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**Mapping the development of professional praxis of  
Higher Education work-based learners via a case-study  
approach**

**by**

**Kevin John Ions**

**Thesis submitted in partial fulfilment for the Degree of  
Doctorate in Education**

**School of Education**

**Durham University**

**May 2016**

# Mapping the development of professional praxis of Higher Education work-based learners via a case-study approach

By Kevin John Ions

## Abstract

This study explores ways in which sixteen mature learners develop their professional praxis through participation in a Higher Education work-based learning (HEWBL) programme. It examines the theoretical underpinnings of work based learning (WBL) emphasising the role reflection plays in developing learners' professional praxis. Outcomes indicate how learners' engagement can be mapped, suggesting a typology that may support future HEWBL developments.

UK-based HEWBL has expanded significantly since the 1980s in response to Government pressure, as a means of meeting demand for higher-level skills necessary to compete globally. Higher Education Institutions (HEIs) play a crucial role in providing effective workforce development opportunities through HEWBL, as these widen participation and develop and support employees becoming self-managing professionals and autonomous learners. Reflective learning is central to many HEWBL programmes aiming to develop professional praxis, yet its efficacy as a pedagogical strategy is contested. This thesis provides empirical evidence for praxis development through reflective learning, thus illuminating its effectiveness as a pedagogical strategy.

The study adopted a multiple-case study approach. The sixteen learners were primarily public sector employees aged over 25, engaged in professional roles. As such, participants were under-taking HEWBL voluntarily to promote their career prospects. Detailed accounts of learners' WBL experiences were obtained via analysis of semi-structured interviews, completed novel reflective learning templates and essays. The thesis reports that learners develop professional praxis in four learning domains, namely affective, lifelong, professional and organizational. The study established a method for mapping praxis across each domain, thus making each observable. Scoring "strength" of evidence for each domain generated maps that enable identification of two distinct learner groups: one comprises predominantly *lifelong* and the second predominantly *affective* learners. This finding implies HEWBL generates contrasting outcomes for learners, and, in turn, suggests that planning HEWBL may be improved by taking these into consideration.

## Table of Contents

List of Tables .....	6
List of illustrations.....	8
List of Abbreviations .....	9
Statement of Copyright .....	10
Acknowledgements.....	11
Chapter One: Introduction.....	12
1.1 Introduction to chapter.....	12
1.2 Background to the study .....	12
1.2.1 International .....	12
1.2.2 National .....	14
1.2.3 Institutional .....	16
1.2.4 Personal .....	17
1.3 What is Work-Based Learning?.....	18
1.4 Purpose of the study .....	22
1.5 An analysis of Roseberry University’s Work-Based Studies (WBS) programme.....	23
1.6 Thesis Structure .....	25
Chapter Two: Literature Review .....	27
2.1 Introduction.....	27
2.2 Theories underpinning Higher Education Work-Based Learning (HEWBL) .....	27
2.2.1 Andragogy.....	27
2.2.2 Learner-centred education .....	28
2.2.3 Critical pedagogy .....	30
2.2.4 Informal learning .....	32
2.2.5 Professional reasoning .....	33
2.2.6 Reflection-in-action and reflection-on-action .....	35
2.2.7 John Dewey’s theories of education.....	37
2.2.8 Experiential learning theory (ELT) .....	38
2.3 Reflective learning.....	40
2.3.1 A critique of reflective learning .....	40
2.3.2 Characterising reflective learning in underpinning HEWBL theories .....	42
2.3.3 Specific outcomes of reflective learning.....	43
2.4 Initial conceptual framework for the study .....	44
2.5 Chapter summary .....	48

<b>Chapter Three: Methodology.....</b>	<b>49</b>
3.1    Introduction.....	49
3.2    Research question and timeline .....	49
3.3    Research paradigm.....	51
3.4    Research design.....	52
3.4.1    Case-study approach .....	52
3.4.2    Data Collection Methods .....	54
3.5    Sampling strategy.....	58
3.6    Data collection process .....	61
3.6.1    Reflective essays.....	61
3.6.2    Completion of Praxis Representation (PRep) templates .....	61
3.6.3    Interviews .....	62
3.7    Ethical considerations .....	63
3.8    The pilot study.....	65
3.9    Data Analysis .....	74
3.10    Reliability .....	91
3.11    Validity.....	91
3.12    Chapter summary.....	93
<b>Chapter Four: Mini-Case Studies .....</b>	<b>94</b>
4.1    Introduction.....	94
4.2    Description of participants.....	94
4.3    Explanation of data .....	94
4.4    Participant data sets.....	98
4.4.1    Adam.....	98
4.4.2    Anna .....	106
4.4.3    Daniel.....	115
4.4.4    Edward.....	124
4.4.5    Eve.....	132
4.4.6    Gareth .....	143
4.4.7    Haley .....	152
4.4.8    Harriet.....	161
4.4.9    Harry .....	168
4.4.10    James .....	175
4.4.11    Karl .....	184
4.4.12    Olive .....	193
4.4.13    Phillip .....	200
4.4.14    Sarah .....	207

4.4.15	Simon .....	217
4.4.16	William .....	225
4.5	Learner groups .....	233
4.5.1	Predominantly affective learners .....	233
4.5.2	Predominantly lifelong learners .....	236
4.5.3	Distinguishing characteristics of affective and lifelong learners .....	240
4.6	Chapter conclusion .....	241
<b>Chapter Five: In-Depth Case Studies .....</b>		<b>242</b>
5.1	Introduction .....	242
5.2	Case selection .....	242
5.3	Case one: Eve, a predominantly affective learner .....	243
5.4	Case two: Daniel, a predominantly lifelong learner .....	252
5.5	Contrasting Eve and Daniel’s experiences .....	258
5.6	Chapter conclusion .....	258
<b>Chapter Six: Discussion .....</b>		<b>260</b>
6.1	Introduction .....	260
6.2	Developing professional praxis through HEWBL .....	260
6.2.1	Focussing on real-world problems .....	260
6.2.2	Emotional praxis .....	261
6.2.3	Emancipatory praxis .....	262
6.2.4	Variations in the extent of praxis development .....	264
6.2.5	Prioritising praxis .....	265
6.2.6	Professional and organisational praxis .....	266
6.2.7	Theory and praxis .....	267
6.3	Limitations of the study .....	268
6.4	Chapter conclusions .....	270
<b>Chapter Seven: Conclusion .....</b>		<b>271</b>
7.1	Introduction .....	271
7.2	Key findings .....	271
7.3	Implications for practice .....	273
7.4	Contribution .....	274
7.4.1	Theoretical contribution .....	274
7.4.2	Methodological contribution .....	275
7.5	Recommendations for future research .....	275
7.6	Reflection on personal development .....	276
7.7	Concluding remarks .....	278
<b>Appendix A – Redacted Extracts from Work-Based Studies Approval Document .....</b>		<b>280</b>

<b>Appendix B – Redacted Extracts from Learning Recognition and Development Module.....</b>	<b>288</b>
<b>Appendix C – Main Study PRep Templates .....</b>	<b>291</b>
<b>Appendix D – Main Study Interview Guide.....</b>	<b>299</b>
<b>Appendix E – Participant Information Sheet and Consent Form .....</b>	<b>302</b>
<b>Appendix F – Pilot Study PRep Templates .....</b>	<b>305</b>
<b>Appendix G – Pilot Study Group Session Instructions.....</b>	<b>313</b>
<b>Appendix H – Pilot Study Interview Guide.....</b>	<b>314</b>
<b>References.....</b>	<b>315</b>

## List of Tables

Table 1 Models of Work-Based Learning (Costley and Dikerdem, 2012, p. 12).....	21
Table 2 Praxis learning domains arising from extant literature .....	47
Table 3 Research project timeline .....	50
Table 4 Sample selection.....	60
Table 5 PRep template distribution and return schedule.....	61
Table 6 Description of pilot study participants .....	65
Table 7 Changes reported by pilot study participants mapped to praxis learning domains....	72
Table 8 New outcomes for inclusion in main study .....	74
Table 9 <i>a priori</i> themes (level 1) .....	77
Table 10 Initial coding template .....	78
Table 11 Changes to level 2 themes .....	80
Table 12 New level 3 sub-themes incorporated into coding template version 2 .....	82
Table 13 Coding template version 2 .....	83
Table 14 New level 3 sub-themes incorporated into template version 3 .....	84
Table 15 Template version 3 (final template) .....	85
Table 16 Description of level 3 themes .....	87
Table 17 Summary of praxis changes for a single theme (Eve) .....	88
Table 18 Eve’s Total numbers of praxis changes per learning domain .....	89
Table 19 Median numbers of praxis changes for each learning domain .....	90
Table 20 Participants’ backgrounds and work contexts .....	97
Table 21 Adam’s summary of praxis changes .....	103
Table 22 Total praxis changes (Adam).....	104
Table 23 Anna’s summary of praxis changes .....	112
Table 24 Anna’s total praxis changes .....	113
Table 25 Daniel’s summary of praxis changes.....	121
Table 26 Daniel’s total praxis changes .....	122
Table 27 Edward’s summary of praxis changes.....	129
Table 28 Edward’s total praxis changes .....	130
Table 29 Eve’s summary of praxis changes .....	140
Table 30 Eve’s total praxis changes .....	141
Table 31 Gareth’s summary of praxis changes.....	149
Table 32 Gareth’s total praxis changes.....	150
Table 33 Haley’s summary of praxis changes.....	158
Table 34 Haley’s total praxis changes.....	159

