead academics typically had limited prior experience of project management and line management. The majority of project staff were external appointments. Progress of the projects was monitored monthly at meetings of WIWBL staff, acting as a project board.
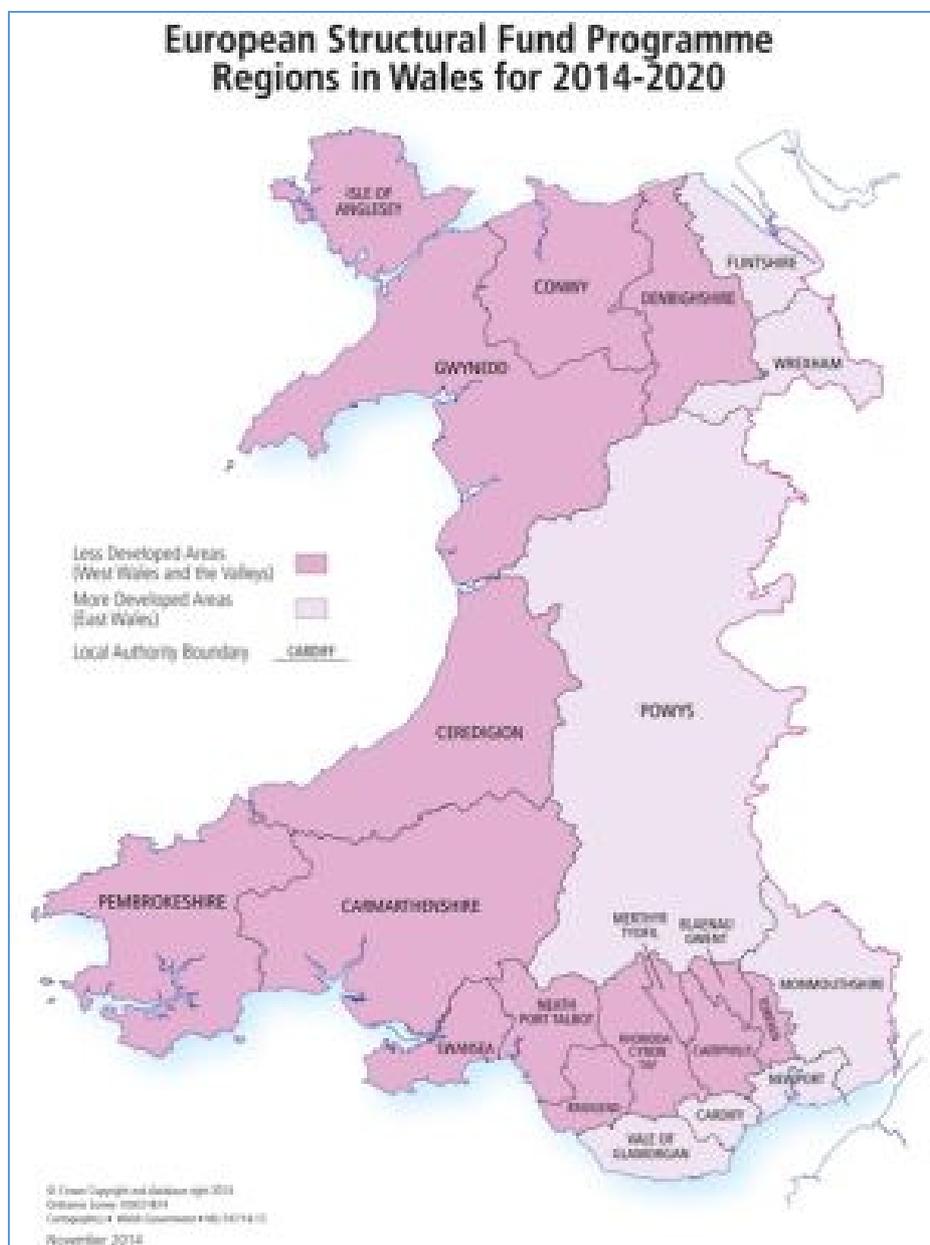
Figure 4: Convergence area of Wales (West Wales and the Valleys) (the same area covered the 2007-2013 programme)

[Source: http://eft.cymru/English/LatestNews/Pages/ESIFlaunch.aspx]

Table 2: Project scope

Id	Title	Period	Cost (£m)	Learners profiled at start	Learners achieved	Area covered
001	LATERAL	2010-2013	0.620	180	99	Convergence area
002	Mentoring Our Workforce	2010-2013	0.355	80	80	Convergence area
015	Elevate Cymru (West hub)	2012-2015	1.138	267	305	Southwest Wales
027	Safe Workforce: Sustainable Workplace	2013-2015	0.518	116	145	Convergence area

[Sources: OldBell3 2013, 2015; UWTSD 2014a, 2014b, 2015a, 2015b]

The success and impact of the programme as a whole was the subject of external evaluation by OldBell3 at the mid-point and towards the end of the programme (OldBell3, 2013; 2015). The evaluation included interviews, surveys, and focus groups with project staff, stakeholders, learners and employers, in addition to a review of the quantitative outputs and results achieved.

Among the findings were that the Work Based Learning Programme Board was seen as suffering from a lack of engagement with senior staff from some HEIs (OldBell3, 2015: 136-137). The survey reported that LATERAL's learners and employers said they had received unclear information (OldBell3, 2013: 65-66); the courses were liked by the learners (OldBell3 2013: 68), but that many of employers felt their needs were not being addressed (OldBell3 2015: 80). Similarly, for Mentoring Our Workforce it reported that learner aims were being met but many employers' needs were not (OldBell3, 2015: 77, 80). Because Elevate and SWSW were still delivering at that point they were not covered in detail by the evaluation, but these later projects had placed great emphasis on ensuring that employers were involved in determining the skill gaps to be addressed, and so if they have been included a more positive view would probably have been presented.

4.1.2 Lessons learned

As part of the PMU's project closure process, UWTSD was required to prepare a project closure report for WEFO, summarising financial and indicator performance and, critically, to identify lessons learned and best practice (UWTSD, 2014a, 2014b, 2015a, 2015b). These reports fed into the main Work Based Learning Programme

report to WEFO. It was left open to each project lead to decide how to collect and report the lessons learned, as it had been to identify lessons in the course of project delivery.

Most of the lessons reported were operational and specific to the particular project's context. Some themes recurred, though (see Table 3).

Table 3: Lessons Learned themes

Theme	LATERAL 2010-2013	MoW 2010-2013	Elevate 2012-2015	SWSW 2013-2015
Staff recruitment timescale	▓	▓		
Academic processes	▓	▓	▓	
Financial processes	▓	▓	▓	▓
Funder requirements	▓	▓	▓	▓
Marketing and business engagement	▓	▓		▓
Student completion rate	▓	▓		
% students achieving results	29	36	70	71

[Sources: UWTSD 2014a, 2014b, 2015a, 2015b]

Most of the reported issues arose from the tension between existing university processes and the demands of the project in terms of timing and compliance with WEFO regulations. Because of the staggering of the project timescales, later projects had the opportunity to reflect on issues encountered by the initial projects and to some extent design around them.

Staff recruitment could take more than three months from initial requirement to advertisement, shortlisting, interviewing, selection, appointment and starting work. The first projects in their planning had underestimated the timescale and as a result programmed activities were delayed pending the start of the project team. Later projects did not encounter this issue since planning took it into account.

Academic processes also affected planned activities: validation of new courses, enrolment of students and confirmation of results engaged with the university's QA procedures, which were developed with the standard academic year and BA and MA students in mind. To some extent greater awareness of the potential issues reduced their impact through planning, but they remained as a constraint.

Similar issues occurred in terms of the University's financial processes for the allocation and management of budgets, procuring and ordering goods and services in line with public procurement rules, and the calculation and coding of staff costs. Traditionally the university has centralised most of its financial functions and it proved difficult to accommodate project requirements. This remained an issue throughout, as did the thorough requirements laid down by the funder for evidence trails to support grant claims; some of the evidence requested proved difficult or impossible to generate from the university's systems. As a result, compliance with funder requirements became a significant strand of project activity in itself.

Marketing and business engagement was critical to the achievement of targets since a flow of participants were needed to follow the qualifications. Although the courses were provided at no cost, being fully funded by ESF, it remained difficult to engage with employers and recruit learners. A wide range of avenues were explored, including print advertising, hosted events, radio advertising, network events, direct mail and social media campaigns, but it remained an area where the magic bullet proved elusive.

Given that the purpose of the ESF funding was to equip the Welsh workforce with new qualifications and skills, the key metric from WEFO's point of view was the number of people leaving with a completed qualification (defined as the KPI 'results'). Thus it was even more critical to the projects that the learners once enrolled continued to the end and submitted assignments, than that they started. The rate of withdrawal was closely monitored, and in the early projects it was found to be extremely high. The later projects were able to reduce withdrawal rates substantially, mainly by dividing the courses into smaller modules whose assignments were of more manageable scope. This is probably the best example of a lessons learned process leading to changes within and between the projects. Overall the ESF 2009-2013 programme reported that 89% of participants achieved a qualification (Davies et al. 2016: 36).

4.1.3 Changes made

In the course of each project, an opportunity was presented annually for the university to submit a proposal to reprofile its targets and budget from the original, subject to the funder's approval. Although this was not classified as a lesson learned exercise, it reflected an opportunity to reflect on experience to date and to consider how likely the project was to meet its targets without changing approach. The changes made (Table 4) reflect the same issues as the lessons learned (Table 3), and, again, are mainly operational rather than strategic.

Table 4: Changes made during project delivery

Project Id	Changes made
001	Reduction in participant target reflecting less demand that expected; closure of recruitment activities
002	Change from long courses to short courses in response to low completion rate
015	Reduction in expenditure and participant targets
027	Reallocation of expenditure

[Sources: UWTSD 2014a, 2014b, 2015a, 2015b]

4.2 Results

4.2.1 Project management in HEIs

Welsh HEIs' project management practice was reviewed from the survey responses and from information made available on the business-facing pages of their websites (Aberystwyth University, 2017; Bangor University, 2017; Cardiff Metropolitan University, 2017; Cardiff University, 2017; Wrexham Glyndŵr University, 2017; Swansea University, 2017; University of South Wales, 2017). As a comparison, the interviewee's responses were inferred from their comments.

Most HEIs located projects within a parent academic department, although some, with a low level of project activity, managed them centrally. Formal project management methodologies such as PRINCE2 are rarely adopted.

Table 5: Project management in HEIs

	Survey	Interviews
Location of projects		
Central project office	2	
Embedded in faculties		1
Both	1	4
Project management methodology		
Full PRINCE2		
PRINCE2 governance		2
Agile PM		
MSP		
Own guidelines	1	2
No formal methodology	2	1
Post-project review (all that apply)		
Lessons learned report		3
Closure report		4
Post-project review	1	
No review	2	1
Lessons from past projects feed into new projects		
Strongly agree		
Agree	1	1
Neither agree nor disagree	2	3
Disagree		1
Strongly disagree		

4.2.1.1 Methods used

It was expected that some HEIs would have adopted formal project management methodologies, and in particular PRINCE2, which was developed with public sector bodies in mind, while others would adapt parts of PRINCE2 practice and terminology, and the remainder would rely on conventional line management approaches.

No examples of fully-implemented PRINCE2 were encountered; the majority of projects used PRINCE2 elements of governance and reporting, while using inhouse processes for other facets. In a few cases no explicit methodology was used.

Elements of PRINCE2 most often cited were:

- Project governance and roles
- Project plans and change control
- Highlight reports
- Risk management
- Work packages

Elements which do not appear to have been widely used include product-led planning, product specification and quality management, checkpoint reports, formal exception reporting and Closing a Project.

None of the interviewees had received project management training from the institution in preparation for the role, although some had received such training in the past.

4.2.1.2 Location of projects

All HEIs reported that most projects were embedded within the relevant academic department, with some projects being run by a central administrative unit. This approach makes sense if projects are being mainstreamed, but may lead to lack of cohesion in terms of methodology and sharing best practice and lessons learned.

4.2.1.3 Reporting/monitoring arrangements

All of the projects covered by interviews had a series of measures in place to monitor progress, with specific reference to indicators, and oversight in the form of a project board meeting monthly or quarterly. Generally a monthly reporting cycle was found, with the compilation of KPIs against profile, and monthly and quarterly highlight reports. In one case indicators and progress against milestones was reported on a web tool. External evaluation of the projects and programmes was usual.

Although monthly progress was usually monitored by senior staff, it is not clear how engaged they were with the project's work.

In one case a shared web platform allowed all consortium partners to view current data.

"I didn't feel that the project was being monitored by the institution"

Participant 4

"The only times they really get involved is when things go awry and then all of a sudden the University's at risk, financially I mean, and at that point then, in some respects, it could be too late."

Participant 4

4.2.1.4 Project closure

In most cases, the project closure process was initiated by the programme, and was planned and implemented over a long period, resulting in the creation of an ordered archive by the end of the project. In practice most projects experienced a half-life, dealing with queries after the end of the project, after the team had dispersed.

In other cases the project closure was managed by the lead academic during or after the end of the project activity.

It would appear that some institutions fail to allow for the resource implications of dealing with the legacy of completed projects or put robust measures in place to ensure that they can be dealt with effectively.

These responses reflect what might be expected of projects in Higher Education: it is clear that for all institutions, projects form only a small proportion of their activity, and the maturity of their approach to project managements reflects this. Formal project management methodologies have made limited impact on practice, but reporting and monitoring practices conforming to them have been adopted.

4.2.2 Issues encountered, challenges and targets

Responses indicated that most lead academics were confident at the start that the project would succeed, if the right team were recruited.

"I was extremely confident at the beginning that we would actually smash targets."

Participant 3

"Very confident. … I was sure that we would get something out."

Participant 5

Most considered that the targets for outputs they had set were challenging. One reported that although the targets were unrealistic, the project would provide significant other benefits to the institution even if they were not achieved.

4.2.2.1   Predicted issues

In response to the question about issues that were encountered that had been identified in advance, a wide range were reported:

- Recruitment of sufficient participants
- Overlap of provision and marketing between consortium partners
- Difficulty finding staff with the right skills
- Contract management of suppliers
- Accuracy of budget
- Need to adjust to the nature of project work in Higher Education
- Reliability and sincerity of expressions of interest from target market
- Difficulty of engaging with businesses, especially through cold calling and networking events

A recurrent issue was dealing with expected demand, from specific employers or from a sector. Projects consulted established employer research du=ring the bid stage, which typically showed that there were significant skill gaps that were a priority for businesses if they wished to develop. For example, a South Wales Chamber of Commerce survey showed that 33% of businesses reported that their staff lacked the skills and qualification needed for their roles, and 29% reported that they were unable to recruit suitably qualified staff (2011: 2). On this basis it was reasonable to expect that employers would be keen to take up relevant opportunities, but it appears that these responses constitute a 'Soft yes' (Anthony, 2013), reflecting a broad intention rather than a commitment to take action.

In principle, all of these issues could be accommodated within a cautious, market-tested, thorough project plan. However, the fact that these issues were anticipated and allowed for did not prevent them from having serious effects on delivery, an instance of the paradox that has been called Hofstadter's Law: 'It always takes longer than you expect, even when you take into account Hofstadter's Law' (Hofstadter, 1999: 152).

4.2.2.2   Issues not predicted when planning

Many of the issues encountered might have been foreseeable at the project planning stage, if additional time and resources were available. (Typically there was no development funding available which limited the extent of feasibility research.)

Examples cited by the respondents included the need to develop a CRM system inhouse because the partnership was unable to provide external access to an existing system; the recruitment of staff taking significantly longer than had been allowed for in the plan; employer engagement and needs analysis requiring more time and resources than had been expected; ineffectiveness of advertising in leading to enrolments; the need of staff to move between roles flexibly to deliver different parts of activity, and the need to co-create products with customers rather than rely on off-the-shelf standard products. In each of these cases, it might have been possible to foresee the issue and its impact on the project, if more extensive and detailed examination of the practical issues of implementation had been undertaken, although it is difficult to predict which might prove significant.

There remain issues which were wholly unforeseeable, and wholly outside the control of the institution. In one case, there was a twelve-month delay in signing off on the contract because of other members of the partnership failing to approve it, delaying the start of delivery, and in another similar case the partnership had to be reconfigured when the lead partner withdrew from the consortium. One project was heavily impacted by an institutional merger that coincided with delivery; this impacted staff availability, courses being taught, and the location of the team. Another project's progress was significantly affected by a project partner not being able to deliver their assigned work package through lack of expertise. Clearly partnerships and the institution's wider activities are significant areas of risk to projects.

4.2.2.3   Targets

Most of the projects achieved their targets, although all of them were at some stage below profile. Respondents reported a feeling of frustration and impotence when activity was failing to result in the desired uptake, resulting in scrutiny from the funding body and the institution.

> "There was pressure when we weren't meeting targets."

> Participant 3

Even for the successful projects, it was clear that in many cases meeting the targets had required significant commitment and flexibility, and was partly out of the team's control:

> "We had a bit of good luck"

> Participant 4

These results show that project planners are good at identifying some of the issues that will prove critical to the success of the project, but perhaps are over-confident that they have allowed for their impact. On the other hand, it is probable that projects would have run more smoothly if there had been more opportunity to explore some of the other potential issues before committing to the plan. The 'black swan' issues, which were either unpredictable or wholly outside the project's control, appear to be more common than planners would wish. Achieving targets is a likely

project outcome but not without significant levels of oversight, flexibility and resilience. Overall this can be taken to imply that, despite the care taken when developing project proposals, projects carry with them a significant level of risk for the institution.

4.2.3   Pre- and post-project review and organisational learning

In response to questions about review processes, the answers varied. In one case, no formal process was in place, although the team adapted their approach during the project and drew their own conclusions from the experience. In three cases there was a formal lessons learned exercise as part of the project closure process, and in two cases the best practice was shared across the programme during and after the project.

> "The closure report was started very early on, and we used to have getting the team together and brainstorming, and every session we would use the plus/delta [feedback from learners at the end of each delivery day], and the changes we made to how we delivered were actually quite noticeable and we developed some strong products."
>
> Participant 3

In one case an external evaluator acted as a critical friend throughout the project, facilitating reflection and changes in practice.