<b>Table 35 Harriet’s summary of praxis changes .....</b>	<b>165</b>
<b>Table 36 Harriet’s total praxis changes .....</b>	<b>166</b>
<b>Table 37 Harry’s summary of praxis changes .....</b>	<b>172</b>
<b>Table 38 Harry’s total praxis changes .....</b>	<b>173</b>
<b>Table 39 James’ summary of praxis changes.....</b>	<b>181</b>
<b>Table 40 James’ total praxis changes.....</b>	<b>182</b>
<b>Table 41 Karl’s summary of praxis changes.....</b>	<b>190</b>
<b>Table 42 Karl’s praxis changes .....</b>	<b>191</b>
<b>Table 43 Olive’s summary of praxis changes.....</b>	<b>197</b>
<b>Table 44 Olive’s total praxis changes.....</b>	<b>198</b>
<b>Table 45 Phillip’s summary of praxis changes .....</b>	<b>204</b>
<b>Table 46 Phillip’s total praxis changes.....</b>	<b>205</b>
<b>Table 47 Sarah’s summary of praxis changes .....</b>	<b>214</b>
<b>Table 48 Sarah’s total praxis changes.....</b>	<b>215</b>
<b>Table 49 Simon’s summary of praxis changes.....</b>	<b>222</b>
<b>Table 50 Simon’s total praxis changes.....</b>	<b>223</b>
<b>Table 51 William’s summary of praxis change .....</b>	<b>230</b>
<b>Table 52 William’s total praxis changes .....</b>	<b>231</b>
<b>Table 53 Summary of praxis changes for affective learners .....</b>	<b>234</b>
<b>Table 54 Summary of praxis changes for lifelong learners .....</b>	<b>238</b>

## List of illustrations

Figure 1 Kolb's (1984) Experiential Learning Cycle (p. 37) .....	39
Figure 2 Example praxis learning map.....	90
Figure 3 Adam's praxis map .....	105
Figure 4 Anna's praxis map .....	114
Figure 5 Daniel's praxis map .....	123
Figure 6 Edward's praxis map .....	131
Figure 7 Eve's praxis map .....	142
Figure 8 Gareth's praxis map .....	151
Figure 9 Haley's praxis map .....	160
Figure 10 Harriet's praxis map .....	167
Figure 11 Harry's praxis map .....	174
Figure 12 James praxis map .....	183
Figure 13 Karl's praxis map .....	192
Figure 14 Olives praxis map .....	199
Figure 15 Phillip's praxis map .....	206
Figure 16 Sarah's praxis map .....	216
Figure 17 Simon's praxis map .....	224
Figure 18 William's praxis map .....	232
Figure 19 Consolidated praxis maps for predominantly affective learners .....	235
Figure 20 Consolidated praxis maps for predominantly lifelong learners .....	239

## List of Abbreviations

APEL	Accreditation of Prior Experiential Learning
EU	European Union
ELT	Experiential Learning Theory
HAP	Higher Apprenticeship Programme
HE	Higher Education
HEFCE	Higher Education Funding Council for England
HEI	Higher Education Institution
HEWBL	Higher Education Work-Based Learning
LtW	Learning through Work
PCSO	Police community Support Officer
PRep	Praxis Representation
RU	Roseberry University
SDF	Strategic Development Fund
SWOT	Strengths Weaknesses Opportunities Threats
US	United States
UALL	Universities Association for Lifelong Learning
Ufi	University for Industry
UK	United Kingdom
WBL	Work-Based Learning
WBS	Work-Based Studies

## Statement of Copyright

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## **Chapter One: Introduction**

### **1.1 Introduction to chapter**

This chapter provides an overview of the study, beginning with a background to the study from an international, national, institutional and personal perspective. Definitions of Work-Based Learning (WBL) and the diversity of Higher Education Work-Based Learning (HEWBL) provision is then discussed. The purpose of the study and the specific research question is then stated and a clear rationale for the study is given. To provide further context for the study, an analysis of the HEWBL programme from which the research participants are drawn is provided. Finally, an outline of the structure of the thesis is presented.

### **1.2 Background to the study**

#### **1.2.1 International**

Internationally HEWBL has emerged as a growing part of Higher Education (HE) provision (Costley and Dikerdem, 2012). However, whilst it has become well-established in some countries it is an emerging concept in others (Devins, 2013). There are differences in the degree of state intervention through policy initiatives that have influenced the development of HEWBL (Brennan et al., 2006). Two main models of vocational training have shaped HEWBL internationally – free market and corporatist (Ashton, 2004). In the free market model, WBL is the responsibility of employers and individuals with the role of the state limited to providing a legal framework that enables market forces to operate relatively freely, whilst in the corporatist model, developments are agreed by the state, unions and employers (Ashton, 2004).

In many European countries corporatist models have a strong tradition and consequently HEWBL from undergraduate to doctoral levels has long been a priority that has benefited from substantial European Union (EU) funding (Brennan et al., 2006). France, Germany and the Netherlands all operate centrally-regulated models which requires close co-operation between government, employers and the unions to fund and develop provision (Brennan et al., 2006). Free market models dominate in countries such as the United States (US) (Ashton, 2004) and Canada (Brennan et al., 2006). However, whilst the US has promoted HEWBL via a number of different professional institutions it is still perceived by many of its universities as less valuable than the traditional paradigm of HE learning - structured, context-independent and focused

almost exclusively on cognitive development (Raelin, 2011). The lack of focus on developing practice-based knowledge and skills has led to frustration amongst many who argue that students are poorly prepared to become successful in their chosen profession. Canada also operates a free market model characterised by a decentralised regulatory system, minimal legislation and a negligible role for the federal government (Brennan et al., 2006). As in the US, HEWBL in Canada is poorly regarded by some. For example, parents and educators have a clear preference for traditional, academic education over vocational education which they perceive as inferior (Brennan et al., 2006).

Irrespective of the differences in its implementation between different countries, HEWBL has emerged from the notion of independent study focusing on students developing an understanding of, and improving their own professional practice (Gibbs and Garnett, 2007). Boud and Garrick (1999) argue that it is a truly pioneering attempt at finding answers to the contemporary economic, social and educational challenges of our time. One of the main drivers of the expansion of HEWBL is globalisation (Boud and Garrick, 1999). Globalisation, facilitated by advanced information and communications technologies is an ongoing process by which the world is becoming ever more interconnected (Boud and Garrick, 1999). Globalisation has resulted in the increased production of services and goods and the growing influence of multinational companies that have the power to change global policy and regulation (Casey, 1999). It has resulted in constant technological, economical and organisational change making continuous learning an essential component of countries economic success (Schmidt and Gibbs, 2009). In countries with sophisticated economies the increasing complexity of many work-roles means that people must continuously learn new practice-based knowledge and skills that can be applied in diverse contexts rather than rely on the skills and knowledge they bring with them (Boud and Garrick, 1999). The increasing reliance on teams of knowledge workers who can work across geographically dispersed locations and navigate complex challenges means that there is an increased focus on developing HE programmes that cultivate interpersonal, team-working and entrepreneurial skills and knowledge (Casey, 1999). The aspiration for a continuous process of learning as an answer to the challenges of globalisation has gained wide acceptance in business, education and politics (Boud and Garrick, 1999).

Rapid digitalisation has led to the development of knowledge-based, information economies internationally which has changed the nature of work (Devins, 2013). Furthermore, digitilisation has contributed to an expansion of HEWBL over the last two decades because it is perceived as a means of helping employees to develop the new skills and knowledge required to enable countries to compete in a global economy (Devins, 2013). Digital technologies have

become fundamental to teaching and learning in HE with regards to sharing information and the preparation of students to thrive in global markets (University of Oxford, 2015). One of the most significant aspects of changes to HE has been the emerging popularity of Massive Open Online Courses (MOOCs) internationally (University of Oxford, 2015). MOOCs are perceived as an effective means of widening participation in HE globally with the emergence of collaborative international partnerships helping to drive the expansion of such courses (University of Oxford, 2015). Social media which has become embedded in many societies has also played a significant part in the development of HEWBL programmes (Price, 2016). Price (2016) argues that the use of social media should be a major consideration when designing HEWBL programmes because it can facilitate diverse pedagogical approaches that enhance flexibility, teaching and learning.

### **1.2.2 National**

HEWBL has expanded significantly since the 1980s in the United Kingdom (UK) in response to pressure from successive Governments (Lester and Costley, 2010). In the 1980s a main driver for HEWBL was the perceived need to widen access to HE to mature participants to maintain a supply of sufficient numbers of students during a period in which fewer 18 year olds sought entry to HE (Nikolou-Walker and Garnett, 2004).

Accreditation of Prior Experiential Learning (APEL), a WBL innovation developed during the 1980s to extend access to HE, helped WBL gain credibility in the HE sector (Nikolou-Walker and Garnett, 2004). APEL allows learners to gain credit towards a formal qualification for previous experiential learning gained through work provided they demonstrate the learning undertaken maps onto university accredited modules (Brennan, 2005). Experiential learning can be recognised through reflection on work-experiences to identify and articulate HE level learning (Brennan, 2005). Learners gaining credit for prior learning through APEL processes save time by avoiding repetition of learning already undertaken. Therefore APEL offers non-traditional students' academic progression and access to HE (Newton, 1994). The introduction of modularisation of programmes of study and credit accumulation and transfer systems (Brennan and Little, 1996) were also innovations which enabled HE expansion during the 1980s. Credit-based programme structures allowed Higher Education Institutions (HEIs) to credit-rate companies' "in-house" WBL programmes and those offered by professional institutions, allowing access to HE level study to off-campus learners (Brennan and Little, 1996).