Despite the lack of a formal handover process, most of the institutions had initiated changes in practice in response to the projects' experiences, mainly to accommodate current and future project activities within existing administrative and QA processes. In other cases the project team dispersed without the institution making adaptations.

Particular points of learning were the need to be manage partnerships carefully, with clarity about roles, responsibilities and governance structure, the streamlining of financial processes for expenditure and related evidence trails, and the importance of resilience when selecting project teams.

There were also reports of resistance to change:

> "This model which has been running for centuries is how we are going to do it."
>
> Participant 3

> "The institution itself probably hasn't learned that it needs to monitor these projects, and have feedback on a regular basis
>
> Participant 4

These comments suggest that organisational learning cannot be assumed as a matter of course and requires an openness to listening and adaptation.

Although formal project management methodologies were not employed, it is clear that the principle of capturing and sharing lessons learned throughout a project, and taking them forward into organisational memory, is well-embedded in Higher Education. This conforms to the broader issue of change in Higher Education: universities may project an image of tradition and stability, but in fact have proved highly adaptable to a changing social, educational and financial environment (Hotho, 2013: 360).

4.2.4 Impact on respondents' practice

Few of the interviewees had made significant changes to their own practice following the project, although some had learned more about their own capacities. In general the responses were much fuller in discussing changes to external processes and activities than in changes in their attitudes, values and priorities (perhaps an example of the type of masking that formed part of the role).

> "So recently I took on a Leadership and Development module because I felt that I could do that now, take on teaching a module in that area which I would never had done before […] I felt that I could examine traits and behaviours and things in an interesting way because […] it's so much easier to just manage a system than it is a person […] There's like a hierarchy that you have to work with [in non-project work], and in a project, you create your own."

> Participant 1

> "I don't think I've actually achieved the financial skills, but I'm much more aware of the need for them."

> Participant 2

> "It gave me the confidence to go in and argue the case for all sorts of things."

> Participant 2

> "Its impact on me was that I'd never considered myself entrepreneurial in any situation, but realising that compared to other Higher Education institutions, we were entrepreneurial."

> Participant 2

"I've learned so much, so, so, much, not just about work based learning, but also about writing modules, engaging with businesses, finding out what works for them, finding out you can't force-fit your clients"

Participant 3

"I've learned so much but I've concluded, at least at this time in my life, it's time for me to get back to mentoring."

Participant 3

"I've learned a lot about politics in these type of institutions, and how I don't really like that sort of thing."

Participant 3

"It's the importance of involving the customer in designing what you're delivering. That has to be the biggest lesson from it. And that's been carried through from my perspective in my practice in working with [a specific employer] that started with a conversation, then taking it back."

Participant 4

"Small projects are worth doing [   ] as long as you do more project management on the little ones because you have very little room for manoeuvre, so every bit of activity has to go to an output. You can't have any wasted time"

Participant 5

Although the interviewees shared a strong professional identity as academics and managers, it would appear that Schön's model of Reflection on Practice did not form part of their process (Johns 2013: 2). On the contrary, in many cases they reported that the learning that had taken place remained unconsidered until raised in the interviews. Given the emphasis on reflection within the teaching of work-based learning, this is surprising.

4.2.5 Personal challenge

A wide range of personal challenges were reported. In many cases the challenge was framed in terms of self-management: the work required in deciding how they should behave in a difficult situation, usually a social interaction with the team.

"It was more the people management side because I tried to allow people get on with the tasks […] I found that some people needed to see me all the time, every day, and I found that hard, because I had to be up here for a meeting […]. But you can't turn someone away from your door"

Participant 1

"because you always want to give them the benefit of the doubt, and you'd need to have this conversation […] making sure we don't cross the line with each other, don't get too friendly, and at the same time you're trying to show them some empathy, you know, because people are so different."

Participant 1

"You also had to sell [a project not meeting its targets] outside - put a positive spin on things"

Participant 2

"I always tried to use mentoring skills in management conversations and the only way you're going to do that is through emotional intelligence and stepping back from your own emotions to have that conversation. That can be difficult if you have a difficult relationship."

Participant 3

"it's making sure that you do everything you can to make sure that the project is a success because so many people, families, are involved, with income generated from that project. So I think that's the most worrying side of any project."

Participant 4

"In the role of project managing, or managing a team whatever they are, there are responsibilities you carry, [. . .] you then have the dilemma of being sworn to secrecy for one aspect, and the pastoral care of those that work for you. There can be conflict in your own mind as to how you address the situation."

Participant 4

"There are times when you just sit there and go 'why does it always end up with me?"

Participant 5

"Sometimes the challenge is just that "I'm overloaded now and I don't know what I'm doing" – yes you do, you've got the tools."

Participant 5

It is clear that even when a project is meeting its targets and the individuals have considerable expertise and experience of the project domain, the role of lead academic brings with it responsibilities that will push them out of their comfort zone and may leave them feeling isolated, especially where they have privileged access to information that they cannot reveal.

4.2.6 Grounded Theory: Emergent themes

Four themes emerged from the interviews whose salience had not been predicted in the research design. They were mentioned at length by most of the interviewees in their answers to the standard interview questions, as become apparent upon transcription. They did not fit readily within the implicit information model of the questions, since there was no room within them for the expression of specific emotional content. Although emotional labour had been identified as a topic of interest, it was considered that direct questioning would not be the most productive approach.

The four most common themes that were not covered directly in the responses to the questions were broadly characterised (Table 6). Example statements coded to the theme are cited below; in some cases these have appeared earlier under the relevant topic response.

Table 6: Emergent themes from interviews

Theme (node)	Definition	No. respondents (total=5)	No. references
Positive effect	References to positive emotions or benefits derived from project work	5	18
Dissonance	References to occasions with the need to conceal or manage the expression of one's true emotions when undertaking project work	5	16
Self-doubt	References to occasions of feelings of uncertainty or lack of self-confidence when undertaking project work	3	16
Emotion	References to occasions of emotional responses which arose in the course of project work	5	26

4.2.6.1   Positive effects of working on projects

Although all respondents reported the challenging aspects of working on their projects, they also mentioned aspects of the experience that made it enjoyable and worthwhile, noting the difference with their usual work.

In particular, the experience at the time was described as motivational, dynamic or pleasurable.

"It was quite creative some of the things that were happening in the project as well".

Participant 1

"I felt that we were really making a difference"

Participant 3

"The whole ethos was so strong and you could get really passionate about it."

Participant 3

"I enjoyed doing these things enormously, it's a little bit out of your ordinary day job, you're following a passion"

Participant 5

"I've loved working with the people, that's a real pleasure"

Participant 3

These responses could be taken as an implicit commentary on the nature of their normal work where routine tasks may come to dominate their time and energy, confirming the evidence of a survey of staff in Higher Education which highlighted lack of variety in work and not enjoying work as key causes of dissatisfaction and stress (Tytherleigh, et al. 2005: 48).

In addition, the experience has led to growth in self-confidence, self-knowledge, or knowledge about the domain.

"I felt that I could do that now, you know, take on teaching a module in that area which I would never had done before"

Participant 1

"I don't think I've actually achieved the financial skills, but I'm much more aware of the need for them."

Participant 2

"It gave me the confidence to go in and argue the case for all sorts of things"

Participant 2

"Its impact on me was that I'd never considered myself entrepreneurial in any situation, but realising that compared to other higher education institutions, we were entrepreneurial"

Participant 2

"I've learned a lot about politics in these type of institutions"

Participant 3

"I'm handling myself much better, more confidently"

> Participant 3

"It's the importance of involving the customer in designing what you're delivering. That has to be the biggest lesson from it."

> Participant 4

"One of the bits of feedback I've had is 'You're always in safe hands with [me]'."

> Participant 5

These benefits were achieved without any formalised process of reflection (apart from participation in this study). It is possible that these might be reinforced and widened if some form of personal post-project review and reflection were incorporated into their professional practice.

4.2.6.2   Emotional dissonance

One of the key elements of their role that led to stress was the need to conceal or manage their emotions in social contexts for the good of the project.

"Making sure we don't cross the line with each other, don't get too friendly, and at the same time you're trying to show them some empathy"

> Participant 1

"It was difficult then to kind of meet that person"

> Participant 1

"I'm not good at hiding my feelings. I can't."

> Participant 3

"In management situations I've always tried to be emotionally intelligent, and I'm able to step back, and if there are any negative emotions, so I can step back and have a Berne's adult-to-adult conversation going on and I've always been good at that."

Participant 3

"The only way you're going to do that is through emotional intelligence and stepping back from your own emotions to have that conversation"

Participant 3

"Getting a feel for the project and how successful they were or not and you also had to sell it outside -- put a positive spin on things"

Participant 2

"You have to deal with people who perhaps you don't get on with, or they've annoyed you, and you have to step back."

Participant 3

"I've wanted to be one of the gang. And I struggle there."

Participant 3

"I've got to deal with this person I can't stand or who makes me angry or whatever, or they're being horrid to me or whatnot, and you've just to, in order to manage their emotions, you've got to step back from your own emotions and then have the conversation with them so that you will get what you want."

Participant 3

"The genuine reason is that you're worried that the project isn't being successful so you're rolling you sleeves up as well, but what you're telling your team could be something completely different."

Participant 4

"You then have the dilemma of being sworn to secrecy for one aspect, and the pastoral care of those that work for you. There can be conflict in your own mind as to how you address the situation"

Participant 4

"They're leaders in their field, I've got to be careful not to go 'don't be silly'.

Participant 5

"There has to be one grown up around, everybody loves giving it to you."

Participant 5

In general, it is unsurprising that the need to engage with staff while keeping some information undisclosed created a sense of unease. Authentic leadership's core values include equity and accountability (Erkutlu and Chafra, 2017: 416), and there is a tension that arises when these values have to be set aside. In the context of Emotional Intelligence training, the fact that managers are engaged in actively managing disclosure and confidentiality has been recognised, with disclosure seen as a possible strategy with risks and benefits (Thory, 2016: 46). Thus we would expect the need for dissonance to create stress within an individual.

It is possible to be more specific, as one participant's citing of Berne's Transactional Analysis implies. In Transactional Analysis [TA], the concept of three ego-states was developed, briefly labelled as Adult, Parent, and Child (Berne, 2010); although presented as authentic constructs it has been argued that they are better considered as metaphors (Loria, 2003: 196). It is easy for managers to default to the Parent mode, allowing the rest of the team to adopt Child mode (Barrow, 2015: 172).

"The goal of TA is to have all parties involved converse in the idealized state, which is adult to adult but it remains a challenge" (Whitley-Hunter, 2015: 140). The disadvantage of the manager taking on the Parent mode is that responsibility for coordinating, monitoring and initiating is not delegated, overloading the manager and underusing the skills of the team. It is implied that the manager must take the initiative to change the dynamic and move themselves from Parent (or Child) to Adult mode: doing so requires labour as well as intent. Berne says that in this situation it is a requirement that the manager acts as the autonomous individual and switch roles (Berne, 2010: 158). Thus the manager is obliged to maintain the Adult role of listener even when acting in other modes, so they are ready to change when necessary (Landaiche, 2007: 29). This analysis explains why it is that social relations with the team form such a large part in the concerns of the academic managers.

4.2.6.3   Self-doubt

There is an implicit assumption within HE that senior staff will be super-competent, willing and able to take on new roles and responsibilities.

> "The modern academic is increasingly expected to work across four broad domains: teaching, research, scholarly activity (other than research) and administration in support of the other three areas of work."

> (Graham, 2015: 668).

It is clear from the responses that many of participant had experienced moments, or long periods, of self-doubt about their abilities and actions.

> "You do worry, you know."
>> Participant 1

> "Should I be more managerial? I just wasn't sure."
>> Participant 1

> "I don't know if I did a good job, I still don't know."
>> Participant 1

> "A big part of me is saying: really? Management? is that really for you?
>> Participant 3

> "I think that I'm a good leader, I don't think I'm a good manager"
>> Participant 3

> "It was outside my comfort zone"
>> Participant 3

> "I'm not very good at that sort of thing"
>> Participant 3

"I don't think I'm strategic enough to be at this level: I'm in the wrong level."

Participant 3

"There are times when you just sit there and go 'why does it always end up with me?"

Participant 5

It has been noted that the Impostor phenomenon, the feeling that one is not competent to undertake one's role, is prevalent in Higher Education (Parkman, 2016: 53), and these comments reflect this. Unfortunately it is not possible to determine whether the individuals identify themselves as self-doubting in non-project contexts. It is interesting to note that the prevalence of self-doubt and impostorship is not correlated with actual competence: those that doubt themselves may be just as effective as those that do not (Bechtoldt, 2015: 482), while those with least knowledge are least aware of their ignorance (the 'Dunning Kruger effect') (Gibbs et al. 2017). Rather, it could be considered that feelings of doubt are part of the emotional labour for those who are prone to it.

4.2.6.4 The project as an emotional arena

The previous themes have shown that part of the positive effect of working on projects in emotional, in terms of motivation and sense of achievement, and that the negative effects of dissonance and self-doubt are also emotional. It is not surprising to find that many respondents referred to emotion in relation to their work.

"It's like I've no friends anymore."

Participant 1

"Sometimes I'd go home with a bit of a headache."

Participant 1

"And that was hard because the- umm- person wouldn't want to have been kind of shown up. So when that happened, that would really bring me down."

Participant 3

"So if I knew I was going in the next day and I was going to get a kicking you don't really look forward to that."

Participant 3

"I want my team, to be happy"

Participant 3

"What's concerning is that when you're not hitting targets"

Participant 4

"So I think that's the most worrying side of any project."

Participant 4

"If I was a selfish individual I'd say I don't care and just carry on, and not change anything and I'm all right Jack, because I'm a full time employee, but I could never think that way"

Participant 4

"It's sort of niggling at the back of your mind, that if things go belly up then there are people who will suffer financially because of it."

Participant 4

"There were certainly times when I was getting a bit concerned."

Participant 4

"It's been a bit sad."

Participant 5

"When I closed [the project] down and archived it, I was like [oh]. People felt a bit bereft."

Participant 5

"And you have to take it on the chin, yourself"

Participant 5

"And I snapped, just slightly, not fully, just slightly, it was a very useful thing to do, I didn't lose control."

Participant 5

"It was fantastic experience."

Participant 3

The implication of these comments is that working on projects is not just an emotional experience, bringing happiness, concern, sadness, and anger, but appears to be more so than their usual work. It therefore appears that Emotional Intelligence skills, particularly awareness of one's own and others' emotions and the ability to manage one's own emotions, are particularly engaged when working on projects.

"When problems arise, people with empathy skills are better equipped to get the required advice and help from colleagues and are thus generally more successful in their projects" (Singh, 2006:79)

4.2.6.5   *Discourse analysis*

In order to establish how significant the themes identified by the Grounded Theory exercise were to the respondents, the interview transcripts were analysed for the frequency with which specified concepts occurred. Without setting a specific threshold, it is interesting to see whether these themes dominated the responses or were incidental to other issues.

The specific process used was the NVivo vocabulary analysis tool, using 'specializations' (related concepts grouped together under a single head word), with stop words excluded to remove interviewer's responses and the questions from the analysis. The resulting word frequencies are shown graphically as a word cloud (Figure 5), with the size of the term reflecting its relative frequency.

It would appear that emotional aspects of working on projects, while an important part of the qualitative experience, remained subordinated to the external concerns of implementing a project and leading a team (word frequencies for 'acted' and related terms was 2.0%, 'emotions' was 0.5%; since the earlier factual questions were not transcribed, this over-estimated the salience of emotions in general among the responses).

Figure 5: Word cloud showing concept frequency in interview transcripts (generated by NVivo) (data in Appendix 6)

4.3   Discussion

4.3.1 Project practice in HEIs

Overall the research has characterised the domain of project working in Higher Education as partially developed. There has been limited adoption of formal project management methodologies, but no attempt to train academic managers in their use. There have, nonetheless, been quite robust reporting and oversight processes to ensure that progress is monitored and issues identified, perhaps showing that formal methodologies might be unnecessary. Arrangements for project closure have been well-developed when required by the funder, but elsewhere have been left to the lead academic to resolve. Generally it appears that it would be possible to significantly improve the performance of projects in the sector by moving from implicit to explicit processes and the highlighting of the skills and tasks entailed in taking on such work.

4.3.2 Project planning

In project planning, many of the challenges that would be faced during implementation had been correctly identified as concerns, including common issues relating to the integration of financial and other processes required for the project into the institution's usual arrangements. The impact of some of these factors might have been mitigated or planned for if there had been greater investment at the planning stage in market research, if the proposal had been piloted and evaluated, or if the project plan had included a mobilisation phase before delivery proper commenced.

4.3.3 Dealing with known and unknown issues

The most serious threats to projects, however, were essentially unpredictable, deriving from institutional changes such as merger and restructuring, and from difficulties with setting up partnerships and working within them.

Although HEIs are becoming more used to working collaboratively, it is clear that doing so requires a genuine shared interest in an outcome and a recognition that every partnership is to some extent provisional. One of the anomalies of the HE sector is that such partnerships are often effectively mandated by the funding body, regardless of the practical benefits that arise from them. Such "Coalitions of the Unwilling" might be expected to be particularly fractious and fragile, and it is in practice impossible to force a partner to continue with a project it no longer desires. HEIs might be advised to prepare fall back options as a contingency if the intended arrangements prove unworkable.

The impact of internal restructuring and mergers is perhaps harder to minimise; the most that can realistically be done is to highlight early on the potential effects and to take these into account when prioritising work to be done. Although attempts have been made to quantify the costs of restructuring in terms of loss of knowledge (Trugman-Nikol, 2011: 56), the cost of disruption to normal activities may also be significant.

4.3.4 Approaches to lessons learned and organisational learning

A variety of approaches to the capturing of lessons learned have been applied. In some cases a formal process was adopted, feeding into the project closure report; elsewhere there were less formal arrangements. A recurrent theme was the apparent indifference of the institution to the opportunity to enhance and share organisational learning, even where the project staff would be leaving. It would be relatively simple for institutions to adopt the practice of reviewing a project upon completion and identifying any lessons that might benefit future work of the sort.

On the other hand, institutions were found to have been effective in adapting the project and their practices while the project was active.

4.3.5 Effect on practitioners' practice

For the individuals involved, there is the slightly paradoxical finding that most had learned a lot but this learning had not affected their future practice. It is possible that the lack of change of practice derived from the lack of any attempt at a personal level for the practitioner to reflect on their experience and consider whether different approaches might have been more effective. It would be simple to propose to staff involved in practice that such reflection might be productive.