During the 1990s successive Governments emphasised the significance of APEL and credit-based programme structures as a means of expanding HE through policy and funding initiatives (Nikolou-Walker and Garnett, 2004). In 1997 New Labour vigorously pursued widening participation in HE. Dearing's (1997) report into the future of HE in the UK encouraged HEIs to offer part-time, WBL programmes to enable adult learners to benefit from HE. In 2000 a University for Industry (Ufi) was established via a Government policy to deliver learning into the workplace. An initiative arising from Ufi was a framework called "Learning through Work" (LtW), which was successful in enabling learners to negotiate WBL programmes based on professional development needs to gain HE level qualifications (Lester, 2015). The Department for Education and Skills (2003) highlighted development of strategies to support progression of Further Education vocational learners to HE through WBL routes. A further initiative introduced by Government included incentivising partnerships between employers and HEIs through the Higher Education Funding Council for England (HEFCE) Strategic Development Fund (SDF) to deliver co-funded HEWBL programmes. This incentive was designed to meet HEFCE's (2009) aim of transforming HE by enabling partnerships between universities and employers to be established to meet employers' higher skills needs.

Since 2010 successive Governments have maintained commitment to HEWBL through expansion of Higher Apprenticeships Programmes (HAPs). A Government commissioned review of apprenticeships (Richard, 2012) recommended investment in HAPs to enable suitable HE pathways for people in highly skilled professional roles. The University Vocational Awards Council (2015) set out a strong case for HEI involvement in working with employers to implement and deliver new HAP standards funded as a consequence of Richard's (2012) recommendations. The vision for HAPs up to 2020 includes commitment to expansion through direct funding from Government and through an employers' levy of 0.5% of larger employers' payroll costs (Department for Business Innovation and Skills, 2015).

Thus, successive Governments have invested heavily in expansion of HEWBL programmes since the 1980s maintaining ongoing support primarily through HAPs until at least 2020. This may be important for enabling future global competitiveness of the UK economy for a number of reasons. Work-based degrees are perceived as a means of helping to meet workforce skills gaps and responding to changing employment patterns (Smith and Scott, 2011). A shift from an industrial to a knowledge-based society has resulted in increasing demand for 'higher-level', self-managing workers who are also self-directed learners (Lester and Costley, 2010). However, over 70% of the 2020 workforce has already completed their compulsory education therefore there will be shortage of workers with the higher level skills and knowledge to ensure the UK

remains competitive (Leitch, 2006). Therefore efforts that develop such skills amongst the existing workforce by providing part-time and flexible work-based provision (Lester and Costley, 2010) are required. HEWBL is also regarded as an effective means of enhancing organisational performance and hence improving economic growth and wealth (Harvey, 2007; Smith, Poppitt and Scott, 2013). In addition to economic needs, the UK Government believes that widening participation in HE leads to greater social mobility and impacts positively on social cohesion by producing graduates involved with their local communities (Department for Business Innovation and Skills, 2014). Evidence suggests a crucial role for HEIs in providing effective workforce development opportunities which widen participation, simultaneously developing and supporting employees becoming self-managing professionals and autonomous learners. Although HEWBL is not embraced by all universities, it is now firmly established in the UK, is popular with students and for some HEIs contributes to their distinctive qualities (Lester, 2015). For example, Teesside University along with Middlesex University, University of Chester, Lancaster University and the University of Derby have pioneered HEWBL during the past two decades offering both undergraduate and postgraduate levels of study (Helyer, 2015c). However, even universities that have embraced HEWBL have had difficulty in designing, resourcing and delivering such complex programmes (Smith et al., 2013).

### **1.2.3 Institutional**

Roseberry University (RU) is a former polytechnic which was granted a charter to become a post-1992 University under the Further and Higher Education Act 1992. In response to Dearing's (1997) report into the future of HE in the UK, RU developed a Work-Based Studies (WBS) programme as part of an initiative focusing on widening participation. The programme recognises the workplace as a location for higher-level learning, offers opportunities for flexible, student-centred study and provides learners with opportunities to claim award-bearing credits for prior experiential learning. The WBS programme allows learners to study core programme modules on-campus, subject-based modules relating to professional and organisational development and work-based project modules focussed on innovating in the workplace (see Appendix A). Thus, the programme is a hybrid combining a variety of module types within a degree. Freire's (1996) definition of praxis "reflection and action upon the world in order to transform it" (p 145) is a central pillar underpinning the WBS programme. WBS students develop professional praxis by critically reflecting on commonly accepted beliefs and perspectives to gain deep and meaningful learning which will facilitate transformative practical action. Many HEWBL programmes use reflective learning as a central pedagogic strategy for personal and professional development (Helyer, 2015c).

The Skills Funding Agency fund HAPs in the UK (Skills Funding Agency, 2016). As a lead provider of HAPs, RU have secured over £500k of funding for enrolments during 2015/16 and can apply for additional future funding. Currently the University is determining how current awards can be used and/or redesigned to deliver HAPs. As the WBS programme is a leading University HEWBL programme, experiences gained from developing this are integral to discussions about design and delivery of HAPs. Consequently, reflective learning is a major pedagogic strategy to develop personal, professional and organisational knowledge and skills to meet the new apprenticeship standards. However, whilst reflective learning is central to many HEWBL programmes such as WBS and HAPs, its efficacy as a pedagogical strategy is contested. Reflective learning is not universally accepted as an effective way of challenging and enhancing professional and organisational practices. Thus a lack of consensus about the nature reflective learning exists. Investigating how to apply reflective learning is therefore valuable research within the WBL domain (Costley and Dikerdem, 2012).

#### **1.2.4 Personal**

As a senior lecturer in WBL, a programme leader for the WBS Programme and a member of RUs HAP development team I have strong professional interest in HEWBL pedagogies. As reflective learning is central to HEWBL I am interested in investigating impact on learners' professional praxis. My interest lies in the *process* of reflective learning and *outcomes* for learners and the organisations in which they learn and work. I have discovered through my own experiences of teaching professionals engaged in HEWBL that modern working environments experiencing rapid pace of change, in a world in which career changes are frequent, reflective learning offers a process for helping professionals to learn continuously to cope with change, and innovate. Reflective learning provides professionals with opportunities to contribute constructively to the vigour and health of their employing organisations, simultaneously keeping their own skills and knowledge up-dated. The process helps participants understand and capitalise on interrelationships between working, learning and innovating and acts as an effective tool for creating, capturing and transferring knowledge to enable more effectively working. However, I have discovered important issues relate to the development of professional praxis through a reflective learning approach that I intend to explore.

Firstly, I became aware through reading students' writing about their reflective learning that outcomes vary for different learners. These differences relate to learners' emotional, career, professional development and/or the extent to which individuals innovate. Employers sponsoring work-based learners to undertake HEWBL programmes often want to know about

the 'impact' HEWBL programmes have on employees and their organisations to justify sponsorship in terms of return on investment. Appropriate evidence, however, is difficult to provide. This research project has offered an opportunity to investigate why differences in outcomes occur, the extent of these, and implications for planning HEWBL programmes.

Secondly, I have become cognisant of emotional dissonance occurring when delivering reflective learning workshops. During workshops learners often discuss emotive issues which trigger unanticipated emotional responses. These emotional responses are often uncomfortable for tutors and learners. Hence, learners need to be facilitated appropriately through the reflective learning process. Therefore I decided that investigating the role emotion plays in development of professional praxis through a reflective learning approach would be worthwhile.

Finally, many students enrolled on HEWBL programmes are employed in roles exerting considerable power over others, such as police officers, armed forces officers, managers and supervisors. However, praxis is rooted in notions of personal freedom and justice (Freire, 1982). Thus, there is a tension between justice and power in developing HEWBL professional praxis that could be usefully explored. A first step in addressing these personal concerns is making development of professional praxis explicit, enabling determination of differences in outcomes and examination of processes that lead to variation.

### **1.3 What is Work-Based Learning?**

Devins (2013) suggests that WBL is an ill-defined concept which encompasses related terms often used interchangeably. For example, Helyer (2015b) defines WBL as "what is 'learned' by working – not reading about work, or observing work but actually undertaking work activities" (p. 2). This is indistinguishable from Unwin and Fuller's (2003) 'workplace learning' which they claim is an all embracing term including all learning derived from undertaking a wide range of workplace activities. Boud and Symes (2000) distinguish between workplace learning and WBL on the grounds that only WBL leads to formally recognised qualifications. Helyer (2015b) however, suggests WBL may or may not be formally assessed and accredited. The terms "WBL" and "flexible learning" are used interchangeably by Government agencies (Roodhouse, 2010). Costley (2001) sees these terms as separate, but part of a group of related concepts that also includes 'lifelong learning' and 'employability'. However, what is clear is that HEWBL requires a combination of both theory *and* practice to generate new knowledge that can applied to

specific work based contexts (Helyer, 2015c). This emphasis on learning through work illustrates WBL's *experiential* nature.