The most common personal challenges related to the social environment of the project, especially the situation where the manager has to maintain some distance from the rest of the team in order to maintain objectivity or neutrality, to limit access to information, or to avoid being drawn away from their high priority work. In contrast, as might be expected from academic staff, learning new skills and developing solutions to problems caused little anxiety.

4.3.6 Emotional labour in a project environment

Analysis of the interview transcripts confirmed the work of Lysak and Zlatar (2013) in showing that much of the project manager's work is emotional labour, whether in the form of the motivation and excitement of taking on a new and creative challenge, the need to manage the dissonance of behaving in ways at odds with one's internal self, or the need to cope with and move on from occasions of self-doubt, especially for individuals prone to impostorship. It seems reasonable to conclude that someone's levels of Emotional Intelligence and resilience are critical to determining their

effectiveness as lead academic or project manager, and this could be borne in mind when selecting or preparing staff for the role.

4.3.7 Generalisability of the findings

Although projects differed in their specifics, the comments of those involved responses remained remarkably consistent. There was a spectrum of issues and approaches reported, but the institutional landscape across the HEIs was similar. HEIs appeared to be more similar in their approach to PRINCE2 to each other than to government or the private sector, where it has been widely been adopted in full (Edmonds, 2010, 215). The recurrence of comments concerning university processes, recruitment targets, organisational changes and partnerships suggests that these are common to the sector. The underlying themes of the practitioner's reflections are much more similar than their superficial expression might imply. The absence of significant outliers suggests that the data can be considered reliable.

The research was intended to reveal some of the issues relating to the practice of project management in HEIs. Some quantitative data (surveys and project reports) has been included, but the core of the study has been qualitative data in the form of the interviews with key staff members about their experiences. Since these are the individuals who were most directly involved in the work, their views are highly relevant as advice on what occurred and why. The data are therefore considered to have a high validity.

There remains the question of the generalisability of the findings. It would appear that similar issues occur across the sampled organisations, irrespective of funding body and status. It is likely that all HEIs in Wales with aspirations to significant project activity share these experiences. There is no reason to suppose that the Welsh context imposes a specific flavour to the domain, and it is therefore suggested that the conclusions might hold true across the UK Higher Education sector.

4.4   Review of findings

The topic of the research was articulated as a series of questions, each with a pair of null and alternative hypotheses to clarify the outcomes. As is discussed below, in some cases the specific wording of the hypothesis proved to affect whether it could be considered accepted or rejected. This situation arose because hypotheses did not take account of the full complexity of the domain.

What approaches have been tried to capture lessons learned in the Higher Education setting? Which approaches have worked best?

H_01 Higher Education Institutions have not attempted to capture lessons learned

H_11 Higher Education Institutions have attempted to capture lessons learned

The hypothesis as worded concerned the intention and the process of organisational learning from the experience of running projects. The experience as reported showed that projects have usually attempted to capture lessons learned, but the HEIs have not taken steps to ensure that these are shared or acted on. Therefore it is considered that the null hypothesis H_01 cannot be rejected. More generally, it is acknowledged that HEIs do learn lessons and adapt in response to projects, but there is currently a lack of conscious efforts to ensure that this is maximised.

How many of the challenges faced by projects in implementation had been identified in advance as part of the planning?

H_02 Challenges had not been identified in advance of the project

H_12 Challenges had been identified in advance of the project

The hypothesis as worded assumed that either the major challenges would, or would not, have been identified at the planning stage. (The researcher's expectation was that hypothesis H_12 would be shown, that the issues were known at the start). Overall it appears that project planning had done well to identify the challenges that would be encountered, on which basis the null hypothesis could be rejected and therefore H_12 is considered shown. However, it is true that some challenges were not known, or indeed knowable, at the outset, and these proved to be the most significant in threatening the successful completion of the project. For these serious 'black swan' events, the null hypothesis H_02 holds true.

How well have institutions absorbed lessons learned from projects?

H_03 Institutions have not absorbed lessons learned

H_13 Institutions have absorbed lessons learned

Since was acknowledged that the institutions had made changes to their practices in response to the needs of their projects, whether through a formal process of post-project review or not, then the null hypothesis H_03 can be rejected in favour of H_13.

How have individual practitioners been affected by their experience of working on projects?

$H_0 4$ Practitioners have not been affected by their experience

$H_1 4$ Practitioners have been affected by their experience

The practitioners reported that they had learned from their participation in the project, but had not changed their practice as a result. They had also been emotionally involved at the time in positive and negative ways, but generally were no longer so. On the whole it seems there is insufficient data to merit rejection of the null hypothesis $H_0 4$.

5 CONCLUSIONS

5.1 Main conclusions

It had been expected that the study would reveal that many HEIs had adopted formal project management practices in order to monitor progress, identify and deal with issues that arose, and embed lessons learned from projects into organisational learning to inform future practice. It was found that this was not the case, and although elements of, or equivalent to, project management best practice were in place for monitoring and reporting on progress, there appeared to be little attention paid to the question of transferring knowledge derived from experience from the project team to the rest of the organisation.

The lead academics involved approached their work with diligence and enthusiasm, and found themselves subject to complex social situations and feelings of impostorship, and undertaking a significant amount of Emotional Labour in order to keep their projects on track. Although they learned new information, they had not attempted to capitalise on their experience by reflecting upon it for the future.

5.2 Recommendations

5.2.1 Recommendations to HEIs developing projects

The following recommendations are proposed as a result of this work to better ensure the success of projects in the future, in order of priority:

- Consider carefully before committing to entering a partnership, with a clear view of what benefits the partnership will bring; be prepared to revise the arrangement or withdraw if those benefits are unlikely to be realised; make contingency plans to cover the breaking up of a partnership.
- When undertaking internal restructuring or mergers, identify possible impacts on projects as one of the operational considerations, and seek to isolate project activity from disruptive change.
- Include a 'reality check' review early in the project delivery stage (after 3-6 months) where the assumptions that informed the project plan can be tested against experience and any adjustments can be made for the remainder of the project.
- Invest time and money in researching likely demand as part of the planning process, paying particular attention to possibly-misleading 'soft yeses' and examining whether the outputs are seen as must-haves or nice-to-haves.
- Take experience of past projects into account when developing new proposals, and consider a wide range of possible risks outside the norm (Suárez-Lledó 2011: 89)
- Develop and implement a form of post-project review to capture and disseminate organisational learning arising from projects.

- Consider the Emotional Intelligence, self-confidence and resilience of staff members when identifying individuals to act as project lead, and provide training and support before and during the project.
- Consider the benefits of providing introductory project management training to those involved in delivering or overseeing projects
- When framing a 'lessons learned' exercise, use the question 'what should the organisation learn?' rather than 'what would you change if you ran the project again?'
- Plan for project closure well in advance and ensure that as much as possible is completed while the team is still active.

5.2.2 Recommendations to HE staff involved in planning and delivering projects

The following recommendations are proposed for staff who are engaged in projects as lead academics:

- Consider whether your skills and aptitudes are suitable, and seek to develop them where necessary, especially Emotional Intelligence, resilience and understanding your attitude to impostorship.
- Consider some training in the key principles of project management.
- Recruit someone as a mentor or buddy with whom you can freely share doubts and concerns.
- Try to learn from experience at the time and to include a deliberate stage of reflection on your professional practice at the end of the project.
- Expect that you will be doing Emotional Labour as part of your work and prioritise this as a crucial element of your role.
- Monitor team dynamics and seek to establish a culture of openness and flexibility.

5.3 Potential for further study

This study has been framed to cover both the institutional and individual perspectives. There is a limit to how much can be gained from the analysis of individual projects and institutions because their experience may not be generalisable. However, there seems to be significant scope to explore further the nature of project work from the practitioner's viewpoint, and to frame a study using the concepts of impostorship, Transactional Analysis, and dissonance, to examine projects through a social lens, since this appears to be an unexplored dimension of project management practice. In view of the problems encountered in elucidating information about emotions from the interviewees, consideration might be given to either more extensive discourse analysis, or the framing of a series of questions to drill down precisely into their feelings.

It would also be worthwhile to explore whether practitioners of project management face different challenges to those of conventional management, or whether there is in fact a single domain of management practice.

Ideally a longitudinal study would allow the concerns and learning to be tracked in real time, rather than relying on the participant's recollections of past situations. This would allow a better understanding of the baseline condition and the impact and distance travelled.

5.4   Reflection on learning

As indicated in the *Autoethnographical reflection* (section 3.8, p. 21), I started the project with clear expectations of the probable outcomes, in particular that most issues encountered were foreseeable and indeed foreseen, and that there was significant Emotional Labour involved in working on projects.

The research has shown that there is also a significant impact on projects from unpredictable events outside their control, and that the general Emotional Labour included a specific element relating to impostorship, Transactional Analysis and dissonance. HEIs has been shown to be more adaptable and proactive in monitoring projects than I had expected, although arrangements for embedding organisational learning remained were poor.

Both of these elements will inform my future professional practice. I will also endeavour to include an element of reflective practice to review my experience at the end of each project cycle.

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Appendices

Appendices

APPENDIX 1: LETTER OF APPROVAL

Martin Locock

Dear Martin

As Head of the Wales Institute for Work Based Learning I have reviewed the intended research project "Lessons learned for project management in a Higher Education environment", and can confirm that UWTSD is willing for Martin Locock to undertake the project subject to ethical approval.

With kind regards

Annette Fillery-Travis BSc, MA, PhD, CChem, FRSC

Pennaeth Athrofa Cymru ar gyfer Dysgu Seiliedig ar Waith
Head of the Wales Institute for Work-based Learning
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w: www.superprofdoc.eu

Trawsnewid Addysg . . . Trawsnewid Bywydau
Transforming Education . . . Transforming Lives

We discussed this research project a while ago and you volunteered to be interviewed. I have now officially started the work-based-module and as part of the ethical approval process I need to have a letter from the organisation saying they are happy for the research to take place.

I attach the project proposal.

Could you send me a letter that says something like:

I have reviewed the intended research project "Lessons learned for project management in a Higher Education environment", and can confirm that UWTSD is willing for Martin Locock to undertake the project subject to ethical approval.

Cofion / Best wishes

Martin Locock BA MCIfA FHEA

Prif Swyddog y Prosiect GWLAD
Principal Project Officer, GWLAD

Athrofa Cymru ar gyfer Dysgu Seiliedig ar Waith
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Trawsnewid Addysg . . . Trawsnewid Bywydau
Transforming Education . . . Transforming Lives

PRIFYSGOL CYMRU
Y Drindod Dewi Sant

UNIVERSITY OF WALES
Trinity Saint David

E1 FORM

APPLICATION FOR ETHICAL APPROVAL - Research

CAIS AM GYMERADWYAETH MOESEGOL - Ymchwil

CEFNOGWYD APPROVED	✓	A GYFEIRIWYD REFERRED		NIS CEFNOGWYD NOT SUPPORTED	

Mae'r ffurflen hon i'w defnyddio cyn cynnal gwaith ymchwil, prosiectau neu gynyrchiadau. Dylai'r ffurflen hon gael ei chwblhau gan yr ymchwilydd, yn achos myfyriwr, dylid ei gwblhau mewn ymgynghoriad â'r goruchwyliwr. Rhaid i bob ffurflen gael ei gefnogi gan Bennaeth yr Ysgol / Gyfadran. Dylai'r ffurflen gael ei chyflwyno i'r Swyddfa Ymchwil Ôl-raddedig.	This form is to be used prior to conducting research, projects or productions. This form should be completed by the researcher; in the case of a student, it should be completed in consultation with the supervisor. All forms must be supported by the Head of School/Faculty. The form should be submitted to the Postgraduate Research Office.
RHAID ffurflen hon gael ei chwblhau a'i gymeradwyo gan y Pwyllgor Moeseg cyn cychwyn y prosiect / ymchwil.	**This form MUST be completed and approved by the Ethics Committee prior to the commencement of the project/research.**

ADRAN 1 – MANYLION MYFYRIWR   **SECTION 1 - STUDENT DETAILS**

Enw Llawn Full Name	MARTIN PAUL LOCOCK

Ysgol/ Cyfadran School/Faculty	WIWBL	Rhif Myfyriwr Student Number	090271

Teitl dangosol yr ymchwil: Indicative Title of Research:

The experience of delivering Work-Based Learning projects, 2011-2015, and implications for project management practice [This is an updated version of the EC1 approved by the Ethics Committee 20/12/16 amended to include an online questionnaire]

Categori'r Prosiect - Ticiwch un blwch i ddynodi categori'ch prosiect	Category of Project - Please tick one box to identify your category of project	
Categori A - Staff	**Category A - Staff**	√
Prosiect Ymchwil y Staff	Staff Research Project	
Cynhyrchiad / Cyflwyniad Ysgol	School Production / Presentation	
Prosiect Ehangu Mynediad	Widening Access Project	
Categori B – Myfyrwyr	**Category B - Students**	
Hefyd yn aelod o Staff	Also Member of Staff	
Graddau Ymchwil	MPhil/PhD Research Degree Thesis	
Traethawd Hir MA /Prosiect dysgu seiliedig ar waith	MA Dissertation/Work Based Learning Project	√

1

Prosiect Ehangu Mynediad	Widening Access Project	

		Ydw / Yes	Na / No
A yw hwn yn brosiect cydweithredol sy'n cynnwys ymchwilwyr o sefydliadau neu gyrff allanol?	Is this a collaborative project involving researchers from outside institutions or organisations?		√

Os ydych, rhowch y Enw llawn a manylion cyswllt y cydlynydd prosiect gan y sefydliad neu'r sefydliad:	If yes, please give the full Name and contact details of the project co-ordinator from the institution or organisation:

Enw llawn / Full Name	
Cyfeiriad / Address:	

Rhif ffôn (os ydy'n berthnasol) Telephone (if applicable)	E-bost Email

ADRAN 2 – GWEITHGAREDD YMCHWIL   SECTION 2 – RESEARCH ACTIVITY

Ydy'r prosiect yn cynnwys:	Does the project include:	Ydy / Yes	Nac ydy/No
Defnyddio holiadur neu offeryn ymchwil tebyg (atodwch drafft gopi)	Use of questionnaire or similar research instrument (attach draft copy)	√	
Defnyddio prawf ysgrifenedig neu gyfrifiadurol	Use of written or computerised test		√
Cyfweliad (cysylltwch gwestiynau posibl)	Interview (attach provisional questions)	√	
Dyddiaduron	Diaries		√
Arsylwi ar gyfranogwyr a hwythau'n ymwybodol o hynny	Participant observation with their knowledge		√
Arsylwi ar gyfranogwyr a hwythau ddim yn ymwybodol o hynny	Participant observation without their knowledge		√
Recordio fideo neu sain	Video or audio-taping	√	
Mynediad i wybodaeth bersonol neu gyfrinachol heb gydsyniad penodol y cyfranogwyr	Access to personal or confidential information without the participants specific consent		√
Defnyddio unrhyw gwestiynau, ysgogiadau prawf, cyflwyniad y gallai rhai cyfranogwyr eu profi fel rhywbeth sy'n achosi niwed / tramgwydd corfforol, meddyliol neu emosiynol	Administration of any questions, test stimuli, presentation that may be experienced as physically, mentally or emotionally harmful / offensive		√
Cyflawni unrhyw weithredoedd allai achosi embaras neu effeithio ar hunan-barch	Performance of any acts which may cause embarrassment or affect self-esteem		√

2

			√
Ymchwilio i gyfranogwyr sy'n ymwneud â gweithgareddau anghyfreithlon	Investigation of participants involved in illegal activities		√
Gweithdrefnau lle defnyddir twyll	Procedures that involve deception		√
Gweini unrhyw sylwedd, cyfrwng neu blasebo	Administration of any substance, agent or placebo		√
Dull arall o gasglu data neu fformat cyflwyno (esboniwch)	Other method of data collection or presentation format (please explain)		√

Os NADDO i bob cwestiwn llofnodwch y dudalen gefn a'i dychwelyd i'r Swyddfa Ymchwil Ôl-raddedig **Os OES i unrhyw gwestiwn, os gwelwch yn dda llenwch y ffurflen ac yna dychwelyd i'r Swyddfa Ymchwil Ôl-raddedig**	**If NO to every question please sign the back page and return to the Postgraduate Research Office** **If YES to any question, please complete the form and then return to the Postgraduate Research Office**

1.	Braslun o'r prosiect	Project outline

The study will explore the institutional and personal experience of implementing four Work Based Learning projects, using evidence from project proposals, closure reports, evaluations, and interviews with key project staff to explore how projects coped with the challenges and risks, how they identified lessons learned, and what the subsequent impact of the lessons has been. The interviewees will be encouraged to reflect on the personal challenges they faced in dealing with uncertainty and change.

2.	Hyd y Prosiect	Duration of Project
	O / From _____September 2016_____	hyd / to ____May 2018____

3.	Disgrifiad Rhowch fraslun cryno o'r prosiect, heb unrhyw jargon, ac yn cynnwys beth bydd angen i'r cyfranogwyr ei wneud. Esboniwch unrhyw dermau technegol neu derminoleg sy'n benodol i'r ddisgyblaeth (Uchafswm 300 o eiriau.)	Description Provide a brief outline, free from jargon, of the project including what participants will be required to do. Explain any technical terms or discipline specific terminology (Max 300 words.)

This study will examine the University's experience between 2010 and 2015 in operating four European Social Fund projects delivering fully-funded work-based learning for the private sector in southwest Wales. The projects were LATERAL (Liberating Aptitudes by Technology Enhanced Recognition and Accreditation of Prior Learning), which provided a pathway for workers to access higher education by awarding credits for their experiential learning; Mentoring Our Workforce, targeted at businesses wishing to develop workplace mentoring schemes; Elevate Cymru (South West), the regional hub for a pan-Wales project, the University Network for High Performance Skills, delivering HE courses in management topics, personnel, and mindfulness; and Safe Workforce: Sustainable Workplace was developed to address the recognised need for businesses to improve their health and safety performance by addressing behavioural safety by changing the culture. The projects varied in scope, complexity and targets, and encountered differing challenges in implementation. For comparative purposes, the experience of project leads elsewhere in UWTSD and in other universities in the UK will be sought to identify common features.

The study will compare the management of the projects from an institutional and professional viewpoint, highlighting the lessons learned for future practice. The official account of the aims and outcomes of the projects will be drawn from the project proposals, closure and evaluation reports, with a particular focus on the points where significant changes to the delivery were considered. Participants drawn from the academic managers and project officers involved in each project will be interviewed to reflect on how these critical points emerged, what response resulted, the effectiveness of progress tracking and active lesson learning. They will also be asked reflect on their personal experience of undertaking the project and what challenges they faced. The interviews will be transcribed and common themes will be drawn together to propose best practice for projects of this type.

An anonymous survey of project staff in Higher Education bodies in Wales will be undertaken to identify the approaches to project management and review that are currently being used.

4.	Amcanion a Chyfiawnhad i'r Prosiect:	Aims and Justification for the Project:

4

Rhestrwch y nodau a diben y prosiect. Uchafswm 300 o eiriau. Defnyddio pwyntiau bwled i ganolbwyntio eich ymateb.	List the aims and purpose of the project. Max 300 words. Use bullet points to focus your response.

The aims of this research are to review the experience of WIWBL in delivering four EU funded work-based learning projects in order to inform best practice in the fields of project management in HE and work-based learning, by:
- Exploring the institutional and personal experience of delivering the LATERAL, Mentoring our Workforce, Elevate (West) and Safe Workforce: Sustainable Workplace projects
- Critically evaluating participant's experience in relation to the projects and how potential issues affecting project performance were identified and addressed in the course of the projects
- Identifying and analysing different approaches to progress monitoring and capturing lessons learned
- Reflecting on the institutional and personal learning derived from the projects
- Critically evaluating participant's experience in relation to the projects
- Comparing the experience of these projects with others in the HE sector and current practice in Wales

The research will consider a range of issues arising from the intrusion of project activity into the HE domain of Work-Based Learning.

5.	**Dulliau Arfaethedig:** Rhowch fraslun o'r dulliau casglu data neu o natur yr amser mewn ymarferiadau. Dylech gynnwys technegau / dulliau penodol, tasgau y gofynnir i'r cyfranogwyr eu gwneud, amser ac ymrwymiad y cyfranogwyr a dadansoddiad o'r data. Os ydy'r prosiectau'n cynnwys gweithdrefnau / gweithgareddau nad ydynt yn dilyn arfer derbyniol a sefydlwyd eisoes, esboniwch a rhowch gyfiawnhad (hyd at 700 o eiriau).	**Proposed Methods:** Outline how the data will be collected or the nature of rehearsal time. Include specific techniques / methods, tasks participants will be asked to do, time and commitment of participants and analysis of the data. If the project includes procedures / activities different from already established acceptable practice then please explain and justify (up to 700 words).

The research is proposed as a staged programme of reflection on practice through:
- A literature review considering existing research on work based-learning, project management practice and lessons learned, emotional labour and narrative frameworks such as the 'hero's journey' as sense-making tools
- Compilation and analysis of project proposals and closure reports, evaluation reports, statistics and other material relating to the programme
- Selection, approach and briefing of participants
- Structured interviews with anonymised staff from the projects (6 x 1 hour)
- Transcription of interviews and identification of key content
- Online questionnaire of project staff in HE bodies in Wales
- Compilation of institutional and individual lessons learned

The main method of data collection will be by individual semi-structured interviews with members of staff using a standard set of open and closed questions. This format will encourage participants to reflect on their experience and talk at length if they wish about their practice and learning. In this way it is hoped that common themes may emerge arising from the intrinsic challenges of managing projects, at a more generalised level than the very specific operational lessons reported in the closure reports. The qualitative content of these narratives will prove as valuable as the objective outcomes. In order to preserve a rich resource of text, the interviews will be recorded and transcribed, allowing key points to be reported in the participant's own words. The survey will provide basic semi-quantitative data on current practice in the sector to allow UWTSD practice to be compared.

6.	**Cymwysterau / Profiad Ymchwilwyr:** Rhestrwch unrhyw gymwysterau gorfodol sy'n ofynnol ar gyfer casglu data neu ar gyfer y	**Investigators Qualifications / Experience:** List any mandatory qualifications required for the collection of data or for the production.

cynhyrchiad.

Experience of gathering data in the workplace

7.	**Lledaenu Gwybodaeth / Cynulleidfa:** Rhestrwch i bwy y rhoddir neu y dangosir copi o'r canlyniadau neu adroddiad / cyflwyniad terfynol.	**Dissemination of Information / Audience:** List to whom a copy of the results or final report / presentation will be given or shown.

Publication in a relevant journal (eg Wales Journal of Education) and on WIWBL webpage
Presentation at a national conference and to UWTSD

8.	**Lleoliad y Prosiect:** Nodwch bob lleoliad lle y cesglir data neu y cynhelir ymarferiadau / cynhyrchiad.	**Location of Project:** Identify all locations where data will be collected or rehearsals/ production will take place.

UWTSD Carmarthen Campus (own workplace)

9.	**Cymeradwyaeth Arall:** Oes angen cael cymeradwyaeth unrhyw sefydliad arall cyn cychwyn neu gwblhau'r prosiect? Os felly, gan bwy ac a ydy wedi'i sicrhau eisoes?	**Other Approvals:** Is there a requirement for approval from any other organisation / institution prior to starting or completing the project? If so, by whom and has it been obtained?

None necessary

ADRAN 4 – MANYLION CYFRANOGWYR / CYNULLEIDFA

SECTION 4 - PARTICIPANT / AUDIENCE DETAILS

Pwy yw'r cyfranogwyr arfaethedig?	Who are the intended participants?	Ydw / Yes	Na / No
Myfyrwyr / staff Y Drindod Dewi Sant	Students / staff of Trinity Saint David	✓	
Oedolion (dros oed 16 ac yn gymwys i gydsynio)	Adults (over the age of 16 and competent to give consent)	✓	
Plant a phobl ifanc dan oed	Children / legal minors		✓
Cleifion neu gleientiaid gweithwyr proffesiynol	Patients or clients of professionals		✓
Rhywun sy'n cael ei gadw yn y ddalfa neu y mae'r llys wedi cymryd cyfrifoldeb amdano	Anyone in custodial care or for whom the court has assumed responsibility		✓
Aelod o unrhyw sefydliad lle mae'n bosibl bod angen i unigolyn arall hefyd gydsynio.	A member of any organisation where another individual may also need to give consent.		✓
Eraill: Nodwch: / Others: please identify:			

Nifer, Oed a Ffynhonnell y Cyfranogwyr Rhowch fanylion yr demograffeg y cyfranogwyr / gynulleidfa.		Participant / Audience Number and Age Provide details of the demographics of the participants / audience.
Nifer o Gyfranogwyr / yn y Gynulleidfa	Participant/ Audience number	Maximum 7 participants (interviews) Survey respsondents: maximum 20
Grŵp oedran y Cyfranogwyr/y Gynulleidfa	Participant/ Audience age group	Over 21

Cyfranogwr Ffynhonnell: Sut wnaethoch chi adnabod y cyfranogwyr? Rhestru eich dulliau o recriwtio ac unrhyw feini prawf gwahardd.	Participant Source: How did you identify the participants? List your methods of recruitment and any exclusion criteria.

All academic managers and project officers involved in the projects will be invited to take part in interviews. All those who accept will be included.

Project	Academic lead	Project Officer
WBL01 LATERAL	Elsie Reynolds	Lowri Harris
WBL02 MOW	Liz Wilson	Lynsey Harries
WBL15 Elevate Cymru (West)	Rhianon Washington	Catrin Evans or Lynsey Harries
WBL27 SWSW	Nick Samuel	[author]

Additional participants will be recruited from: known contacts who have experience of similar projects in the HE sector (interview); and HE representatives on the WHEELOS forum (survey).

ADRAN 5 – RISGIAU YN PROSIECT   SECTION 5 – RISKS IN PROJECT

Bydd y diffyg ateb cadarnhaol i bob un o'r cwestiynau hyn yn arwain at y gofyniad eglurhad a gallai arwain at oedi yn eich ymchwil. Dim neu Dim NID yn dderbyniol.	A lack of a positive answer to all of these questions may result in the requirement of further explanation and a delay in your research. None or Nil is not acceptable.

1.	Risg bosibl i'r Cyfranogwyr: Rhestrwch unrhyw risgiau posibl i gyfranogwyr (corfforol, seicolegol, cyfreithiol, cymdeithasol neu economaidd) sy'n gysylltiedig â'r prosiect. Dylech gynnwys dadansoddiad o debygolrwydd a difrifoldeb posibl unrhyw risg.	Potential Risk to Participants: List any potential risks to participants (physical, psychological, legal, social or economic) associated with the project. Include an analysis of the likelihood and potential severity of any risk.

No risks additional to normal university operations have been identified.

1.a	Rheoli Risg: Rhestrwch sut y bydd unrhyw risgiau a nodwyd yn cael eu rheoli.	Management of Risk: List how any risks identified will be managed.

n/a		

2.	**Risgiau Posibl i'r Ymchwilydd:** Rhestrwch unrhyw risgiau posibl i'r ymchwilydd sy'n fwy na fyddai'n debyg o godi o ddydd i ddydd.	**Potential Risks to Researcher:** List any potential risks to the researcher greater than might be encountered on a daily basis.
	No risks additional to normal university operations are identified; activities are similar to usual work.	

2.a	**Rheoli Risg:** Rhestrwch sut y bydd unrhyw risgiau a nodwyd yn cael eu rheoli.	**Management of Risk:** List how any risks identified will be managed.
	n/a	

3.	**Risgiau Posibl i'r Prifysgol:** Rhestrwch unrhyw risgiau posibl i'r Brifysgol yn fwy na debygol o godi o ddydd i ddydd	**Potential Risks to University:** List any potential risks to the University greater than might be encountered on a daily basis.
	No risks additional to normal university operations are identified.	

3.a	**Rheoli Risg:** Rhestrwch sut y bydd unrhyw risgiau a nodwyd yn cael eu rheoli.	**Management of Risk:** List how any risks identified will be managed.
	n/a	

4.	**Canlyniadau Niweidiol:** Rhestrwch unrhyw mesurau yr ydych wedi'u rhoi ar waith i gyfyngu ar unrhyw effeithiau andwyol neu canlyniadau'r prosiect, lle y bo'n briodol. Dylech gynnwys unrhyw brotocolau argyfwng.	**Adverse Outcomes:** List any measures you have put in place to limit any adverse effects or outcomes of the project, where appropriate. Include any emergency protocols.
	Participants may be reluctant or unwilling to share negative or personal aspects of their experience. Reassurance about the validity of all comments, the value of candour in discussing the topics, and the arrangements for anonymity and confidentiality, should provide comfort in sharing as much they choose, without placing pressure on them to share more than they wish. Insider research – the researcher will need to treat the information and opinions of the participants as confidential and potentially sensitive, and will need to ensure that arrangements for anonymisation are robust and properly applied.	

ADRAN 6 – MONITRO, ADBORTH A CHYFRINACHEDD	SECTION 6 - MONITORING, FEEDBACK AND CONFIDENTIALITY

1.	Monitro: Os ydych yn sylwi ar unrhyw ymddygiad sy'n groes Cod y Brifysgol Ymarfer, unrhyw	Monitoring: Should you observe any behaviour that contravenes the University's Code of Practice, any guidelines

	ganllawiau a gyhoeddir gan y gymdeithas broffesiynol priodol neu weithred anghyfreithlon. Amlinellwch eich strategaeth adrodd.	published by the appropriate professional association or is illegal outline the strategy of your reporting action.

University guidelines will be followed.

2.	Adborth Pryd a pha gefnogaeth neu adborth yn cael ei ddarparu i gyfranogwyr, os yn briodol?	Feedback When and what support or feedback will be provided to participants, if appropriate?

A draft of the paper will be supplied for comment prior to submission for publication.

3.	Cydsyniad Gwybodus: Erbyn pa ddull yr ydych yn dogfennu'r 'caniatâd i gymryd rhan yn y prosiect' (yn cynnwys copi o'r ffurflen caniatâd os ydych yn defnyddio un).	Informed Consent: By which method are you documenting the 'consent to participate in the project' (include a copy of the consent form if you are using one).

Informed consent will be obtained by supplying participants with information about the aims and content of the study, documented by their completion of the consent form (see Appendix) which will be completed and held on file. They will be invited by email, stating that participation is voluntary, and they are free to withdraw at any stage.

4.	Cyfyngiadau Cyfreithiol ar Gyfrinachedd: Nodi unrhyw wrthdaro posibl a all godi rhwng yr angen posibl am gyfrinachedd a'r gofyniad cyfreithiol i gael mynediad at y wybodaeth, megis subpoena, rhyddid gwybodaeth ac adrodd gorfodol gan rai proffesiynau. A gynghorir y cyfranogwyr am y gwrthdaro posibl hwn?	Legal Limitations to Confidentiality: Identify any potential conflicts that may arise between the potential need for confidentiality and the legal requirement to access the information, such subpoena, freedom of information and mandatory reporting by some professions. Is the participant being advised of these potential conflicts?

Should any issues arise, the University of Wales Trinity Saint David protocols will be adhered to. Participants will be advised prior to interview that the data may be released to other parties if UWTSD is legally required to do so.

ADRAN 7 – STORIO, DIOGELWCH A MYNEDIAD I DDATA	SECTION 7 - DATA ACCESS, STORAGE AND SECURITY

1.	Cyfrifoldeb am Ddata a Gesglir: Pwy sy'n gyfrifol am storio a diogelwch yr holl wybodaeth a gesglir?	Responsibility for Data Collected: Who is responsible for the storage and security of all information collected?

Lead researcher

2.	Sut y bydd y data yn cael ei storio?	How will the data be stored?

Secure computer server, locked filing cabinet
A back-up of the data will be held on a USB stick held in the locked filing cabinet.

3.	Mynediad i Ddata: Pwy fydd yn cael mynediad at y data? A oes unrhyw amodau i gael mynediad?	Data Access: Who will have access to the data? Are there are any conditions to access?
	The researcher will have access to the data for analytical purposes.	

4.	Cyfrinachedd / Anhysbysrwydd: Rhestrwch y dulliau a fydd yn cael eu defnyddio i sicrhau cyfrinachedd ac anhysbysrwydd y cyfranogwyr.	Confidentiality / Anonymity: List the methods that will be used to ensure the confidentiality and anonymity of participants.
	Participants will be assigned an arbitrary unique identifier upon recruitment. This identifier will be used for all research records, carried forward into the publication. At that point they will asked whether they wish to remain anonymous. The master list showing participants names and identifiers will be retained securely and destroyed once the paper has been published.	

ADRAN 8 - CYLLID   SECTION 8 – FUNDING

		Ydy / yes	Nac ydy/ No
Ydy'r prosiect yn derbyn cyllid?	Is the project being funded?		✓
A oes angen i'r prosiect gael ei gymeradwyo cyn cael ei ystyried gan asiantaeth gyllido?	Does the project require approval before consideration by the funding agency?		✓
Ffynhonnell y Cyllid	Source of Funding:		

Adran 8 – Ychwanegwch unrhyw sylwadau pellach yr hoffech iddynt gael eu hystyried gyda'r cais hwn.

Section 8 - Please add any further comments you wish to be considered with this application.

ADRAN 9 – DATGANIAD   SECTION 9 - DECLARATION

Rhaid i'r adran hon gael ei chwblhau gan bob parti perthnasol cyn y gellir cyflwyno' r cais i'r Pwyllgor Moeseg.	This section must be completed by all concerned parties before it can be submitted to the Ethics Committee.
Datganiad **Mae'r wybodaeth a gynhwysir yma yn gywir, hyd eithaf fy ngwybodaeth a'm cred. Rwyf wedi ceisio dynodi unrhyw risgiau a phroblemau sy'n**	**Declaration** **The information contained herein is, to the best of my knowledge and belief, accurate. I have attempted to identify any risks and issues**

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gysylltiedig â'r prosiect / ymchwil neu gynhyrchiad ac rwyf yn cydnabod f'ymrwymiadau innau a hawliau'r cyfranogwyr.	related to the project/research or production and acknowledge my obligations and the rights of the participants.

Myfyriwr / Student   Martin Locock   Dyddiad: / Date: 3/10/17

	Disclaimer: To the best of my knowledge the above information supplied to me is correct.

Cydlynydd y prosiect / Project co-ordinator (if appropriate) n/a   Dyddiad: / Date:
Cyfarwyddwr Astudiaethau / Director of Studies n/a   Dyddiad: / Date
Pennaeth Ysgol / Head of School   Dyddiad: / Date

Rhaid i bob cais am ymchwil ar sail cyfweliadau gynnwys y dogfennau canlynol:	All interview based research applications must provide the following pro-forma documents:
1. Ffurflen gydsynio ddrafft 2. Sampl o'r cwestiynau a ofynnir 3. Taflen wybodaeth am yr ymchwil sy'n esbonio'n glir ddiben y prosiect, y deilliannau disgwyliedig a'r rheini y dangosir y canlyniadau iddynt.	1. A draft consent form 2. A sample of the questions that will be asked 3. An information sheet on the research that clearly explains what the project is, what the expected outcomes are and who the results will be shown to.

DYCHWELWCH I'R SWYDDFA YMCHWIL ÔL-RADDEDIG

PLEASE RETURN TO THE POSTGRADUATE RESEARCH OFFICE

Cadeirydd y Pwyllgor Moeseg /Chair of the Ethics Committee   Dyddiad: / Date:

SAMPLE QUESTIONNAIRE QUESTIONS
(Survey Monkey)

How does your institution control its projects?
1   Central project office
2   Embedded within departments
3   Both

What project management methodology is used?

1   PRINCE2 fully implemented
2   PRINCE2 for governance only
3   Agile
4   MSP
5   Own guidelines
6   No special methodology

How does the institution usually review projects at closure? (tick all that apply)

Lessons learned report
Closure report
Post-project review
No review

In planning new projects, how much attention is paid to reviewing previous experience?