The expansion of HEWBL programmes led to the emergence of models to suit different contexts. Kettle (2013) suggests there are two HEWBL models – Model 1 recognises the learner as employee and the employee as learner. In Model 2 the learner is an HE student in preparation for work. Model 1 involves three parties, namely the learner/employee, University and employer. The degree of employer involvement varies from case to case. At one extreme, the employer drives the relationship because the purpose of the programme is workforce development. Conversely, an alternative places the learner in control because s/he is studying to meet personal and professional development goals. Model 2 involves the same three parties but the driver of the programme is the University because its purpose is to help full-time HE students to develop employability/graduate skills through a work-based placement or project. Brennan (2005) distinguishes between three types of HEWBL programmes – employability programmes focussing on preparing undergraduates for work; skills development programmes focussing on the development of specific work-role skills and competencies; knowledge recognition workplace programmes that relate to workforce development. Major (2002) suggests that HEWBL programmes are accredited HE learning programmes that can include undergraduate placements, sandwich degree courses and distance learning programmes. Nottingham (2011) differentiates between discipline centred, learner-centred and employer-centred programmes. Discipline centred programmes are aligned to a disciplinary area such as health, engineering or education; learner centred programmes are transdisciplinary, focussed on improving learners professional practice through reflective learning and based on generic learning outcomes; employer centred-programmes combine disciplinary knowledge with business oriented approaches and are focussed on workforce development. The Learning and Skills Council (2007) focus on demand-led approaches to HEWBL which involve employers in the design, delivery and assessment of courses to meet organizational needs. Brennan et al. (2006) propose four types of HEWBL programme: Type A (workplace learning module or work placement); Type B (alternative sequence of taught modules and short periods of practice in relevant occupational settings; Type C (some integration of taught modules with activities in real settings) and Type D (employment-based programme, negotiated between HE, employers and learner with focus on learner's work-role).

Universities as providers of HEWBL programmes have addressed the pressure for the expansion of such programmes in different ways. Smith and Scott (2011) contrast HEWBL programmes delivered at three post-1992 universities – Northern University, Central University and

Southern University. Northern University developed a negotiated learning framework for supervisors and middle-managers who have significant work experience but no traditional qualifications to enable them to plan their own undergraduate or postgraduate degree programme by combining modules from throughout the university with in-company training. Central University offer undergraduate and postgraduate programmes that are negotiated between employers and the university with content based on learners' personal and professional development plans. Southern university provide a fast-track, tailored, master's degree for junior and middle-managers who have either five years relevant experience or a first degree; a tripartite learning contract is agreed between employer, university and employee showing how the learning outcomes will be achieved through work-based assessments. Smith, Poppitt and Scott (2013) describe a Foundation Degree programme offered by a Northern university and developed in partnership with the Chamber of Commerce and local employers. This programme is controlled by the university but allows learners to apply theories through structured workshop activities and assessments to test and enhance their practice based knowledge. Edwards (2014) describes the way in which a Professional Development module offered to full-time students at the University of Birmingham operates. The module includes a compulsory work placement in a charity, or an organisation in the public or private sector and requires learners to engage in critical-self-reflection to help them to develop their employability skills. These examples illustrate the diversity of HEWBL programme provision.

Costley and Dikerdem (2012) based on a study of UK universities offering different types of HEWBL programmes provide a useful categorisation of HEWBL programmes (Table 1). This, together with Kettle's (2013) typology illustrates that most HEWBL provision involves partnership between employers, universities and learners. However, relative roles and power differentials between partners differ significantly depending on the purpose of programmes.

<b>Models</b>	<b>Typical attributes</b>
Work based studies degree (for individuals)	Content negotiated by learner, part-time degree programme, full-time employment
Degree in cohorts	Content designed with contribution of employer, part-time degree programme, full-time employment
Foundation degree programmes	Content designed by HE in relation to employer, full-time or part-time degree programme
Sandwich year programmes	Content designed with employer, 1 year full-time work experience as a part of a degree programme
In-house training (e.g. National Vocational Qualifications)	Short courses to contribute job roles during employment
Conventional degree programme to support work role (e.g. Master of Business Administration)	Content designed by HE, part-time or evening degree programme, full-time employment
Work placement within a programme of study to integrate aspects of professional life to learning and teaching experience	Specific outcomes to be delivered for the programme of study

**Table 1 Models of Work-Based Learning (Costley and Dikerdem, 2012, p. 12)**

In addition to location of study and employer involvement, HEWBL programmes can be differentiated from traditional HE programmes by the types of knowledge acquired and applied by learners. Gibbons et al. (1994) distinguish between two types of knowledge: Mode 1 knowledge is discipline-specific, theoretical knowledge acquired within universities; Mode 2 knowledge is transdisciplinary knowledge arising from context-specific, real world problems and produced outside universities. HEWBL programmes focus predominantly on Mode 2 knowledge on the premise that learning takes place outside universities, in workplaces and that new, contextualised forms of knowledge are created through work (Walsh and Kotzee, 2010). Work-based learners may draw upon disciplinary knowledge, but their primary source of learning is work (Boud and Garrick, 1999). Work-based learners therefore, focus on developing understandings of themselves as practitioners, combining theory and practice to generate and apply new context specific-knowledge in the workplace. Work-based learners “see themselves as expert practitioners rather than novice academics” (Walsh, 2008, p. 15). Such learners are labelled by Solomon (2005) as ‘learner-workers’; learners who are a hybrid between being a learner and a worker, who relate formal learning to current or future workplace practices. HEWBL programmes derive curriculum from the workplace rather than academic disciplines,

incorporating learning processes that utilise work experiences to produce knowledge (Reeve and Gallacher, 2005).

The previous discussion suggests HEWBL is a new learning paradigm within which the role of universities is not to deliver factual, discipline-based knowledge but to engage learners in new ways of learning and developing knowledge from, and for the workplace. Portwood (2000) argues that HEWBL is an emerging and distinctive field of study that is re-drawing theories of knowledge generally accepted by universities. The focus of learning in HEWBL is the organisational environment in which learner-workers engage in critically questioning accepted practices and investigating and implementing alternatives (Portwood, 2000). The distinctiveness of HEWBL programmes arises from their utilisation of universities knowledge in situated-learning contexts (Nikolou-Walker and Garnett, 2004). Universities are challenged by HEWBL because it advocates non-traditional approaches (Smith and Scott, 2011). Orthodox notions of HE are being contested by widening the range of stakeholders involved in HEWBL programmes (Nikolou-Walker and Garnett, 2004), by allowing learners to choose the content of learning programmes (Harvey, 2007) and by recognising the importance to learner-workers of multi-disciplinary knowledge (Portwood, 2000). Furthermore, the mainstream view that academic knowledge is superior to experiential-based learning is challenged by the design of HEWBL programmes that value, accredit and facilitate learners' experiential learning (Harvey, 2007).

To understand how learners may engage in HEWBL as a new paradigm of learning requires examination of theories and models underpinning HEWBL. No single theory underpins HEWBL programmes, but a range of learning theories and models relating to experiential learning, professional learning and adult learning (Boud, 1989; Hager, 1999) influence them. Critical examination of these theories and models illuminate ways in which professional learners develop professional praxis through inquiry based learning and reflective learning.

#### **1.4 Purpose of the study**

The purpose of this study is to find out how professional praxis develops through a reflective learning approach, thus illuminating its effectiveness as a pedagogical strategy. The study explores the impact reflective learning has on learners' professional development and on the organisations in which they learn and work within the specific context of professional praxis development. This necessitates examining the roles that theory, emotion and ethics play in

development of professional praxis through reflective learning. Findings will be set within the wider context of HEWBL and underpinning pedagogical theories and practices.

The specific research question this study seeks to address is:

***In what ways do Higher Education work-based learners develop their praxis?***

Discussions in 1.2 suggest answering this question is valuable from international, national, institutional and personal perspectives. Internationally, HEWBL is emerging as an important component of the HE landscape. Nationally, continuing investment in HEWBL is a means of helping to meet higher-level skills needs necessary for the UK to compete globally. Institutionally, HEWBL is one of RUs distinctive offers; as a lead provider of HAPs there is continued interest in exploring and developing effective HEWBL reflective learning pedagogies. Personally, as an academic engaged in designing, leading and delivering HEWBL programmes I intend to explore why praxis develops in various ways for different learners; in the role (if any) emotion plays in this variation and the extent to which professionals in positions of power develop ethical professional praxis.

This small scale study attempts to provide empirical evidence to inform design and delivery of HEWBL programmes aiming to develop professional praxis through reflective learning pedagogies. Chapter Two discusses some of the extant research that has explored the process and outcomes of reflective learning. However, little research focusses on the impact of reflective learning on HE Work-Based Learners in the context of developing professional praxis. This small scale study helps to fill this gap.

**1.5 An analysis of Roseberry University's Work-Based Studies (WBS) programme**

Research participants for this study were drawn from RUs WBS programme. The analysis of the WBS programme provided in this section needs to be read with reference to the discussion of theories underpinning HEWBL presented in section 2.2.

Students enrolled on RU's WBS programme are part-time, employees engaged in professional roles (e.g. police officers, managers, teachers, health care professionals). Early on in their programme as stated in the programme approval document (see Appendix A) students submit a learning agreement based on an audit of prior learning and an analysis of their professional development needs. The learning agreement is a plan showing how learners will achieve their degree, including, for example credits claimed through APEL, optional modules and timescales

for completion. The agreement is negotiated and agreed between individual learners and RU. HEWBL models identified by Costley and Dikerdem (2012) in Table 1 (p. 21) show the WBS programme matches a part-time, negotiated work-based studies degree aimed at individuals (not organisations) in employment. The programme combines campus-and work-based learning. Its underlying rationale is based on partnership between learners, employers and the university. All WBS students undertake work-based projects which meet their professional development needs and those of their organisation, but employer sponsorship is not a pre-requisite for enrolment. Hence, the degree of employer involvement varies.

The programme's underpinning philosophy is rooted in critical pedagogy. For example, the programme approval document refers to "praxis" three times. One example of this (see Appendix A, (p. 284) is:

The WBS student develops and enhances their ability to effectively combine theoretical ideas and practical action into higher learning praxis. Accepted perspectives and beliefs can be critiqued, commonly held paradigms challenged and deep, meaningful learning achieved. The programme will enable students to engage with the needs of the workplace, enhance their own praxis and meet HE requirements through reflexive dialogue and critical analysis.

The main attributes of critical pedagogy can be identified within the programme. Firstly, in line with Leistyna, Lavandez and Nelson (2004) and Freire (1995) theory is critical to action in praxis as there is focus on action and theory as mutually dependent constructs. The WBS programme promotes theory informing practice and practice informing theory, recognising that new context-specific knowledge can be generated from theory and practice interaction. Secondly, the ethical dimension of praxis is apparent. Praxis challenges accepted orthodoxy to enable transformative, emancipatory change through dialogue and self-reflection (Freire, 1996). This is clear within the programme design as the WBS programme promotes dialogue as a means of enhancing praxis, and critiquing and challenging deeply held beliefs and perspectives to enable change and innovation. Any practice-based innovations developed through the programme must be ethically grounded.

The programme philosophy is influenced by andragogic and learner-centred models of adult learning. To meet individual professional development needs learners plan, negotiate and follow individualised degree routes, and, through flexible, workplace modules identify, construct and pursue units of independent study and carry out inquiry-led work-based projects.

This implies learners are intrinsically motivated, self-directed and engage in learning to solve work-related problems they identified – attributes of adult learners proposed by Knowles (1984). The programme recognises and values learners’ distinct personal experiences and promotes personal as well as professional growth. Recognition of learners’ needs and wants and promotion of affective learning to change attitudes and behaviours is aligned to Rogers and Freiberg (1994) learner-centred model of adult education. Marsick and Watkins’s (1990) notion of informal learning is acknowledged within the programme design. For example, WBS students may have achieved significant higher-level, informal learning through life and work experiences, which the programme is designed to recognise and credits through APEL processes.

The RU WBS programme is rooted in an experiential learning approach. The programme emphasises learning derived from, and for professional practice, drawing on theories of knowledge and learning, particularly, critical reflection to facilitate the analysis and assessment of reflective practice in support of new learning for personal and organisational development. To enable learners to develop reflective learning skills, the first module is “Learning Recognition and Development”. This module provides learners with a personal perspective on their learning; providing knowledge, learning and experience required for ongoing development as autonomous learners (see Appendix B). The module equips learners to become reflective practitioners by exposing students to theoretical models relating to reflective learning, including many of those discussed in section 2.2 (p. 27) No single theory or model is prescribed. In keeping with the critical pedagogical approach underpinning programme design, students are expected to critique theory, use it to inform their practice, and generate new theory from their practice. Furthermore, the module labels learners on the programme as ‘learner-workers’ consistent with Solomon’s (2005) view of HE work-based learners as a hybrid between learner and worker.

## **1.6 Thesis Structure**

This thesis comprises seven chapters. This chapter (Chapter One) discusses the background and purpose of the study. Chapter Two explores theories underpinning HEWBL, specifically those emphasising reflective learning in professional and organisational development. Chapter Three presents a detailed explanation of the research methodology employed. This includes an outline of the underpinning research paradigm and provides a discussion of, and a rationale for data collection and analysis methods. Chapter Four presents mini-case studies to illustrate the development of praxis of sixteen HE Work-Based Learners. Chapter Five provides in-depth

accounts of two cases illustrating how learners develop their praxis predominantly in one professional praxis learning domain. Chapter Six discusses research findings and their significance in relation to the research question and purpose of the study, drawing on theories underpinning HEWBL and Chapter Seven discusses how the research contributes to the body of knowledge in the area of HEWBL and outlines implications for practice and recommendations for further research.

## **Chapter Two: Literature Review**

### **2.1 Introduction**

This study is concerned with ways in which mature learners develop their professional praxis through participation in HEWBL programmes. Reflective learning is central to many theories underpinning HEWBL. This chapter critically examines theoretical underpinnings of HEWBL emphasising the role reflection plays in developing learners' professional praxis. Reflective learning as a 'contested' pedagogical strategy is critiqued to establish understanding of contexts in which it is applied and identify concerns over its use. The purpose that reflective learning plays in each underpinning model along with the empirical research into the outcomes of reflective learning is examined to determine praxis learning domains. The chapter concludes by establishing a conceptual framework based on these domains of learning.

### **2.2 Theories underpinning Higher Education Work-Based Learning (HEWBL)**

#### **2.2.1 Andragogy**

Andragogy as proposed by Knowles (1984) is the art and science of teaching adults and is a model of learning that proposes that adults should be involved in the planning of their own learning by Knowles (1984) model makes the assumption that all adults are self-directed, are intrinsically motivated to learn, relate learning to their social roles, acquire learning in order to solve problems and have acquired substantial experiences which can be used as a learning resource. The andragogical model has significantly influenced the design of adult learning programmes since the 1980's (Sandlin, 2005) and it still remains popular as a framework for adult learning (Dalglish and Evans, 2008).

The andragogical model is critiqued. A main debating point is the assumption that children and adults learn differently (Sandlin, 2005). For example, whether adults really have richer life experiences that facilitate new learning is contested. Children may have fewer experiences than adults, but the quality of their experiences may be richer (St. Clair, 2002). The negative experiences adults experience may inhibit rather than assist learning (Vodde, 2009). The process of turning experience into learning through reflection is independent of age and experience (Boud, Keogh and Walker, 1985). Also contested is the extent to which adults and children differ with regards to autonomous learning. According to Tennant (2006), children's learning can be natural, spontaneous and often independent. For example, children are perhaps more likely than adults to be motivated to learn new knowledge or skills that they

know they can apply immediately to help them solve a particular problem (Tennant, 2006). Conversely, Kerka (2002) suggests that adult students respond well to an eclectic mix of teacher and self-directed strategies rather than a purely self-directed approach. In improving student achievement and satisfaction, Rachal (2002) proposes the outcomes of applying the andragogical model are variable, making this unsound for prescribing practice. Sandlin (2005) suggests the popularity of the model arises from adult educators' desiring to professionalise and control adult education, not because it is effective for emancipating learners.

Despite critique, studies demonstrate the model can be applied successfully in specific contexts. Vodde (2009), for example, found andragogy more effective than a traditional pedagogical military training model for police training. Police trainees who were taught using andragogical principles were better able to make decisions, solve problems and communicate effectively than those who were taught using a pedagogical military model. Bright and Mahdi (2010) found that applying andragogical principles to the teaching of Iraqi students helped to facilitate cultural understanding between Arab and American cultures which in turn promoted tolerance and friendship. Based on their experiences they propose that andragogy can be applied to enhance understanding between cultures leading to more peaceful leadership philosophies. Popular for adult education, the model has gained significance in HEWBL. Andragogy frees learners from teaching constraints by allowing them to negotiate content and outcomes of learning (Boud, 1989). HEWBL programmes are frequently based on andragogical principles allowing learners to be stakeholders in their own learning through the negotiation of the content and assessment of programmes and treating them as self-directed learners (Helyer and Garnett, 2016). Furthermore, andragogy emphasises the value of work-experiences as a valuable learning source, allowing learning gained from these experiences to be articulated and assessed through university APEL processes (Helyer and Garnett, 2016). Henschke (2011) believes that despite its flaws, andragogy offers an effective means of engaging adult learners in meaningful learning and that further research will help to establish it as a scientific academic discipline.

### **2.2.2 Learner-centred education**

Learner-centred education, as the name implies, emphasises individuals' personal needs (Boud, 1989). This tradition emerges from humanist philosophies of adult education grounded in humanist psychology which stress the importance of understanding emotions, feelings and personal responsibility rather than transmission of traditions and ideas (Boud, 1989).

Rogers and Freiberg (1994) proposed the importance of the teacher-student relationship is key to learning. Within this, the teacher must believe in the capacity of others to think and learn for themselves. The teacher's role is not to teach directly but to facilitate learning by providing an environment to enable learners to take responsibility for their learning and to value this for themselves. Experiential learning is vital to the learning process because individuals' unique perceptions and experiences influence how and what is learnt (Rogers and Freiberg, 1994). Addressing learners' needs via experiential learning enables personal change and growth, including changed attitudes, behaviours and openness to change (Rogers and Freiberg, 1994). Individuals learn in various ways according to personality and emotions (Rogers and Freiberg, 1994). The teacher's multi-faceted role in experiential learning includes creating a positive climate for learning; clarifying the purposes of learning; making learning resources available; balancing intellectual and emotional components of learning; and sharing feelings and thoughts with learners (Rogers and Freiberg, 1994). The role of reflection in learning is collaborative, helping learners to make sense of feelings, ideas and processes through dialogue with peers and teachers (Rogers and Freiberg, 1994).

Learner-centred education is critiqued. Curzon (1997) proposes that unconditional positive regard for students, a condition central to learner-centeredness means teachers must deny the validity of their beliefs. Edwards (2001) emphasises the possibility that learners may become isolated because of the individualised nature of student-centred learning programmes. Bredo (1999) suggests that learner-centred education ignores the value of the social context of learning in which people learn from peers. However, evidence suggests that in traditional HE programmes learner-centred approaches may be beneficial. Hall and Saunders (1997) found improved motivation, grades and retention in information technology students; Zepke and Leach (2007) established improved retention of HE students in seven different institutions; and Lea, Stephenson and Troy (2003) found that despite some reservations, psychology students felt engaged in learning and experienced improved confidence. In HEWBL programmes the value of learner-centred approaches arises from establishing positive tutor-learner relationships. For example, in nursing education, community nurses build positive relationships with supervisors, contributing to their being able to learn from experiences (Hallett, 1997). In surgical courses, trust between learners and tutor-surgeons is essential to the learning environment (Sharma, 2011). Positive tutor-learner relationships generate an environment in which learners feel emotionally supported and giving and receiving feedback is valued (Sharma, 2011).