1   None
2   Very little
3   Some
4   A lot

Cyfranogwr Rhif Adnabod:
Participant Identification Number:

CWESTIYNAU CYFWELIAD SAMPL	SAMPLE INTERVIEW QUESTIONS

TEITL Y PROSIECT: / PROJECT TITLE:
The experience of delivering Work-Based Learning projects, 2011-2015, and implications for project management practice

1	What was the name and aim of the project?
2	What was your role?
3	At the start of the project, what did you see as the main challenges you would face?
4	How confident were you that the project would succeed?
5	How was the project's progress monitored?
6	What known or unforeseen issues were encountered in implementation?
7	What was the biggest challenge the project faced?
8	Did the project meet its targets? What changes were made to the targets over the course of the project?
9	How were lessons learned captured during the project and at the end? Have these informed the institution's future practice?
10	What impact has the experience had on your professional practice?
11	What did you find most challenging personally about the project?

ENW A CHYFEIRIAD YR YMCHWILYDD	NAME & ADDRESS OF RESEARCHER Martin Locock WIWBL UWTSD Carmarthen SA31 3EP

	SA31 3EP

PRIFYSGOL CYMRU
Y Drindod Dewi Sant
UNIVERSITY OF WALES
Trinity Saint David

Cyfranogwr Rhif Adnabod:
Participant Identification Number:

FFURFLEN GANIATÂD CYFRANOGIAD	SAMPLE PARTICIPANT INFORMATION SHEET

TEITL Y PROSIECT: / PROJECT TITLE:
Lessons learned from delivering Work-Based Learning projects, 2011-2015

Dear Participant:

My name is Martin Locock and I am a member of staff of WIWBL.

I would like to invite you to participate in my research project. This project will reflect on the experience of delivering four work-based learning projects by UWTSD and aims to inform best practice by highlighting the institutional and individual lessons learned.

Through your participation in the interviews, I hope to ascertain how the project coped with the challenges encountered in implementation and how the experience has affected your subsequent professional practice.

Your participation in this study is completely voluntary so you can withdraw at any stage.

The interview should take about 60 minutes to complete, but there is no time constraint. I understand that your time is at a premium but your opinions are very valuable to me.

After careful and precise analysis of the data obtained from the interviews, I will be happy to provide you with a copy of the findings. A draft of the paper will be supplied for comment prior to submission for publication. The results will hopefully enhance my understanding of project management in HE and will be published in an academic journal. .

I thank you in advance for your time and participation. If any questions do arise, feel free to contact me at your convenience.

ENW A CHYFEIRIAD YR YMCHWILYDD	NAME & ADDRESS OF RESEARCHER
	Martin Locock WIWBL UWTSD Carmarthen SA31 3EP

APPENDIX 4: PROJECT LOGOS

APPENDIX 3: PARTICIPANTS

Participant 1: Lead academic for a training project in HE

Participant 2: Lead academic for a work-based learning project in HE

Participant 3: Lead academic for a work-based learning project in HE

Participant 4: Lead academic for a work-based learning project in HE

Participant 5: Lead academic and principal investigator for a professional development project in HE

APPENDIX 5: SURVEY

Lessons Learned from Projects in HE

Delivering projects in the Higher Education environment in Wales

This short survey is being undertaken by Martin Locock of UWTSD as part of an MA work-based project examining how funded projects have been managed by Higher Education institutions in Wales. The results are completely anonymous (your IP will not be recorded) and will be used to provide some quantitative data about the sector to accompany qualitative research. It is intended that a summary of the results will be published in a journal. The survey is intended to capture current practice rather than aspirations; please be frank about the maturity of the institution's processes. Please describe the part of the institution with which you are most familiar.

1. How does your institution control its projects?

○ Central project office
○ Embedded within departments
○ Both

2. Which project management methodology is used?

○ PRINCE2 fully implemented
○ PRINCE2 for governance only
○ Agile PM
○ MSP (Managing Successful Programmes)
○ Own guidelines
○ No formal methodology

3. How does the institution usually review projects at closure? (tick all that apply)

☐ Lessons learned report
☐ Closure report
☐ Post-project review
☐ No review

4. Please score the following statement:
"When planning a new project, my organisation ensures that past experience is taken into account."

○ Strongly agree
○ Agree
○ Neither agree nor disagree
○ Disagree
○ Strongly disagree

Thank you for taking part. If you would like a copy of the finished report, email mlocock@gmail.com

APPENDIX 6: DISCOURSE ANALYSIS – WORD FREQUENCY

Word	Length	Count	Weighted Percentage (%)	Similar Words
acted	5	470	1.71	achievement, acted, activity, address, air, answer, asking, assumption, behave, best, borrowing, brainstorming, business, calling, capture, care, challenge, change, closure, comfort, commitment, competition, conclusion, conflict, control, course, cover, credit, deal, dealing, decision, delay, delivery, demand, detail, development, difference, divorce, drive, education, engagement, essay, evaluation, exercise, failing, find, finding, fit, force, gap, getting, giving, going, guidance, handling, heavy, hell, help, hiding, hitting, impact, implementation, issue, job, labour, laughter, launch, lead, leadership, leading, leaving, line, looking, make, making, management, manoeuvre, means, meeting, model, move, negative, negotiation, offering, order, organisation, oversight, paperwork, parcel, part, performance, pick, planning, playing, pleasure, politics, practice, pressure, process, profession, project, pulling, recruitment, reflection, report, response, responsibility, rest, role, rolling, run, set, shoot, shooting, situation, sleeping, smash, stand, start, stay, stealing, steering, struggle, support, taking, talk, task, teaching, telling, thanks, thing, training, try, turn, turning, use, vent, way, wearing, willing, withdrawal, word, work, works, writing
equally	7	126	1.61	answer, change, close, equally, even, fit, friend, level, look, match, meet, member, participant, partner, support, weight
participant	11	125	1.60	active, activity, back, commitment, end, engage, engaged, engagement, engaging, involved, involving, move, participant, participants
changes	7	423	1.42	address, advance, air, appreciate, awake, back, beginning, better, bring, carry, change, changes, changing, clear, close, closing, closure, cloud, come, comfort, complete, conclusion, cover, crop, cross, culture, deck, delay, delivery, develop, development, difference, drive, driving, elevate, end, even, experience, felt, file, fill, find, fit, following, full, get, going, grow, happening, hat, help, hide, impact, inform, institution, issue, kicking, know, labour, launch, let, level, line, live, load, lose, make, manoeuvre, match, move, number, open, organisation, part, people, piece, point, process, progress, put, react, reinforce, revert, right, run, running, screw, sell, set, sitting, size, smash, spin, split, start, stay, step, still, stuff, suffer, tack, take, thing, think, time, top, try, turn, turning, walking, weight, withdrawal,
unit	4	280	1.39	advantage, agreed, area, bit, board, case, change, corner, couple, course, cover, cross, degree, detail, development, door, extra, face, felt, field, force, future, gang, gap, good, group, head, home, incorporated, individual, intelligence, issue, lead, leading, level, life, line, load, means, member, merger, nonsense, one, organisation, pair, part, person, piece, point, power, real, sector, side, somebody, someone, sort, split, standard, stay, step, stuffing, system, tack, team, thing,
project	7	171	1.30	belly, bill, business, communicate, designing, drive, external, head, lesson, plan, planned, planning, programme, project, projects, risk, see, seeing, show, task, tasks, work
active	6	357	1.06	active, activity, approving, back, beginning, best, boring, business, calling, capture, care, change, comfort, control, course, cover, demand, designing, development, driving, education, end, engagement, essay, exercise, feedback, first, fit, forward, going, guidance, hell, help, hiding, intelligence, issue, job, keeping, labour, laughter, lead, leadership, leading, life, line, listening, live, look, looking, manoeuvre, manufacturing, model, move, negotiation, open, order, organisation, paperwork, part, planning, playing, pleasure, policy, politics, practice, process, profession, project, role, run, running, set, show, situation, specialty, start, stealing, steering, struggle, support, task, teaching, thanks, third, training, try, turn, use, vent, vice, wearing, work, works, writing, wrong
targets	7	58	1.00	address, business, directly, end, occasions, point, take, target, targets, thing
communicate	11	320	0.97	address, advertising, air, answer, apply, argue, beg, bill, burns, carry, challenge, change, chart, comment, commitment, communicate, conversation, cover, credit, day, deliver, delivery, demand, detail, develop, essay, expect, field, get, give, giving, group, guess, guidance, head, inform, information, intelligence, issue, kudos, laughter, lead, learn, lecturer, lesson, level, line, masters, mentor, nonsense, number, offering, order, organisation, output, page, piece, point, profile, programme, project, recognition, reflection, reinforce, report, respects, response, rubbish, saying, show, side, signed, signing, solution, staff, start, step, stuff, talk, tell, thanks, thing, time, turn, type, understanding, view, want, word, writing
really	6	36	0.97	actually, genuine, real, really
working	7	288	0.96	acted, activity, answer, apply, audit, bring, business, capture, care, carry, comparing, create, crop, deal, drive, employer, employers, engagement, exercise, fill, get, guess, handling, hat, help, issue, job, labour, learning, line, make, makes, making, manage, model, move, number, output, page, paperwork, part, playing, pressure, process, processes, project, risk, role, run, running, set, still, struggle, succeed, take, task, tell, turn, turning, use, work, worked, working, works, writing
things	6	63	0.90	area, arse, back, belly, change, feeling, happening, least, process, shoulder, situation, small, system, target, thing, things
moved	5	350	0.89	acted, advance, air, behave, bring, capture, carry, change, close, closing, closure, communicate, conclusion, cope, corner, deal, decision, delay, deliver, develop, drive, driving, engage, essay, face, following, force, forward, get, gin, give, impact, jack, keep, kicking, knock, labour, launch, live, load, lose, make, manage, manoeuvre, match, meet, motivate, move, moved, order, pair, part, partner, pick, pile, practice, progress, project, put, react, rest, risk, run, running, saw, screw, see, sell, set, shoot, shoulder, sit, sitting, smash, spin, split, stand, start, step, struggle, stuff, take, top, try, turn, use, walking, way, work, worrying, wrong
organisation	12	127	0.81	activity, beginning, business, care, conference, consortium, deal, detail, force, friendly, gang, hands, hierarchy, home, institute, institution, intelligence, labour, manage, management, member, order, organisation, partnership, party, personnel, school, side, staff, start, team, trust, unit, university, workforce
meet	4	113	0.80	answer, case, conference, cope, cover, cross, deal, encountered, engagement, experience, face, fill, fit, front, just, manage, match, meet, meeting, meetings, party, pile, playing, see, seeing, session, sit, sitting, stay, suffer
think	5	287	0.80	allow, believe, budget, care, carry, change, chart, choose, considered, credit, deal, evaluate, expect, feel, find, give, guess, idea, identify, intelligence, intelligent, know, like, line, make, mean, means, mind, order, plan, planning, policy, process, programme, project, reason, reasons, reflection, see, sort, stand, suppose, take, think, thinking, thought, time, trust, type, view
group	5	158	0.77	activity, business, cloud, course, crop, culture, deck, faculty, fair, field, following, force, free, front, gang, group, groups, hierarchy, information, institution, labour, leaders, leadership, line, lot, matrix, meeting, order, organisation, pair, parcel, party, people, personnel, pile, room, school, sector, set, sick, sort, staff, stand, system, team, type, unit, university, world, year

make	4	300	0.77	achieve, amount, behave, bring, capture, carry, change, chart, clear, come, cover, create, crop, cross, deliver, develop, devil, drive, earning, engage, ensure, expect, find, force, found, free, get, give, giving, grow, guess, hitting, institute, keep, kind, look, make, makes, making, model, motivate, move, number, output, pick, piece, pissed, plan, prepared, profile, programme, project, put, realising, run, see, set, show, sort, spin, start, support, tack, take, taking, think, time, top,
challenges	10	41	0.75	challenge, challenges, challenging, competition, demand, difficult, hard, situation
identified	10	61	0.74	identified, identify, know, known, number, see, set, tell, type, view
management	10	120	0.73	achieve, achieved, achievement, care, cared, careful, cares, control, cope, deal, dealing, directly, flexibility, guidance, handling, head, lead, manage, manageable, managed, management, manager, managing, match, meet, mind, move, organisation, oversight, process, run, running, steering, succeed, work
lessons	7	29	0.71	exercise, lesson, lessons, teaching
get	3	186	0.70	address, assumption, becoming, beginning, benefit, borrowing, bring, capture, captured, change, clear, come, comes, communicate, contracts, create, deliver, develop, developed, developing, development, devil, drive, driving, engage, experience, feel, find, finding, force, generated, get, gets, getting, give, going, grow, launch, lead, let, letting, make, makes, making, mean, process, run, sell, start, started, suffer, sustainability, take, taking, turn, work
need	4	62	0.66	asked, asking, demand, demands, involved, involving, lack, motivate, necessarily, necessary, need, needed, needs, pressure, required, take, taking, want, wanted, wanting
evaluation	10	217	0.65	allow, appreciate, believe, bill, challenge, choose, clear, credit, critical, develop, doubt, evaluate, evaluation, evaluator, expect, feel, find, guess, identify, know, like, make, measured, mind, order, project, rely, see, side, stand, suppose, think, trust, view
know	4	129	0.65	awareness, bang, control, couple, experience, feel, find, informed, know, knowing, knowledge, learn, learned, learning, live, loved, lovely, loves, pair, recognition, screw, screwed, take, tell, think, understanding
much	4	35	0.62	lot, much, often, practice
periodically	12	85	0.62	august, bit, daily, day, days, end, even, extra, full, issue, june, life, may, moment, monthly, night, november, number, periodically, piece, run, school, session, thirties, time, times, weekly, year, years
institution	11	54	0.59	beginning, bring, create, fed, found, home, initially, institute, institution, institutional, institutions, make, order, organisation, school, start, university
positive	8	153	0.58	activity, address, advantage, amount, assumption, back, business, confident, end, first, formal, forward, front, importance, job, lead, leadership, left, level, line, nowhere, order, part, perspective, plus, point, positive, posts, put, right, role, set, setting, side, situation, situations, split, stand, step, suppose, terms, third, view
issues	6	45	0.57	air, area, beginning, change, communicate, extra, free, impact, income, issue, issues, number, numbers, response, take, taking
going	5	132	0.56	achievement, active, address, bang, carry, change, choose, come, cover, cross, drive, failing, file, fit, going, happen, head, knock, lead, leading, leaving, live, manoeuvre, move, moved, offering, open, run, running, school, sit, start, started, step, take, tick, track, try, turn, turning, withdrawal, work, worked, working, works
education	9	83	0.53	academic, chancellor, education, experience, head, informed, knowing, learned, learning, lecturer, lesson, profession, professional, school, see, talk, teaching
happening	9	169	0.52	advance, bang, beginning, bit, case, change, come, conclusion, deal, decision, delivery, develop, development, difference, end, engagement, experience, give, going, happen, happened, happening, head, hell, impact, instance, issue, knock, materialise, meeting, merger, open, opener, piece, progress, report, resilience, rolling, run, stand, start, step, success, thing, tick, time, turn, turning
part	4	162	0.52	air, basis, beginning, bit, change, contribute, corner, crop, detail, divorce, end, environment, fill, gin, going, hat, head, heavy, hell, leaving, length, line, making, member, module, move, open, outside, paper, part, particular, piece, point, rest, right, role, saw, shared, side, solution, split, start, started, straight, stuff, support, top, try, turning, unit, way, world, zone
emotions	8	32	0.51	affected, bang, care, emotional, emotionally, emotions, feeling, little, passion
tried	5	70	0.51	activity, best, control, difficult, drive, end, essay, examine, hard, labour, move, part, risk, run, stress, struggle, take, tried, try, trying
approaches	10	50	0.50	address, advance, approaches, close, closing, closure, come, comes, door, future, move, way
conditions	10	112	0.50	activity, air, assumption, better, case, clear, cloud, comfort, conditions, confidence, context, control, corner, demand, development, drive, elements, feel, feeling, fit, high, information, job, lack, learning, look, lot, luck, need, order, ordinary, problem, process, sensitivity, setting, situation, stress, want, way
knowledge	9	159	0.47	area, case, culture, detail, education, end, experience, experienced, faculty, feeling, field, head, idea, information, instance, institution, intelligence, issue, knowing, knowledge, lead, leadership, learning, level, life, match, mind, model, module, normal, open, organisation, overlap, particular, passion, perspective, plan, point, power, practice, problem, process, programme, reason, recognition, set, skill, specific, stand, stuff, system, target, thinking, thought, track, trust, understanding, view, world
learned	7	96	0.47	audit, conditions, develop, education, exercise, find, inform, learn, learned, learning, mentor, practice, reinforce, school, see, seeing, take, taking, talk, teaching, work
faced	5	49	0.46	aspect, aspects, assumption, case, cover, face, faced, front, head, line, look, looking, match, meet, side, top, turn, type
planning	8	157	0.45	chart, designing, idea, manoeuvre, mean, organisation, plan, planned, planning, policy, prepared, programme, programmes, project, strategy, system, think, thinking, thought, time, withdrawal
thought	7	184	0.44	address, amount, assumption, beginning, conclusion, control, decision, end, feeling, idea, kind, manoeuvre, mind, model, part, plan, policy, politics, programme, project, reflection, right, sort, standard, strategy, system, thing, thought, unit, view, way, whole
process	7	134	0.43	activity, awareness, care, closure, control, culture, deal, deliver, developing, development, education, eye, feeling, impact, know, knowing, knowledge, learning, manage, pick, planning, prepared, process, processes, recognition, response, run, seeing, sleeping, sort, thinking, thought, understanding, work