### 2.2.3 Critical pedagogy

Critical pedagogy proposes that learning is rooted in a cultural, social and political context (Boud, 1989). The principal purpose of critical pedagogy is to enable people to understand the world, overcoming its limitations for themselves and others through collective action (Burbules and Berk, 1999). The approach is concerned with understanding, challenging and changing social injustice, inequity and repression. The teachers' role is promotion of critical dialogue between learners and teachers and learners (Boud, 1989). Advocates of critical pedagogy suggest by developing consciousness, learners have potential to take actions to change reality (Taylor, 1993). Freire (1995) asserted that strategies for teaching and learning should be located within the context of learners' lived experiences to make them meaningful.

Praxis is central to critical pedagogy. This is the relationship between theory and practice, reflection and action (Leistyna et al., 2004). Praxis denotes how humans become critically conscious through reflection, critical thinking and action (Freire, 1996). Freire (1996) defines praxis as "reflection and action upon the world in order to transform it" (p. 33). Reflection and action are necessary for praxis: reflection without action results in intellectual discovery, whereas action without reflection is activism (Freire, 1996). Mezirow (1990) for example, emphasises both action and reflection, proposing that praxis is not complete until an individual has first acted, then reflected upon that action prior to taking further action. Furthermore, praxis is *continuous* and *emancipatory*. A continuous process of reflection and action (praxis) is required to transform structures that impede humanisation and facilitate liberation (Freire, 1982). These notions of emancipation underpin the ethical dimension of praxis. Action in praxis is not merely about action grounded in reflection but must be rooted in respect for people, obligation for their welfare and pursuit of truth (Carr and Kemmis, 1986).

What constitutes an "action in praxis" is complex. Freire (1996) proposes that while engaging in critical reflection immediate action may be impossible or inappropriate; as a result, critical reflection in itself can be considered action. Mezirow (1990) suggests an individual must have the desire or will to act based on insight gained from critical reflection, but the decision to act or not to act can be considered an action as long as self-deception is avoided. Forms of action depend upon the learner context, but include changing interpersonal and career relationships or workplace changes; resisting and changing oppressive practices from within organisations; and changing ways of judging and behaving towards others as a consequence of new insights.

Theory is critical to action in praxis (Leistyna et al., 2004). Praxis is concerned with action to transform individuals and their environments, but must be informed by theory, through

dialogue, and self-reflection, rather than unguided or well-intentioned action (Freire, 1995). Praxis therefore, involves enactment of lessons or theories in the real world, enabling relating intellectual concepts and lived reality. However, the relationship between theory and action in praxis is symbiotic. Praxis dismisses the traditional gap between theory and practice by making these mutually dependent (Rolfe, 1993). Whilst theory can *inform* practice, theory can be generated *from* practice, and, in turn, influence future practice. Theory in praxis, therefore, can be informal contextual theory based on experiential learning as well as formal, published theory. Critical reflection in praxis is the means by which theory and action can be re-assessed within a recursive cycle enabling change for the common good (Mezirow, 1990).

Critical pedagogy has been criticised as over simplistic in categorising people into those who oppose and those who are for oppression (Smith, 2002). Searle (1990) finds critical pedagogy promotes hostility to citizenship and social responsibility. Schugurensky (1998) critiques the complex and elitist nature of its discourse, which constrains influence on mass audiences. Critical pedagogy lacks a usable framework supporting application to teaching and learning in a variety of contexts. Breuing (2011), for example, found that post-secondary teachers attempting to apply theory to practice do so from contradictory definitions, aims and purposes of critical pedagogy. Osborne (1990) suggests that although its contribution to discourse on principles underpinning teaching and learning is valuable, no guidelines indicate how to apply these in practice.

In the HE sector critical pedagogy has advocates. Lambert, Parker and Neary (2007) support critical pedagogy as a means of challenging narrow, neoliberal ideas of entrepreneurialism focusing on wealth creation through development of human resources. They suggest critical pedagogy enables a critical examination of entrepreneurialism in HE that promotes social justice and encourages personal development. Critical pedagogy influences HEWBL pedagogy. Peterson (2009) provides evidence from studies building partnerships between universities and local communities. These partnerships enable students to engage in community-based experiential learning, to become activists promoting positive social change. Wintrup, Wakefield and James (2013) provide evidence of the value of critical pedagogy in helping HE work-based learners to become critical thinkers, owning their work, accessing professional knowledge and challenging inflexible organisational cultures. In a policy context, the UK-based Universities Association for Lifelong Learning (UALL) promotes development of WBL as a critical pedagogy, recognising that learning is a contextual praxis (UALL, 2016).

#### **2.2.4 Informal learning**

Marsick and Watkins (1990) differentiate between formal learning which is planned, highly structured, classroom-based learning and informal learning that tends to be learner-directed, usually occurs outside the classroom and is unstructured. Informal learning happens independently of encouragement by organisations, and may include coaching, mentoring, self-appraisal, performance planning and self-assessment of learning needs (Marsick and Watkins, 1990). Informal learning tends to be incorporated unconsciously into daily work routines, is chaotic and driven by chance (Marsick, Volpe and Watkins, 1999). The informal learning model proposes that confronting a new problem prompts people to assess their situation afresh, explore solutions, then act to solve the problem and evaluate the consequences. The type(s) of knowledge gained through informal learning processes are tacit and personal, gained from experiences and job specific contexts (Le Clus, 2011).

Evidence supports the importance of workplace-based informal learning. Bruce, Aring and Brand (1998) propose that 70% of all workplace learning is informal. In terms of value, informal learning is seen by employees as natural and efficient means of solving problems using accessible work-related resources (Marasini, Ions and Ahmad, 2008). Verespej (1998) found employees' job-related knowledge is learnt through informal workplace learning. Such learning is not limited to low-level, factual and procedural learning but also higher level learning involving analysis and problem solving (Le Clus, 2011). For example, Marasini et al. (2008) found informal learning plays a crucial role in managing the successful implementation of complex enterprise-wide software by enabling knowledge creation, capture and transfer. However, informal learning may not always impact positively on organisations. Individuals are not consistently rational, but use information in selective ways to support personal agendas (Easterby-Smith and Araujo, 1999). Organisational culture strongly influences how informal learning occurs and is applied. In some organisations this may lead to 'bad habits' with the potential to damage (Kim, 1993). For example, Marsick et al. (1999) propose informal learning can be dangerous because decision making and problem solving may be based on flawed analysis of problems and issues. Flaws are caused by lack of conscious and critical reflection into factors such as how individuals' values and belief systems and contextual factors influence actions. These authors suggest that flaws can be addressed by purposefully incorporating critical reflection into informal learning to enable individuals to gain insight into factors influencing actions, thus leading to innovative ways of overcoming challenges.

Although informal learning is often at too low a level to be relevant to HE, a significant amount can be categorised as comprising high-level skills and knowledge with potential to be

recognised as credits towards formal qualifications through HE APEL processes (Lester and Costley, 2010). However, HEIs find developing approaches to recognising informal learning in HE curricula challenging. One barrier is the perception amongst some academics that informal learning generates narrowly contextualised vocational knowledge and skills that are inconsistent with academic skills and knowledge traditionally associated with HE (Skinner, Blackey and Green, 2010). Despite implementation barriers, integration and accreditation of informal learning into HE curriculums and processes supporting the lifelong learning agenda has support from global and national organisations (Singh, 2015). For example, the European Commission (2013) supports a variety of national initiatives in identification and recognition of informal learning in HE. HEIs are encouraged to develop pedagogical and assessment practices that encourage and recognise the informal learning that takes place outside HE curricula (Kettle, 2013). HEIs involved in design and delivery of HEWBL programmes have well-established APEL processes to formally recognise higher level skills and knowledge gained through informal learning. For example, Middlesex University developed and approved regulations for accrediting experiential learning including informal learning in 1991 and these are now well-established within the University's quality framework allowing learners to gain credit for informal learning at undergraduate, postgraduate and doctoral level (Garnett and Cavaye, 2015).

### **2.2.5 Professional reasoning**

Professional reasoning encompasses conscious and unconscious processes guiding professional action (St John, 2009). Chris Argyris and Donald Schon are theorists examining professional reasoning processes (St John, 2009). Argyris and Schon (1974) propose that peoples' actions are guided by their 'mental maps' comprising world-view and beliefs inferred by behaviour. These authors describe theories people use to direct their *actual* behaviour as theories-in-use, contrasting these with espoused theories, which people *believe* govern behaviour. For example, managers may advocate employee empowerment and autonomy (espoused theory) but in practice they reward dependent and submissive behaviour because they believe that their subordinates require authoritarian guidance (theory-in-use) (Argyris, 1976). They suggest most people are unaware their espoused theories differ from their theories-in-use. This means that if people are oblivious to what directs actions in practice they have little or no control over these. This lack of awareness can be overcome by facilitating professionals to reflect on their feelings, thoughts and actions (Argyris and Schon, 1974), making professional practice more effective. In effect, enabling professionals to analyse their theories-in-use through reflection provides opportunities to exercise insight into any existing incongruence between their theories-in-use

and espoused theories. Dick and Dalmou (1990) used reflection in this way to help people to gain insight into the incompatibility between people's espoused theories and theories-in-use. Senge (1990) also supports the idea that facilitating enquiry and dialogue enables professionals to recognise negative patterns of behaviour based on faulty mental models. However, he warns that organisational cultures can restrict reflective processes enabling learning.

Argyris and Schon (1978) propose that professionals engage in single and double-loop learning. Single-loop learning involves attempting to meet goals through trial and error: if a goal is not met by taking a particular action a different strategy is employed. Single-loop learning is used to change organisational practices and strategies without questioning the values (e.g. cultural values) that underpin them. Reflection in single-loop learning focuses on developing an effective strategy to meet desired goals. Double-loop learning involves questioning underlying assumptions and values influencing behaviour, reframing these to enable development of creative solutions to complex problems. Double-loop learning is used to change the values that underpin organisational practices and strategies. Argyris and Schon (1978) suggest that double-loop learning that questions frames of reference and mental models prompts development of new and innovative ideas applicable to rapidly changing and uncertain contexts. Senge (1990) also distinguishes between two types of learning – adaptive learning which is reactive and involves improvements to meet known organisational objectives and generative learning which is proactive and emphasises continuous experimentation. These types of learning are analogous to Argyris and Schon's single-and double-loop learning. Finger and Asun (2000) suggest that distinguishing between single and double loop learning and understanding the role that reflection plays in both types of learning offers a means of bypassing limited, single-loop trial and error learning by enabling people to move directly to double-loop learning through critical reflection. Denhardt and Denhardt (2009) categorised learning in public administration organisations as either single-loop or double loop learning.

Argyris (1990) suggests that values associated with theories-in-use can be grouped into those inhibiting or enhancing double-loop learning. He proposes that values inhibiting double-loop learning are described as "Model I". These values are characterised by controlling, competitive and defensive behaviours of employees within organisations. Employees who act according to Model I values try to gain an advantage over others by closing down discussion and debate, leading to demotivation and low morale. Conversely, Argyris (1990) suggests that values enhancing double-loop learning are described as "Model II". These values are characterised by openness and shared control. Employees who act according to Model II values tend to encourage debate and discussion, information sharing and participative decision-making.

Hager (1996) recognises Argyris and Schon's work as important because they consider the complexity of workplace learning. Robinson (2001) views their work as significant because it is help to explain such a wide range of thinking strategies that people use to process information. Their theories have strongly influenced professional education because they provide a framework in which to develop professional pedagogies which can facilitate professional enquiry (St John, 2009). For example, they have informed the development of many nurse education programmes (Greenwood, 1993) and have been incorporated into HEWBL degree programmes to enable Health and Social Care professionals to engage in double-loop learning to encourage them to critically reflect on the underlying reasons for mistakes which are made in a health care setting (Owens and Rutherford, 2007).

### **2.2.6 Reflection-in-action and reflection-on-action**

Schon (1983) proposed that in a fast-paced world, professionals need do more than adhere to prescribed techniques learned through formal education and training. He suggests that rational reflection offers professionals a process by which theory within practice can apply, ultimately inspiring professional innovation. In practice this means that when professionals are faced with situations with which they are unfamiliar and for which there is no prescribed solution, reflection offers them a means of making sense such situations through experimentation and the development and testing of theory. Schon (1983) distinguished between reflection-in-action and reflection-on-action. Reflection-in-action occurs during an activity or event; "in the moment" reflection involves thinking about and reacting to situations as these arise. This type of reflection involves professionals reflecting on prior knowledge and understanding as well as the event and taking action which changes the situation and creates a new understanding of it. Schon (1983) suggests that during this process the professional benefits from prior knowledge, but the uniqueness of the situation leads to surprise, confusion and puzzlement because prior knowledge is insufficient to resolve the issue. Professionals must therefore think of and test new actions informed by prior knowledge and their emerging understanding of new situations. A good example of reflection-in-action according to Schon (1983) is how jazz musicians improvise together by making in-the-moment modifications to their own playing based on what they hear from other musicians. They can do this because they make new sense of the music as it changes, reflecting-in action on the music they are producing collaboratively and their unique contribution to it.

Reflection-on-action occurs after an event or activity allowing, professionals time to think about how they and others acted, how successful actions were and any consequences from

acting differently (Schon, 1983). Post-event, professionals consciously examine their actions to gain insights that inform future practice. This may involve writing in reflective journals and debriefing with colleagues and/or supervisors. Smith (1994) suggests that when circumstances prohibit answering immediate questions, professionals rely on familiar practices. Reflection-on-action provides necessary space to allow discussion and critical appraisal in collaboration with supervisors and peers of the decisions and approaches they have taken.

Schon's theories (1983) underpin professional practice in disciplines including nursing, organisational learning, teaching, planning, strategy and management (Yanow and Tsoukas (2009). For example, Grushka, McLeod and Reynolds (2005) proposes reflection-for-action in addition to reflection-in-action and reflection-on-action. This allows professionals to reflect on where they want to "be" in future. Congruent with Schon's notion of reflection-in-action, Atkins and Murphy's (1993) reflective model which was developed as a practical approach to promote reflective practice within nursing, recognises the role uncomfortable feelings play in reflective practice. Fish and Coles (1998) suggest health care professionals improvise during unpredictable situations in which no suitable pre-prescribed procedures exist. Clarke, James and Kelly (1996) argue reflection-in-action is central to nursing practice because whilst delivering patient care nurses have to reflect-in-action on theoretical and scientific principles. Yanow and Tsoukas (2009) built on Schon's work by providing a view of reflection-in-action that demonstrates how improvisation arises in management practices, and by categorising types of surprise experienced by managers during novel events.

Literature on reflection and reflective practice show wide acceptance for the central tenets of Schon's work and consequently his terminology relating to reflection and reflective practice has grown in popularity (Yanow and Tsoukas, 2009). However, Schon's proposals have drawn critique. For example, Boud and Walker (1998) criticise the lack of emphasis placed on the role context plays in reflection. They suggest that professional teachers do not always work in institutional contexts that are supportive of honest, critical reflection yet the influence of such strong organisational contexts is often ignored by those who promote reflective practice. Reflection-in-action is also regarded as controversial. Eraut (1995) finds this problematic on the grounds that in situations requiring rapid decision-making, there is insufficient time to engage in meaningful reflection, and thus reflection-in-action is impossible. To reflect, a practitioner must stop the action, even momentarily, to examine former frames of reference. Moon (1999) argues that reflection occurs once an action has been performed and no new action is occurring that involves new information to be understood by the practitioner. Moon (1999) thus supports reflection-on-action only. Ekebergh (2007) argues from a life-world

phenomenological position, proposing that reflection-in-action is unachievable because reflection can only be achieved by removing oneself and considering a situation retrospectively, not in the moment. Munby and Russell (1989) also question the psychological reality of reflection-in-action. Eraut (1995) suggests that whilst Schon (1983) provided many examples of reflection-on-action, the examples he provided of reflection-in-action were few, occurring in limited contexts.

Schon (1983) has influenced the design of training and education programmes at various educational levels in a range of professional fields. Within this, his ideas have credence in HEWBL. His theories are integral to HEWBL programmes as an effective method of helping learners understand the importance of practical knowledge that is central to professional work (Lester and Costley, 2010). Schon's theories enable learners to understand organisational cultures in which they learn and work (Roodhouse 2010). Schon's work has been influenced disciplines in which higher professional learning is an essential part of professional practice such as in education and nursing (Bourner, 2003).

### **2.2.7 John Dewey's theories of education**

Dewey (1938) criticised traditional education for its obsession with delivery of content and progressive education for lack of concern for individuals and/or society. He argued educators should focus on helping learners to learn from their experiences, not on delivering predetermined knowledge. Designing teaching and learning strategies that encourage quality experiences conducive to continuing growth is required. Dewey (1933) recognised reflection as a useful learning process enabling people to rationalise subjective experiences. He identified five stages: identifying a problem; refining it; developing a hypothesis and possible solutions; subjecting the hypothesis to scrutiny; and reasoning and testing a hypothesis in practice. Dewey's view of reflection is therefore an active process linking thinking with action and involving theorising and experimentation with solutions to real world problems (Rolfe, 2013).

Dewey is a principal advocate of experiential learning as a means by which people gain insight into the connections between their actions and resulting consequences (Beard and Wilson, 2006). He is also an influential thinker on the learning process, specifically learning cycles and the role reflection plays in experience-based learning (Boud, 1989). Wood, Westwood and Thompson (2015) suggest Dewey proposed reflection is a type of thinking fundamental to learning. His work on reflection and reflective practice has influenced contemporary theorists. For example Kolb's (1984) experiential learning theory and Schon's (1983) work on reflective