Word			Score	Words
setting	7	165	0.43	activity, change, choose, conditions, context, correctly, crop, develop, environment, even, exercise, field, fit, group, guess, hard, identify, know, level, limited, load, lose, make, match, move, order, pair, pile, point, positive, prepared, put, putting, rest, set, setting, shoot, sit, situation, situations, solution, stand, start, step, stuff, target, tell, time, turn, work
want	4	67	0.43	care, demand, desired, lack, like, long, loved, need, trust, want, wanted, wanting
time	4	77	0.42	bit, case, day, experience, instance, lead, life, moment, night, none, overlap, piece, regular, set, time, times
practice	8	78	0.41	activity, apply, commitment, engage, exercise, experienced, implementation, institution, knowledge, learn, normal, practice, take, training, use, used, useful, working, worrying
good	4	79	0.40	advantage, benefit, better, change, close, complete, full, future, genuine, good, goods, honest, leader, line, load, nice, number, practice, respects, right, safe, skill, skills
individual	10	43	0.40	change, head, independent, individual, individuals, person, personal, personally, several, somebody, someone, specialty, tell
quite	5	12	0.40	quite, rather, stopped
take	4	171	0.39	address, apply, bang, board, bring, capture, carried, carry, change, choose, claims, clear, cover, crop, cross, detail, directly, drive, driving, engage, engaged, engagement, engaging, exactly, experience, field, fill, find, free, get, head, know, level, move, pick, piece, point, screw, see, selected, set, shoot, shooting, stuff, take, taking, target, track, training, try, turn, use, withdrawal, work
yes	3	11	0.39	yes
support	7	119	0.38	activity, advance, allow, approving, argue, back, based, care, carry, contribute, control, cover, ensure, fit, give, help, lead, let, look, match, part, reason, reinforce, rest, see, show, spoke, stand, stay, step, suffer, support, sustainability, tick
sure	4	32	0.38	careful, certain, certainly, confident, positive, sure, trust, trusting
directly	8	176	0.37	address, care, closure, control, create, deal, directly, driving, give, guidance, head, lead, leading, make, manage, manageable, move, order, organisation, plan, point, project, run, steering, straight, tell, turn, work
like	4	69	0.37	care, cared, careful, cares, compared, comparing, feeling, kind, like, potential, probably, reflection, see, sort, view, want
point	5	135	0.37	address, advantage, back, beginning, close, conclusion, corner, degree, designing, detail, detailed, directly, end, first, front, head, high, home, inform, lead, left, level, line, manoeuvre, meeting, moment, periodically, point, right, setting, show, situation, stand, start, steering, stopped, swansea, take, target, tell, time, top, unit, zone
informed	8	92	0.36	air, bill, case, change, clear, comment, communicate, confidence, cover, daily, detail, develop, friendly, headache, inform, information, informed, instance, intelligence, issue, knowing, knowledge, lead, learn, mentor, moment, particular, pleasure, point, programme, reason, reinforce, report, reporting, show, specific, stuff, talk, tell, telling, track, word
just	4	64	0.35	exactly, fair, good, goods, hard, honest, just, meet, right
confident	9	36	0.34	certain, commitment, confidence, confident, confidently, friend, give, positive, sure, trust, trusting
partners	8	12	0.34	move, partner, partners
show	4	147	0.34	benefit, bit, face, fair, give, inform, lead, model, number, open, performance, programme, project, put, run, show, sit, stress, support, suppose, take, turn, vent, view, word
assigned	8	129	0.33	advance, advantage, assigned, choose, conclusion, credit, deal, decision, designing, detail, elevate, evaluate, exercise, lesson, lot, negotiation, project, recognition, take, task
care	4	62	0.33	aware, care, cared, careful, cares, certain, close, concerned, concerning, detailed, help, look, measured, mind, particular, see, sure, therapy, work, worried, worrying
feel	4	99	0.33	awareness, believe, care, comfort, confidence, conflict, empathy, experience, feel, feeling, feelings, find, finding, fingers, idea, impressed, look, looking, passion, pleasure, reason, see, sensitivity, thing, think, thought, want, withdrawal
now	3	10	0.33	directly, now
see	3	103	0.33	appreciate, believe, care, carry, case, considered, control, cover, ensure, examine, expect, experience, find, finding, identify, like, look, looking, make, realising, see, seeing, take, think, understanding, view
sort	4	55	0.33	evaluation, group, groups, kind, like, make, model, nature, size, sort, sorts, type
always	6	9	0.32	always
difficult	9	21	0.32	challenging, difficult, hard, tricky, trying
force	5	83	0.32	affected, bring, detail, drive, driving, force, forced, friendly, get, hands, impact, make, moment, momentum, move, organisation, personnel, pick, power, pressure, pulling, shoulder, staff, stress, strong, unit, workforce
many	4	9	0.32	many
give	4	129	0.31	advance, allow, apply, back, commitment, communicate, contribute, create, crop, deal, deliver, fit, free, generated, give, giving, guess, happen, hat, lead, leaving, let, lot, make, match, move, offering, open, opener, partner, pick, put, sell, show, step, support, think, top, trust, use
head	4	75	0.31	advance, beginning, case, chancellor, credit, develop, front, grow, head, individual, knowledge, leader, line, manager, mind, minded, point, pressure, problem, progress, tack, take, top, way, word
implementatic	14	71	0.31	apply, bit, complete, file, gang, give, implementation, implemented, jack, means, opener, pick, practice, run, saw, staff, step, track, way
fair	4	39	0.30	clear, fair, honest, just, ordinary, reason, reasons, show
importance	10	47	0.30	big, critical, good, grand, heavy, importance, lesson, main, mean, means, moment, point, strategic, stress, weight
right	5	45	0.30	correctly, door, just, outside, power, right, straight, turn, turning, use
writing	7	119	0.30	activity, address, bill, close, closing, communicate, conclusion, create, cross, development, end, essay, issue, job, lead, line, make, numbers, order, paper, pastoral, point, power, profile, put, report, rest, set, staff, type, well, word, work, writing

end	3	86	0.29	business, change, clear, close, closed, closing, closure, complete, completely, concluded, conclusion, deal, decision, end, ended, happening, idea, mind, occasions, part, point, run, shooting, stand, stopped, target, thing, top, view, withdrawal
use	3	77	0.29	activity, address, apply, board, demand, development, employer, employers, enjoyed, exercise, give, help, move, practice, put, role, take, task, use, used, useful, work
provider	8	78	0.28	allow, answer, board, care, careful, carry, crop, drive, engage, fill, fit, give, hat, help, home, long, lot, luck, match, meet, offering, partner, power, provider, set, staff, stay, step, support, top
responses	9	37	0.28	answer, area, demand, feedback, field, hands, issue, job, keeping, response, responses, responsibilities, responsibility, responsible, sensitivity, start, way
based	5	48	0.27	assumption, based, basis, control, found, home, mean, means, number, part, piece, stand, support, third, wrong
cover	5	72	0.27	apply, back, case, change, comfort, conceal, control, cover, cross, ensure, face, felt, hat, hide, hiding, line, meet, overlap, paper, parcel, see, shoulder, size, top
handling	8	55	0.27	control, crop, dealing, drive, field, handling, manage, management, step, turn, work, wrong
leader	6	33	0.27	better, employer, head, job, leader, leaders, leadership, manager, model, monitor, ordinary
monitored	9	9	0.27	monitor, monitored, monitoring
snapped	7	118	0.27	behave, close, give, move, part, piece, project, resilience, snapped, talk, task
fit	3	57	0.26	able, activity, advance, agreed, answer, cover, fit, look, making, match, meet, point, run, set, support, way
numbers	7	48	0.26	amount, difference, find, first, grand, identify, lead, match, number, numbers, one, page, real, size, three, two, weight
team	4	26	0.26	group, team, teamed, teams, unit
way	3	64	0.26	course, directly, door, drive, fit, implementation, line, mean, means, order, part, pick, response, room, tack, track, way, ways
digital	7	31	0.25	change, couple, digital, fingers, member, one, pair, three, two
person	6	46	0.25	heavy, individual, part, person, personal, personally, playing, role
signed	6	64	0.25	address, bill, communicate, degree, experience, number, output, part, put, set, signed, signing, staff, start, target, type, unknown
got	3	7	0.25	got
absorbed	8	16	0.24	absorbed, engage, engaged, engagement, engaging, interesting, learn
actually	8	25	0.24	actually, create, genuine, make, real, realising
advance	7	67	0.24	advance, advantage, amount, better, carry, clear, contribute, develop, development, early, elevate, forward, front, head, help, high, late, later, lead, move, process, processes, progress, shoot, support, top
area	4	55	0.24	area, car, clear, corner, door, environment, eye, field, front, head, issue, keep, module, open, responsibility, room, safe, see, side, well
come	4	87	0.24	address, amount, becoming, change, come, comes, derived, develop, experience, fair, following, get, grow, happen, lead, make, move, number, numbers, run, see, seems, totally, turn
enjoyed	7	53	0.24	activity, apply, enjoyed, experience, like, loved, lovely, loves, pleasant, pleasure, see, use
little	6	14	0.24	emotional, little, niggling, size, slightly, small
reason	6	85	0.24	argue, budget, concluded, faculty, feel, find, give, group, guess, intelligent, line, make, module, policy, process, put, reason, reasons, set, size, sort, support, suppose, think, thinking, thought, understanding
success	7	21	0.24	activity, bang, happening, made, order, run, smash, solution, success, successful
tell	4	89	0.24	advance, air, answer, argue, carry, comment, field, guess, identify, impressed, inform, issue, knock, know, look, mean, move, point, reason, relational, respond, run, saying, several, show, spin, support, take, talk, tell, telling, tells
control	7	102	0.23	activity, care, commitment, control, corner, deal, drive, driving, ensure, essay, examine, guidance, head, keep, keeping, know, lead, manage, manageable, masters, mind, power, process, run, see, standard, steering, try, turn, work
line	4	94	0.23	air, control, course, cover, credit, cross, face, file, fill, front, head, idea, line, part, people, pick, pile, policy, reinforce, set, side, start, support, tack, track, tuned, turn, way
products	8	59	0.23	boring, crop, culture, generated, good, issue, job, leader, line, load, making, number, output, paper, pick, products, set, successful, turning, work, writing
skills	6	32	0.23	complete, control, good, mean, nice, power, skill, skills, technical
designing	9	72	0.22	address, create, cross, designing, end, finding, idea, jack, make, mean, mind, number, page, plan, planning, programme, specialist, standard, think, view, worth
expected	8	63	0.22	asked, asking, believe, carried, carry, deliver, demand, develop, evaluate, expect, expectations, expected, expects, feeling, guess, look, mean, required, see, suppose, think, trust, view
maybe	5	6	0.22	maybe, perhaps
required	8	37	0.22	essentially, necessary, need, order, required, responsibility, tell, want
unforeseen	10	6	0.22	unexpected, unforeseen
whatever	8	6	0.22	whatever
benefits	8	41	0.21	advantage, benefit, benefits, clear, get, good, performance
employers	9	34	0.21	employer, employers, engage, engaged, engagement, engaging, fill, job, leader, working
experience	10	78	0.21	change, come, education, experience, experienced, feel, feeling, feelings, find, happening, life, lose, meet, see, seeing, suffer, time, world
grown	5	10	0.21	adult, big, grown

monthly	7	10	0.21	august, june, may, monthly, months, november
offering	8	93	0.21	give, giving, move, offering, project
others	6	13	0.21	another, difference, different, new, others, otherwise
business	8	63	0.20	active, advertising, boring, business, businesses, concerned, concerning, engaged, field, headache, issue, line, occasions, output, paper, partnership, people, playing, sector, target, work
closed	6	53	0.20	bang, careful, close, closed, closing, complete, completely, concluded, conclusion, end, engage, fill, finally, fine, good, mean, means, move, next, turn, walking
conversation	12	24	0.20	argue, change, conversation, conversations, inform, information, informed, malarkey, talk
develop	7	69	0.20	advance, better, change, come, create, culture, develop, developed, developing, development, education, exercise, find, grow, happen, head, learn, make, prepared, progress, shoot, suppose, training, turn, use
families	8	50	0.20	case, couple, families, future, line, match, number, people, person
initially	9	66	0.20	address, beginning, cover, deal, drive, first, found, initially, institute, knowledge, leader, learner, make, open, opener, people, set, start
look	4	49	0.20	examine, expect, expectations, expected, expects, eye, feel, fit, look, looking, make, match, monitoring, rely, see, seems, trust, view
lot	3	42	0.20	apply, deal, dealing, fortunately, give, hat, left, load, loads, lot, luck, messed, parcel, party, pile, right, set, setting, split, success
playing	7	98	0.20	activity, apply, back, behave, capture, change, complete, cover, deal, develop, exercise, field, lateral, lead, move, numbers, pick, playing, run, running, see, set, show, start, take, try, turn, turning, use, vice, work
practitioners	13	8	0.20	practitioners, professional
talk	4	46	0.20	address, argue, comment, communicate, conversation, deliver, lead, learn, lecturer, level, malarkey, negotiation, recognition, talk, talk', tell, word
affected	8	45	0.19	affected, change, cloud, feeling, forced, get, impressed, involved, involving, move, moved, sick, taken
decided	7	69	0.19	choose, closure, decided, detail, end, field, get, impossible, make, pick, pleasure, set, shoot, take, way
encountered	11	18	0.19	encountered, find, finding, happen, happened, happening
recruiting	10	9	0.19	achievement, engage, enrolments, provider, recruited, recruiting, recruitment
sick	4	40	0.19	affected, cold, funny, moved, people, sick
tools	5	49	0.19	bill, bit, file, gang, jack, means, member, opener, pick, process, saw, tools, way, work
also	4	5	0.18	also
around	6	5	0.18	around
hands	5	57	0.18	deal, dealing, deliver, force, free, give, giving, hands, help, jack, keeping, lead, left, pair, personnel, power, right, side, straight, take, trust, workforce, writing
order	5	55	0.18	asking, closure, course, demand, evaluate, hierarchy, line, make, order, organisation, page, put, putting, regular, run, saying, set, stay, system, tell, telling, tells, word, zone
pair	4	48	0.18	bang, couple, cover, cross, know, match, pair, screw, set, stand, take, two
piece	5	80	0.18	bit, create, end, lead, make, paper, part, pastoral, personal, piece, tack, time, voluntary
report	6	22	0.18	comment, cover, essay, inform, information, paper, report, reporting, reports, talk, telling
role	4	49	0.18	activity, back, end, first, forward, role, third, use, used, useful
biggest	7	5	0.18	biggest
everybody	9	5	0.18	everybody
achieve	7	47	0.17	achieve, achieved, achievement, bang, credit, going, make, manage, performance, recruitment, smash, solution, succeed, success
deal	4	48	0.17	address, advertising, behave, board, borrowing, business, care, carry, cover, deal, dealing, delivery, field, give, handling, lot, manage, move, politics, relational, sell, shared, understanding
fill	4	56	0.17	change, close, complete, engage, enough, fill, full, line, load, people, pick, stuff, take, turn
outside	7	32	0.17	external, open, outside, part, right, unknown
turn	4	79	0.17	awake, better, change, close, control, corner, cover, development, face, fill, get, grow, left, lose, move, open, output, react, revert, right, run, shoot, side, spin, suffer, tack, take, top, turn, turning, work
bit	3	58	0.16	acted, bit, bits, case, instance, moment, number, numbers, part, performance, piece, tack, time, turn, turning, unit
help	4	52	0.16	activity, advance, approving, better, care, comfort, help, helped, helps, look, lovely, model, page, piece, see, support, thanks, work
job	3	45	0.16	activity, business, businesses, calling, education, engage, engagement, job, jobs, line, politics, problem, profession, put, responsibility, situation, specialty, task, tasks, teaching, work
power	5	35	0.16	control, degree, drive, efficacy, faculty, force, intelligence, knowledge, leadership, load, methodology, mind, module, power, pressure, reason, sensitivity, skill, solution, strong, system, understanding
professional	12	23	0.16	academic, adult, chancellor, change, head, lecturer, masters, pro, professional
room	4	34	0.16	area, car, door, head, keep, module, opportunity, room, well
trust	5	20	0.16	believe, consortium, credit, desired, expect, look, rely, trust, trusting
capture	7	37	0.15	activity, capture, captured, carry, course, drive, getting, gin, jack, run, work

fantastic	9	5	0.15	fantastic, grand, unrealistic
fortunately	11	33	0.15	fortunately, good, happy, luck, well
future	6	34	0.15	early, future, good, next, perspective, succeed, view
impressed	9	20	0.15	affected, awful, brilliant, easy, grand, imposing, impressed, line, move, pressure, set, stamped
level	5	29	0.15	deck, degree, equally, even, force, high, level, momentum, setting, stand, take, talk, top
running	7	75	0.15	apply, capture, carried, carry, course, drive, free, get, jack, move, playing, process, run, running, show, step, succeed, suffer, track, try, work
conscious	9	9	0.14	aware, awareness, conscious, self
deliver	7	41	0.14	bring, carry, communicate, deliver, delivered, delivering, expect, get, give, process, sell, talk
done	4	4	0.14	done
every	5	4	0.14	every
financial	9	5	0.14	financial, financially, run
involved	8	37	0.14	active, carry, concerned, engage, engaged, interested, interesting, involved, involving, least, part, thing, world
laughs	6	8	0.14	funny, happy, laughs, laughter
paper	5	36	0.14	bill, cover, daily, order, paper, process, report, stuff, well, writing
performance	11	66	0.14	achievement, benefit, bill, bit, burns, carry, extra, give, heavy, lead, make, move, number, performance, playing, practice, programme, show, spin, turn
relationship	12	13	0.14	confidence, partnership, relationship, relationships, trust
succeed	7	45	0.14	achieve, achieved, achievement, clear, cover, following, make, manage, next, run, succeed, success, successful, work
everyone	8	4	0.14	everyone
everything	10	4	0.14	everything
naïve	5	4	0.14	naïve
bad	3	12	0.13	awful, bad, hard, horrid, naughty, negative, sad, several
board	5	53	0.13	board, deal, get, going, leaving, live, room, use
boxes	5	12	0.13	area, boxes, case, corner, safe, struggle
day	3	30	0.13	day, days, even, life, opportunity, time, year, years
demand	6	32	0.13	activity, challenge, demand, demands, exactly, expect, required, responsibility, use, want
different	9	17	0.13	change, conflict, difference, different, differently, gap, number, otherwise, several
elements	8	49	0.13	air, conditions, elements, environment, lead, making, module, part, point, situation
engagement	10	48	0.13	business, businesses, close, conflict, engage, engaged, engagement, engaging, involved, meeting, move, practice, work
environment	11	30	0.13	area, case, conditions, context, environment, environments, field, front, home, meet, responsibility, setting, situation
following	9	55	0.13	apply, carry, examine, following, move, people, practice, regular, sit, track, use
interesting	11	38	0.13	benefit, concerned, concerning, engage, interested, interesting, involved, part, power, right, worried, worrying
lead	4	76	0.13	activity, advance, advantage, contribute, directly, get, give, guidance, head, lead, leadership, leading, leaving, make, mean, run, running, show, steering, take, taking, top, track, turn
learners	8	4	0.13	learner, learners
open	4	34	0.13	active, arse, beginning, bill, eye, first, found, gap, issue, launch, move, open, opener, opportunity, outside, point, start, turn, vent
prepared	8	48	0.13	activity, create, exercise, learn, make, organisation, planning, practice, prepared, take, training, willing, withdrawal
situations	10	30	0.13	area, challenge, conditions, context, environment, field, front, home, recognition, responsibility, setting, situation, situations, size, thing
well	4	32	0.13	advantage, comfort, comfortable, good, goods, well
whole	5	22	0.13	complete, completely, full, one, totally, unit, whole, works
word	4	26	0.13	christ, conference, conflict, difference, head, jesus, line, negotiation, order, put, recognition, session, show, sitting, word
world	5	60	0.13	academia, experience, part, people, piece, world
wrong	5	6	0.13	awry, sell, vicious, wrong
answer	6	38	0.12	answer, fill, fit, match, meet, react, respond, response, responsibility, responsible, solution, work
aware	5	20	0.12	awake, aware, awareness, careful, conscious, feel, knowing, mind, minded
away	4	5	0.12	away, outside
calling	7	47	0.12	asking, business, calling, challenge, claims, conclusion, decision, demand, expect, guess, job, line, meet, order, page, see, specialty, tell, view
carry	5	63	0.12	advance, behave, bring, capture, carried, carry, communicate, deal, grow, move, posts, shoulder, step, support, take, time, work
clear	5	45	0.12	allow, area, benefit, change, clear, create, fair, free, intelligence, intelligent, let, make, open, opener, parcel, sell, succeed, take, top, understanding
concerned	9	36	0.12	apply, business, concerned, concerning, headache, involved, least, load, part, relational, thing, world, worried, worrying

desired	7	33	0.12	desired, feeling, good, passion, want, wanted
early	5	22	0.12	advance, early, future, new, others, previous
extremely	9	52	0.12	degree, end, extremely, face, high, left, level, outside, part, right, side, view
hitting	7	53	0.12	advance, bang, carry, come, drive, get, hitting, impact, knock, shoot, shooting, smash, take, top
let	3	45	0.12	allow, allowed, allows, clear, get, give, let, letting, make, stand, suffer, support
mentoring	9	7	0.12	learn, mentor, mentoring
occasions	9	43	0.12	business, exercise, formal, happening, head, make, occasions, opportunity, party, reason, time
one	3	14	0.12	one, ones, unit
opportunities	13	28	0.12	day, good, opportunities, opportunity, right, room
people	6	39	0.12	academia, business, following, free, group, labour, live, people, sick, world
traits	6	24	0.12	activity, commitment, control, decision, drive, face, flexibility, life, nature, passion, responsibility, secrecy, specialty, traits, trust
academic	8	10	0.11	academia, academic, academics, world
adult	5	21	0.11	academic, adult, case, head, lecturer, match, professional, type
allow	5	31	0.11	allow, allowed, allows, give, leaving, let, part, provider
archived	8	3	0.11	archive, archived
closure	7	33	0.11	close, closed, closing, closure, conclusion, end, order, stopped
cloud	5	15	0.11	change, cloud, conceal, group, hide, move, unclear
commissioned	12	13	0.11	board, commissioned, committees, directly, fit, organisation
considered	10	27	0.11	considered, deal, dealing, look, see, take, taking, view
customer	8	41	0.11	change, create, customer, customers, institution, make, practice, use
desk	4	3	0.11	desk
entrepreneuria	15	3	0.11	entrepreneurial
foreseeable	11	29	0.11	foreseeable, know, move
live	4	38	0.11	active, board, live, move, people, room
loved	5	11	0.11	loved, lovely, loves, passion, passionate, wanted
might	5	4	0.11	might, power
model	5	38	0.11	help, kind, leader, lovely, model, sit, sitting, sort, work
never	5	3	0.11	never
respects	8	34	0.11	detail, individual, nice, point, report, respects, see, several, view
side	4	51	0.11	area, aspect, back, face, front, head, lateral, line, part, side, spin, unit
small	5	12	0.11	amount, fine, limited, little, size, small
sometimes	9	3	0.11	sometimes
stand	5	25	0.11	evaluate, importance, move, nowhere, profile, put, regular, rest, set, side, stand, still, stress, support
suppose	7	13	0.11	assumption, assumptions, basis, conclusion, develop, expect, given, suppose
terms	5	31	0.11	conditions, life, point, session, terms, time, word
within	6	3	0.11	within
anything	8	3	0.11	anything
came	4	3	0.11	came
gave	4	3	0.11	gave
met	3	3	0.11	met
prince2	7	3	0.11	prince2
something	9	3	0.11	something
went	4	3	0.11	went
amount	6	27	0.10	advance, amount, cold, income, information, length, make, measured, number, risk, standard, totally
big	3	16	0.10	bad, big, expect, expectations, expected, expects, give, giving, grand, heavy, size
case	4	37	0.10	adult, bit, case, happening, instance, piece, problem, time, type
comfort	7	18	0.10	comfort, comfortable, easy, help, keep, pleasure, still, sufficient, support
detail	6	29	0.10	careful, detail, detailed, force, gang, information, part, particular, particularly
diversity	9	18	0.10	activity, different, diversity, fair, running, show, track, turn, turning
elevate	7	27	0.10	change, chin, degree, elevate, grand, head, level, plan, point, top

Term				Related words
free	4	39	0.10	achievement, clear, free, give, independent, issue, people, run, take
generated	9	42	0.10	beginning, create, develop, free, generated, make, people
hard	4	13	0.10	bad, concentrated, hard, heavy, indulgent, set, several, strong
impact	6	32	0.10	affected, bang, change, force, impact, issue, knock, process, run, smash
keep	4	28	0.10	control, cover, hands, keep, keeping, live, maintaining, make, move, responsibility, support, sustainability
life	4	36	0.10	days, experience, life, live, profile, time, years
long	4	18	0.10	length, long, want
masters	7	36	0.10	control, education, employer, head, know, masters
nothing	7	8	0.10	conversation, nothing
start	5	42	0.10	advantage, beginning, create, first, initially, institution, line, make, move, opener, organisation, point, set, start, started, turn
struggle	8	19	0.10	conflict, drive, essay, impact, labour, stand, struggle, struggling, try
suffer	6	55	0.10	care, experience, feel, get, lose, passion, run, see, suffer
up'	3	7	0.10	awake, leading, prepared, up', ups
willing	7	17	0.10	faculty, give, happy, leaving, module, pick, prepared, voluntary, willing
better	6	45	0.09	advance, amended, better, change, close, comfort, develop, fill, good, help, piece, point, set, turn
commitment	10	22	0.09	commitment, engagement, involved, make, move, profession, pulling, sworn, word
conceal	7	11	0.09	activity, cloud, conceal, cover, hide, hiding, secrecy, stealing
contracts	9	15	0.09	change, contracts, engage, getting, partnership, policy, signed, signing, word
critical	8	13	0.09	comment, critical, decision, evaluator, knock, pick, professional, rubbish, writing
earning	7	28	0.09	earning, found, get, income, issue
find	4	56	0.09	address, feel, find, finding, get, grow, learn, make, noticeable, number, see, support
formal	6	21	0.09	formal, positive, practice, validated
full	4	14	0.09	change, complete, full, fully, heavy, high, overloaded, totally, whole
home	4	17	0.09	beginning, comfortable, environment, families, home, institution, internal, unit
intelligence	12	11	0.09	brilliant, clever, information, intelligence, intelligent, mind, power, understanding, word
main	4	6	0.09	independent, main, masters
module	6	21	0.09	change, delivery, faculty, module, modules, power, reason, sensitivity, set, talk, understanding
put	3	22	0.09	apply, assigned, change, commitment, job, put, putting, redacted, set, use, word
realising	9	32	0.09	know, piece, realising, recognition, sell, understanding
recently	8	4	0.09	late, new, recently
relational	10	37	0.09	conflict, identify, issue, mean, partner, point, relational, screw, tell, think, word
understanding	13	61	0.09	answer, believe, conclusion, deal, find, get, guess, knowing, partnership, policy, recognition, see, take, tell, understanding, work
advantage	9	40	0.08	advantage, benefit, good, lead, plus, point, positive, start
annoyed	7	22	0.08	annoyed, devil, get, pissed
clients	7	6	0.08	case, clients, customer, customers, regular
complete	8	37	0.08	close, complete, completely, end, fill, full, good, manoeuvre, realising, run, top, works
employee	8	3	0.08	employee, employees, jack
gap	3	10	0.08	conflict, delay, difference, gap, gaps, open, opener, split, vent
grow	4	33	0.08	advance, belly, carry, change, culture, develop, find, give, grow, progress, shoot, turn, turning
heavy	5	32	0.08	big, full, heavy, labour, part, role, weight, worrying
money	5	7	0.08	budget, load, loads, money, pile
normal	6	22	0.08	change, mean, normal, practice, regular, usually
partnership	11	6	0.08	business, partnership, relationship
previous	8	9	0.08	early, previous, previously
session	7	10	0.08	conference, meeting, session, sessions, sit, sitting
several	7	27	0.08	bad, critical, different, part, several, tell
shared	6	28	0.08	communicate, get, giving, offering, overlap, parcel, shared
step	4	21	0.08	course, manoeuvre, measured, move, put, run, set, step, stepping, support, track
sufficient	10	7	0.08	comfortable, enough, sufficient
type	4	25	0.08	case, face, identify, kind, nature, sort, type, writing

wasted	6	20	0.08	activity, apply, course, rubbish, run, shoot, stuff, use, wasted
address	7	30	0.07	address, apply, calling, come, communicate, delivery, directly, examine, home, point, talk, target, use
beginning	9	43	0.07	achieve, beginning, first, happening, head, home, issue, opener, part, point, start, talk
brainstorming	13	23	0.07	brainstorming, find, think, understanding
colleagues	10	2	0.07	colleagues
comment	7	16	0.07	annotation, comment, credit, knock, noticeable, pick, reflection, report, rubbish, talk
concentrated	12	24	0.07	change, concentrated, contracts, think, turn
course	6	27	0.07	course, education, line, nature, run, running, spin, split, teaching, track, way
delay	5	9	0.07	change, delay, delays, gap, stay, stayed
drive	5	40	0.07	control, drive, driving, face, force, guidance, labour, make, move, power, pressure, run, spin, steering, struggle, work
enough	6	7	0.07	enough, fill, sufficient
fine	4	6	0.07	close, fine, finely, small
high	4	11	0.07	degree, full, high, higher, level
human	5	13	0.07	business, change, field, group, human, methodology, playing, world
income	6	14	0.07	future, income, issue, next, take
kept	4	2	0.07	kept
late	4	6	0.07	late, later, lateral, new, previous, previously
leaving	7	49	0.07	get, give, leaving, let, part, run, start
load	4	15	0.07	fill, full, handling, headache, live, load, loads, pissed, put, set, smash, weight
mean	4	34	0.07	apply, awful, drive, get, idea, identify, mean, means, normal, number, thought
mind	4	23	0.07	care, conclusion, deal, decision, intelligence, listening, manage, mind, minded, thought, view
nature	6	27	0.07	borrowing, change, intelligent, nature, normal, practice, success, type, world
new	3	9	0.07	early, late, new
party	5	15	0.07	formal, labour, lot, organisation, party, set
pick	4	25	0.07	choose, conclusion, decision, force, knock, manoeuvre, move, output, pick, piece, pleasure, recognition, selected, take, way, willing
plus	4	34	0.07	advantage, good, help, lead, plus, positive, specialty, start
profession	10	21	0.07	business, education, job, lesson, line, politics, profession, professional, teaching
respond	7	23	0.07	allow, answer, clear, field, give, let, react, respond, stand, suffer, support, tell
stamped	7	24	0.07	sort, stamped, stumped', work
sudden	6	2	0.07	sudden, suddenly
weekly	6	3	0.07	weekly, weeks
withdrawal	10	24	0.07	close, conclusion, going, leaving, take, withdrawal
else	4	2	0.07	else
knew	4	2	0.07	knew
took	4	2	0.07	took
towards	7	2	0.07	towards
umm	3	2	0.07	umm
wbl	3	2	0.07	wbl
wrote	5	2	0.07	wrote
asked	5	20	0.06	address, asked, asking, challenge, communicate, demand, examine, order, tell, word
audit	5	10	0.06	audit, audited, examine, learn, run, take
bang	4	13	0.06	bang, big, close, hitting, kicking, knock, smash, success
believe	7	14	0.06	believe, credit, friend, look, probably, rely, trust
best	4	12	0.06	best, better, first, try
burns	5	30	0.06	burns, create, experience, feel, make, turn
corporate	9	3	0.06	belly, corporate, incorporated
credit	6	16	0.06	achievement, annotation, believe, credit, idea, line, recognition, rely, respects, trust
derived	7	18	0.06	beginning, create, derived, education, make, put, reason, word
enormously	10	5	0.06	big, enormously, grand
even	4	18	0.06	change, day, even, level, regular, straight

Word				Related
exactly	7	9	0.06	accuracy, demand, exactly, right
feedback	8	7	0.06	activity, answer, feedback, response
field	5	17	0.06	answer, business, choose, field, handling, parcel, playing, politics, respond, set, strategy, take
first	5	9	0.06	best, first, initially
flicking	8	12	0.06	flicking, force, move, show, snapped, take
friend	6	6	0.06	friend, friendly, friends, support
front	5	28	0.06	advance, area, face, field, front, head, let, line, side
genuine	7	17	0.06	genuine, good, honest, sincere
included	8	15	0.06	carry, cover, included, rest, see, view
independent	11	11	0.06	free, independent, individual, several
kind	4	22	0.06	address, good, kind, turn
labelled	8	18	0.06	address, clear, find, labelled, point, tell
maintaining	11	9	0.06	friend, keep, maintaining, sustainability
member	6	23	0.06	extremely, member, part, unit
moment	6	28	0.06	force, importance, moment, point, time
noticeable	10	11	0.06	asking, mind, noticeable, react, respond, strong, telling
parcel	6	17	0.06	assigned, cover, deal, deck, field, lot, parcel, sector, split
particular	10	7	0.06	careful, particular, particularly, specific
programme	9	17	0.06	bill, information, job, performance, programme, programmes, show, system
progress	8	14	0.06	active, adult, develop, forward, progress
reinforce	9	13	0.06	approving, learn, line, reinforce, spoke, stay, strong
rest	4	29	0.06	part, put, rest, set, sit, sleeping, stand, stay, stayed, support
size	4	17	0.06	length, number, regular, situation, size, small, sort
stuff	5	14	0.06	deal, fill, information, matrix, nonsense, paper, rubbish, size, stuff
training	8	14	0.06	breeds, conditions, control, education, exercise, learn, school, training
absolutely	10	5	0.05	absolutely, complete, control, totally
additional	10	3	0.05	additional, extra, plus
amended	7	10	0.05	amended, better, correctly, right
awake	5	7	0.05	awake, aware, turn
back	4	21	0.05	approving, back, cover, side, support
bill	4	11	0.05	advertising, asking, bill, measured, noticeable, posts, programme, saw
breeds	6	18	0.05	breeds, couple, cover, create, cross, make, pair, type
cross	5	33	0.05	corner, cover, cross, drive, meet, point, see, take, track
essentially	11	5	0.05	essentially, importance, necessary
eventually	10	4	0.05	eventually, finally, happening
external	8	9	0.05	change, external, internal, outside
eye	3	20	0.05	area, eye, look, see, thought, view
flexible	8	3	0.05	flexibility, flexible
floated	7	6	0.05	essay, examine, floated, launch, move, try
given	5	6	0.05	assumption, given, mind, minded
hairs	5	8	0.05	bang, hairs, pile, process
incorporated	12	8	0.05	incorporated, internal, learning
iterations	10	6	0.05	aspect, iterations, tell
limited	7	18	0.05	end, limited, number, small, specific, view
manufacturing	13	16	0.05	boring, business, create, culture, make, manufacturing, output, spin, turning
measured	8	27	0.05	activity, carry, measured, run, shoot, stand, step, time
mistakes	8	3	0.05	identify, mistakes, oversight
negotiation	11	5	0.05	activity, chancellor, flexible, negotiation
nice	4	18	0.05	good, nice, pleasant, politics
passion	7	5	0.05	feeling, passion, passionate

pastoral	8	5	0.05	pastoral, piece, rural, situation
pulling	7	30	0.05	advantage, bring, drive, force, get, pulling, side, take
quickly	7	6	0.05	active, area, intelligence, intelligent, quickly
reflection	10	23	0.05	comment, reflection, show, think
split	5	26	0.05	gap, lot, parcel, part, split
stay	4	18	0.05	fill, meet, order, stand, stay, stayed, stopped
stealing	8	18	0.05	advance, hiding, job, move, pick, rolling, stealing, take
still	5	12	0.05	change, comfort, even, still, works
strong	6	9	0.05	hard, noticeable, power, strong
teaching	8	17	0.05	activity, course, education, lesson, talk, teaching
university	10	7	0.05	nature, normal, university, world
walking	7	14	0.05	achievement, behave, calling, close, cover, cross, file, move, track, turn, walking
wearing	7	12	0.05	change, formal, hat, top, try, wearing
200	3	1	0.04	200
ago	3	1	0.04	ago
air	3	26	0.04	air, carry, issue, part, run, spin, tell, vent
along	5	1	0.04	along
already	7	1	0.04	already
angry	5	1	0.04	angry
anymore	7	1	0.04	anymore
anyway	6	1	0.04	anyway
approving	9	9	0.04	approving, clear, cover, credit, evaluate, kudos, recognition, support
argue	5	9	0.04	argue, challenge, conflict, difference
aspect	6	7	0.04	aspect, aspects, sector, side, view
assumption	10	5	0.04	assumption, assumptions, forward
awful	5	5	0.04	awful, bad, horrid, mean
becoming	8	21	0.04	amount, becoming, come, develop, grow, head, make, turn, turning
behaviours	10	2	0.04	activity, behaviours
bereft	6	1	0.04	bereft
bonds	5	1	0.04	bonds
bores	5	2	0.04	bores, boring
borrowing	9	25	0.04	borrowing, dealing, get, take
bring	5	33	0.04	bring, change, contribute, get, make
bugger	6	1	0.04	bugger
buoyed	6	3	0.04	buoyed, support
catalysts	9	1	0.04	catalysts
centuries	9	1	0.04	centuries
compared	8	4	0.04	compared, comparing, examine, relational
competition	11	14	0.04	competition, match, meet, open, run
compliant	9	1	0.04	compliant
concluded	9	16	0.04	clear, closing, concluded, end, finally
conclusion	10	15	0.04	assumption, conclusion, decision, finally, manoeuvre, mind, move, pick, recognition, step
conference	10	10	0.04	conference, giving, meeting, session, sitting, word
corner	6	34	0.04	area, control, corner, head, manoeuvre, part, piece, point, turn
creative	8	3	0.04	creative, hell, power
deadlines	9	8	0.04	deadlines, point
delta	5	1	0.04	delta
dilemma	7	1	0.04	dilemma
enhanced	8	4	0.04	better, enhanced
envelopes	9	4	0.04	close, cover, envelopes, hide

Word				
ethos	5	1	0.04	ethos
finder	6	1	0.04	finder
flouncing	9	1	0.04	flouncing
gone	4	1	0.04	gone
goodbye	7	1	0.04	goodbye
grand	5	6	0.04	big, grand, imposing, impressed
guess	5	33	0.04	give, guess, idea, make, put, set, tell, view, work
happy	5	6	0.04	feeling, happy, willing
idea	4	16	0.04	air, credit, guess, idea, line, mind, minded, thought, view
ineffectiveness	15	1	0.04	ineffectiveness
irrelevant	10	1	0.04	irrelevant
irrespective	12	1	0.04	irrespective
jeopardise	10	1	0.04	jeopardise
less	4	1	0.04	less
liaising	8	1	0.04	liaising
managerial	10	1	0.04	managerial
mortgages	9	1	0.04	mortgages
negative	8	8	0.04	amount, bad, negative, show
non	3	1	0.04	non
pathways	8	1	0.04	pathways
pile	4	6	0.04	money, pile, put, set
politics	8	12	0.04	activity, culture, nice, politics, profession, thought, view
prior	5	1	0.04	prior
profile	7	7	0.04	chart, life, profile
redacted	8	7	0.04	change, redacted, writing
saying	6	11	0.04	opportunity, saw, saying, show, stress, suppose
selfish	7	1	0.04	selfish
sensitivity	11	21	0.04	change, feeling, feelings, seeing, sensitivity, work
silly'	6	1	0.04	silly'
sincere	7	5	0.04	commitment, genuine, honest, sincere
sleeves	7	3	0.04	case, sleeves
soon	4	1	0.04	soon
stopped	7	21	0.04	close, conclusion, end, playing, rest, stand, stay, stopped
students	8	1	0.04	students
stumped'	8	22	0.04	clear, get, run, stumped'
stupid	6	1	0.04	stupid
surprised	9	6	0.04	change, move, surprised
system	6	17	0.04	group, line, order, organisation, plan, programme, system
tack	4	16	0.04	bit, line, tack, turn
therefore	9	1	0.04	therefore
though	6	1	0.04	though
throughout	10	1	0.04	throughout
top	3	36	0.04	complete, crop, face, head, make, part, side, top, turn
unbelievable	12	1	0.04	unbelievable
unnecessarily	13	1	0.04	unnecessarily
website	7	1	0.04	website
whatnot	7	1	0.04	whatnot
worth	5	6	0.04	importance, weight, worth
2015	4	1	0.04	2015
admin	5	1	0.04	admin

arose	5	1	0.04	arose
bossier	7	1	0.04	bossier
children	8	1	0.04	children
clearer	7	1	0.04	clearer
crm	3	1	0.04	crm
dealt	5	1	0.04	dealt
easier	6	1	0.04	easier
gantt	5	1	0.04	gantt
inhouse	7	1	0.04	inhouse
lampeter	8	1	0.04	lampeter
meant	5	1	0.04	meant
mmmebr	6	1	0.04	mmmebr
nicer	5	1	0.04	nicer
onto	4	1	0.04	onto
outpuits	8	1	0.04	outpuits
overlaid	8	1	0.04	overlaid
pmu	3	1	0.04	pmu
ral	3	1	0.04	ral
reis	4	1	0.04	reis
reprofile	9	1	0.04	reprofile
seen	4	1	0.04	seen
shown	5	1	0.04	shown
told	4	1	0.04	told
trickiest	9	1	0.04	trickiest
without	7	1	0.04	without
yourself'	9	1	0.04	yourself'
agreed	6	10	0.03	agreed, clear, fit, free, match, support
appreciate	10	12	0.03	appreciate, approving, culture, see, thanks, understanding
claims	6	8	0.03	claims, demand, right
correctly	9	5	0.03	carry, correctly, cover, therapy
essay	5	9	0.03	essay, paper, report, try, writing
exercise	8	13	0.03	apply, exercise, lesson, set, use
finally	7	17	0.03	close, closing, conclusion, end, finally, match
hide	4	7	0.03	change, hide, hiding, secrecy
imposing	8	9	0.03	bill, communicate, give, imposing, impressed, order
kicking	7	7	0.03	kicking, move, report
lecturer	8	9	0.03	knock, lecturer, talk, teaching
manoeuvre	9	11	0.03	drive, driving, manoeuvre, move, playing, putting, step
match	5	7	0.03	adult, competition, face, match
next	4	5	0.03	close, following, next
overloaded	10	5	0.03	fill, full, load, overloaded
pleasant	8	4	0.03	nice, pleasant, pleasure
posts	5	7	0.03	bill, delivery, move, posts, standard
regular	7	11	0.03	control, even, normal, organisation, regular, size, standard, system
resilience	10	3	0.03	live, resilience
sad	3	5	0.03	bad, feeling, sad, weight
school	6	9	0.03	education, high, school, teaching, training
sector	6	6	0.03	aspect, business, parcel, sector
sell	4	13	0.03	change, clear, close, deliver, move, sell
sit	3	10	0.03	move, put, rest, session, set, sit, sitting

smash	5	15	0.03 good, hitting, smash
specific	8	4	0.03 limited, particular, specific
standard	8	9	0.03 activity, control, evaluate, measured, normal, regular, standard
sustainability	14	10	0.03 carry, keep, support, sustainability
technical	9	10	0.03 detail, point, technical
totally	7	8	0.03 number, totally, unit, whole, works
track	5	16	0.03 course, create, following, make, track
validated	9	11	0.03 change, finding, force, support, validated
weight	6	9	0.03 heavy, importance, load, unit, weight
zone	4	20	0.03 order, part, zone
august	6	2	0.02 august, grand
contribute	10	4	0.02 amount, contribute, giving, offering
couple	6	6	0.02 couple, match, pair, unit
delivery	8	6	0.02 address, bring, delivery, stress
devil	5	14	0.02 change, devil, hell, make
efficacy	8	2	0.02 efficacy, telling
examine	7	3	0.02 audit, comparing, examine
fingers	7	12	0.02 fingers, point, show
internal	8	15	0.02 internal, work, world
later	5	4	0.02 later, lateral, side
materialise	11	2	0.02 activity, materialise
niggling	8	2	0.02 argue, niggling
pressure	8	24	0.02 change, force, head, pressure, set, work
probably	8	3	0.02 amount, probably, risk
saw	3	4	0.02 bill, saw, saying
shoot	5	4	0.02 grow, shoot, shooting, snapped
solution	8	5	0.02 set, solution, success
specialty	9	3	0.02 calling, plus, specialty
straight	8	7	0.02 even, right, straight
stuffing	8	3	0.02 full, stuffing
thanks	6	4	0.02 appreciate, help, thanks
view	4	9	0.02 guess, look, looking, side, view
worried	7	3	0.02 heavy, worried, worrying
advertising	11	3	0.01 advertising, bill, business
degree	6	4	0.01 degree, first, power
motivate	8	3	0.01 idea, motivate
pleasure	8	5	0.01 activity, comfort, feeling, pick, pleasure
selected	8	3	0.01 activity, selected, track
spin	4	4	0.01 drive, side, spin
stress	6	7	0.01 force, show, stress

Lessons learned for managing projects in a Higher Education environment:
organisational and individual experience

Martin Locock 0902171

Structure

Background

Aims and objectives

Methodology and ethics

Findings

Conclusions

Recommendations

Reflection

Background

- Projects in HE 1-5% revenue

- Conventional Project Management techniques - limited adoption

- Significant role of projects in UWTSD especially WIWBL (830 students, £3.3m)

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Aims and objectives

- Institutional experience of projects in HE
- How issues were identified and addressed
- Capturing lessons learned and reflection on lessons
- Academic managers' experience

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Methodology

- Subjectivist
- Interpretivist
- Mixed methodology (mainly qualitative semi-structured interviews, plus survey)
- Grounded Theory (coding of transcripts)
- Explicit hypotheses (null and alternative)

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Ethics and insider research

- Access to confidential and sensitive data
- Anonymisation
- Auto-ethnographical reflection

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Hypotheses

What approaches have been tried to capture lessons learned in the HE setting? Which approaches have worked best?

$H_0$1 Higher Education Institutions have not attempted to capture lessons learned
$H_1$1 Higher Education Institutions have attempted to capture lessons learned

How many of the challenges faced by projects in implementation had been identified in advance as part of the planning?

$H_0$2 Challenges had not been identified in advance of the project
$H_1$2 Challenges had been identified in advance of the project

How well have institutions absorbed lessons learned from projects?

$H_0$3 Institutions have not absorbed lessons learned
$H_1$3 Institutions have absorbed lessons learned

How have individual practitioners been affected by their experience of working on projects?

$H_0$4 Practitioners have not been affected by their experience
$H_1$4 Practitioners have been affected by their experience
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Evidence base: Interviews

Population

Sample

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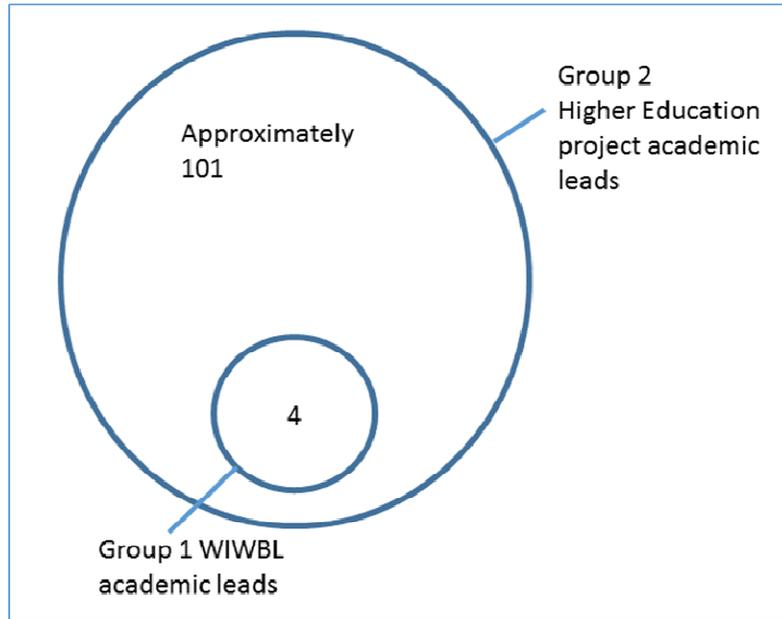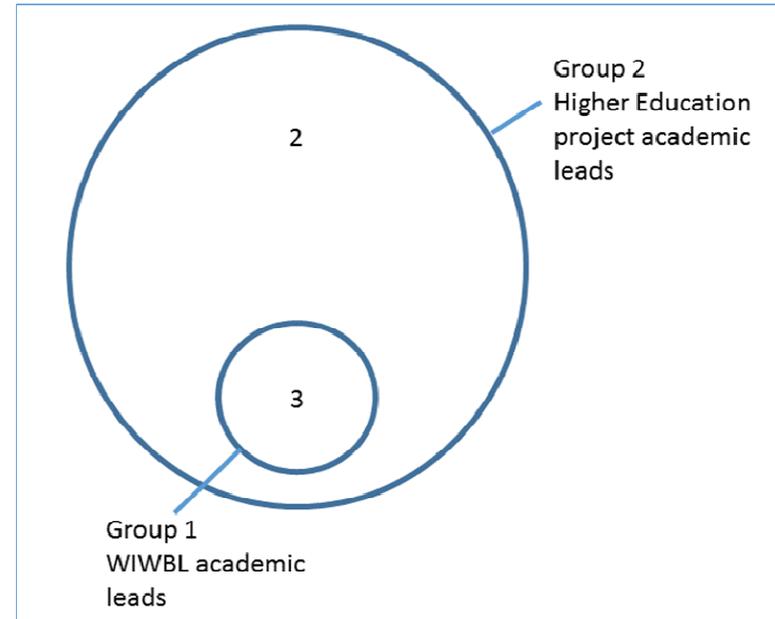
Evidence base: survey

- Questionnaire to WHEELOS (8 HEIs): 3 responses (10%)

- Publicly-available data on project management methodologies, oversight of projects, post-project reviews

- Complementary evidence from interviews

Findings

Theme	LATERAL 2010-2013	MoW 2010-2013	Elevate 2012-2015	SWSW 2013-2015
Staff recruitment timescale	▓	▓		
Academic processes	▓	▓	▓	
Financial processes	▓	▓	▓	▓
Funder requirements	▓	▓	▓	▓
Marketing and business engagement	▓	▓		▓
Student completion rate	▓	▓		
% students achieving results	29	36	70	71

- Lessons were learned and acted on

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Findings

	Survey	Interviews
Location of projects		
Central project office	2	
Embedded in faculties		1
Both	1	4
Project management methodology		
Full PRINCE2		
PRINCE2 governance		2
Agile PM		
MSP		
Own guidelines	1	2
No formal methodology	2	1
Post-project review (all that apply)		
Lessons learned report		3
Closure report		4
Post-project review	1	
No review	2	1
Lessons from past projects feed into new projects		
Strongly agree		
Agree	1	1
Neither agree nor disagree	2	3
Disagree		1
Strongly disagree		

Findings

- Project Management methodologies
  - Very limited adoption of PRINCE2
- Location of projects
  - Mainly embedded within academic depts
- Reporting/monitoring
  - No consistent practice, little organisational learning
- Project closure
  - Legacy issues

Known and unknown issues

- 'It always takes longer than you expect, even when you take into account Hofstadter's Law' (Hofstadter, 1999: 152)
- Unknown issues: merger, partnerships
- Targets
- Post-project review limited (individual learning not organisational learning)
- "The institution itself probably hasn't learned that it needs to monitor these projects, and have feedback on a regular basis" (Participant 4)

Impact on personal practice

- Learned a lot, haven't changed much
- "I don't think I've actually achieved the financial skills, but I'm much more aware of the need for them." (Participant 2)
- Limited reflection

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Biggest personal challenge

- "It was more the people management side" (P1)
- "You also had to sell [a project not meeting its targets] outside - put a positive spin on things" (P2)
- "The only way you're going to do that is through emotional intelligence and stepping back from your own emotions to have that conversation" (P3)
- "You then have the dilemma of being sworn to secrecy for one aspect, and the pastoral care of those that work for you." (P4)

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Grounded theory- emergent themes

Theme (node)	Definition	No. respondents (total=5)	No. references
Positive effect	References to positive emotions or benefits derived from project work	5	18
Dissonance	References to occasions with the need to conceal or manage the expression of one's true emotions when undertaking project work	5	16
Self-doubt	References to occasions of feelings of uncertainty or lack of self-confidence when undertaking project work	3	16
Emotion	References to occasions of emotional responses which arose in the course of project work	5	26

Emotional dissonance

- "Making sure we don't cross the line with each other, don't get too friendly, and at the same time you're trying to show them some empathy" (P1)

- "I'm not good at hiding my feelings. I can't." (P3)

- "The genuine reason is that you're worried that the project isn't being successful so you're rolling you sleeves up as well, but what you're telling your team could be something completely different."(P4)

- "They're leaders in their field, I've got to be careful not to go 'don't be silly'. (P5)

Self-doubt

- "You do worry, you know." (P1)

- "A big part of me is saying: really? Management? is that really for you?" (P3)

- "There are times when you just sit there and go 'why does it always end up with me?" (P5)

- Impostorship

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Discourse analysis

Image generated by NVivo

- Masking

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Hypotheses

What approaches have been tried to capture lessons learned in the HE setting? Which approaches have worked best?

$H_0 1$ **Higher Education Institutions have not attempted to capture lessons learned** but have learned

$H_1 1$ Higher Education Institutions have attempted to capture lessons learned

How many of the challenges faced by projects in implementation had been identified in advance as part of the planning?

$H_0 2$ Challenges had not been identified in advance of the project

$H_1 2$ **Challenges had been identified in advance of the project** but 'black swan' issues too

How well have institutions absorbed lessons learned from projects?

$H_0 3$ **Institutions have not absorbed lessons learned** (individuals have, adaptation during projects)

$H_1 3$ Institutions have absorbed lessons learned

How have individual practitioners been affected by their experience of working on projects?

$H_0 4$ **Practitioners have not been affected by their experience** but have learned

$H_1 4$ Practitioners have been affected by their experience

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Conclusions

- HEIs use inhouse processes not formal PM

- Missed opportunity for organisational learning from Post Project Review

- Lead Academics - Emotional Labour

- Lack of reflection

Recommendations to HEIs (1)

- Partnerships / contingency plans
- Impact of organisational change
- Reality Check of core assumptions 6 months in
- Research into demand – 'soft yes'
- Use past lessons in project planning
- Post-project review and organisational learning

Recommendations to HEIs (2)

- Staff selection: Emotional Intelligence, resilience
- Introduction to Project Management training for key staff
- Lessons learned: what should the HEI learn?
- Plan for project closure within project timescale

Recommendations to lead academics

- Review skills and aptitudes, EI and impostorship

- Recruit a mentor or buddy

- Actively seek personal lessons learned during and after projects

- Prioritise Emotional Labour

- Monitor team dynamics

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Further study

- Drill down into Emotional Labour
- Discourse analysis
- Comparison conventional/project management = one domain or two?
- Longitudinal study with baseline and impact

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Reflection

- Impact of 'black swan' events
- Specific elements of Emotional Labour
  - Dissonance
  - Transactional Analysis - Adult mode
  - Impostorship
- Reflection as part of the project cycle

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