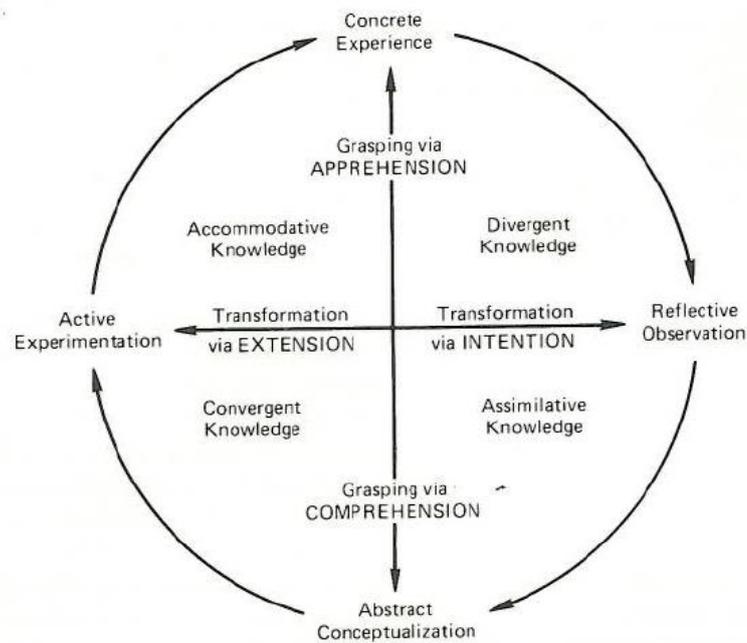
practice is underpinned by Dewey. However, whilst his theories continue to be used as a framework for reflective practice, they have been criticised. Dewey (1933) sees reflection as a conscious, objective and rational process leading to new insight. He proposes that emotion triggers the reflective process, limiting emotion to a role purely about initiating. This ignores the contribution emotion plays as an inherent and useful characteristic of the reflective process (Felten, Gilchrist and Darby, 2006). Cinnamond and Zimpher (1990) suggest Dewey's view of reflection is overly linear and is primarily a solitary activity that does not recognise the value of interaction and dialogue. Despite these criticisms Dewey has influenced design of innovative, HEWBL programmes (Kolb, 1986). His theories are at the heart of work-based learning programmes because they enable linking between reflection and professional practice (Burke, Marks-Maran, Ooms, Webb and Cooper, 2009). Furthermore, HEWBL programmes are rooted in practical approaches that emphasise the relationship between knowledge and action as Dewey expressed (Lester and Costley, 2010).

#### **2.2.8 Experiential learning theory (ELT)**

ELT was developed by Kolb (1984) to provide a holistic model of the learning process emphasising the central role of experience. Kolb (1984) argued that prevailing, traditional learning theories are rooted in positivist epistemology focusing on learning outcomes and measurement of learning. These theories assume the environment shapes and maintains peoples' behaviour by providing a stimulus, which provokes a response, enabling people to become self-correcting by modifying their behaviour (Kolb, 1984). ELT differs from positivist theories of learning by focusing on the process rather than the outcomes of learning. Also, within ELT learning is a holistic process occurring when feelings, thinking, behaviour and perceiving are integrated (Kolb, 1984). ELT emphasises the central role experience plays in formation and re-formation of ideas and creation of new knowledge.

Kolb (1984) proposed a cyclical model of experiential learning comprising four stages (Figure 1). The *concrete experience* stage involves having an experience that is, doing something. *Reflective observation* involves making observations and judgements about experiences. This leads to *abstract conceptualisation* which involves drawing conclusions, that is, learning from the experience. Finally *active experimentation* occurs during which changes and new actions are planned. The cycle can be entered at any point but all stages must be followed in sequence for successful learning to occur. Whilst his four stage experiential learning cycle is core to ELT, Kolb also proposes four learning styles. Kolb (1984) suggested that effective learning requires aptitudes based around each of the four stages of his experiential learning cycle, claiming these

aptitudes can be measured to determine an individual's learning style. The four learning styles (Figure 1) are *diverging*, that is, strong in imaginative ability and generation of ideas; *assimilating*, that is, being able to create ideas and reason inductively; *converging*, meaning good at practical application of ideas; and *accommodating*, meaning good at carrying out plans and tasks.



**Figure 1 Kolb's (1984) Experiential Learning Cycle (p. 37)**

Kolb's ELT has critics. Felten et al. (2006), for example, criticises the four stage experiential learning cycle for limiting the role of emotion to catalysing rational thought, rather than being integral to the reflective process. The lack of importance attributed to feelings and intuitive insight is also of concern to Heron (1992) and Illeris (2002). ELT is criticised for largely ignoring the importance of social aspects of learning. Reflection should not occur in isolation as the theory suggests, but requires social interaction to promote thought, reasoning and learning to be effective (Miettinen, 2000; Beard and Wilson, 2006). Collective reflection on emotions is important for gaining critical perspective on feelings, behaviours and actions (Antonacopoulou, 2004). Lack of recognition of the role culture and environment plays in learning is apparent (Anderson, 1988; Beard and Wilson, 2006), as well as lack of focus on the process of reflection and the critical role this plays in learning (Boud et al., 1985). The model is also criticised for representing a complex, multi-dimensional process by a simple, linear model comprising four stages (Heron, 1992; Beard and Wilson, 2006).

ELT remains widely used respected theory, because educators perceive its effectiveness in empowering learners by engaging them in learning grounded in real experiences, rather than artificial classroom environments (Dennison, 2009). The experiential learning cycle is popular as a way of encapsulating how professionals develop and apply professional knowledge by reflecting on experiences systematically, drawing conclusions and implementing new actions. Furthermore, the cycle provides a useful framework for educators to plan learning, understand and advise learners with learning difficulties (Tennant, 2006). ELT has influenced, for example, Boud et al. (1985) development of a reflective learning model; Jarvis' (1995) work on the importance of social learning in reflection relating to adult education; Johnson and Johnson's (1996) work on reflection in group and peer learning; and Gibbs (1988) development of a six stage reflective cycle model for teachers which included reflection on emotions. Kolb's (1984) work on learning styles has also contributed to understanding how people may learn, challenging models of learning viewing intelligence as fixed and measurable rather than multi-dimensional and malleable (Tennant, 2006). Honey and Mumford (1986) built on ELT to develop their popular learning styles typology. Unsurprisingly, ELT has influenced design and delivery of assessment of HEWBL programmes, offering practical and simple ways of facilitating learning from reflection to enhance professional development (Brennan and Little, 1996; Helyer and Garnett, 2016).

## **2.3 Reflective learning**

### **2.3.1 A critique of reflective learning**

Reflective learning is used extensively as a learning strategy in HEWBL programmes (Costley and Dikerdem, 2012). From 1992 onwards, dominant approaches to APEL developed around models of reflective practice. Butterworth (1992) recognised that to ensure academic rigour APEL relied on students' transforming experiential learning into a reflective narrative through critical reflection. Reflective learning approaches still exist within HEWBL programmes that recognise and accredit experiential learning. They are often considered to be important means of driving continuous professional and organisational development (Costley and Dikerdem, 2012; Helyer, 2015c).

There are many reflective learning models. Competing models are used in various contexts following development in response to perceived needs of professionals, educators and Government, all of whom view reflective learning as vital to improving professional practice and professional engagement in life-long learning (Finlay, 2008). Reflective learning models distinguish between levels. For example, Redmond (2004) proposes reflective learning can be

categorised into two levels, namely, “low level” involving experimentation, and “high level” involving conceptualisation. Argyris and Schon (1978) distinguish between single-loop learning and double-loop learning. Mezirow (1991) and Jay and Johnson (2002) recognise three intertwined dimensions of increasing complexity namely, descriptive (description of the issue/problem), comparative (reframing the issue/problem based on multiple perspectives) and critical reflection (establishing a new perspective). Kember, Leung, Jones and Loke (2000) identified four level states of thinking relating to reflection - habitual action (activity learnt through frequent use), understanding (comprehension of different subjects or phenomena), reflection (critique and appraisal of assumptions about the content or process of problem solving and critical reflection (transformation of a perspective). King and Kitchener (1994) outline a seven level model of development of complex reasoning skills. Finlay (2008) argues that diversity of reflective learning models creates an eclectic choice to suit different professionals’ needs operating in various organisations and contexts. However, concerns over proliferation of models and lack of conceptual clarity around reflective learning are widespread (Bleakley, 1999; Eraut, 1994; McLaughlin, 1999; Van Manen, 1995). The lack of consensus about reflective learning is problematic because without a universal definition, determining its effectiveness is challenging (Costley and Dikerdem, 2012). Nevertheless, its widespread use and growing acceptance in professional practice and education suggest the concept invites critical examination to help determine its efficacy and ethical values.

A concern raised about reflective learning is the ethics involved in requiring people to reflect on, and write about emotive issues they may find disconcerting. Brookfield (1990) suggests that reflecting deeply on behaviours and emotions can be psychologically disturbing. Ghaye (2007) for example, is concerned about potential impact arising from student nurses reflecting on uncomfortable and often distressing emotional experiences, including impact on mental health and wellbeing. The potential harm arising from deep emotional responses elicited through reflection means support is required to help teachers and learners navigate emerging challenges. Quinn (2000) raises the possibility that being overly critical of one’s own practices and behaviours may lead to feelings of unworthiness and low self-esteem. He suggests reflection involves a constant struggle for self-improvement by being critical of oneself. If an individual interprets critical to mean negative, the consequences may be an overly negative view of themselves. A further criticism is levied at the importance of individual reflection. Reflection places an unhealthy emphasis on the veracity of accounts of events portrayed by individual professionals, which may ignore others’ perspectives (Sandywell, 1996; Taylor and White, 2000). This suggests reflection may diminish rather than enhance professionals’ abilities to critique their practice. Boud and Walker (1998) warn against the dangers of uncritical

reflective practice by suggesting it can justify poor practice and reinforce existing prejudices. A further danger is that reflection may become an exercise in self-indulgent contemplation resulting in paralysis by analysis. Reflective professionals must realise reflection without action has no substance (Rhoads, 1997). Evidently, focusing on reflective process should not be at the expense of actual professional practice (Finlay, 2008), nor be used as a simple procedural and perfunctory recipe for professional practice (Boud and Walker, 1998).

Pedagogic concerns are raised by alarmists fearful that reflective learning has become all-pervasive in professional education. Ixer (1999) for example suggests the conceptual ambiguity around reflection makes it impossible to adequately teach or assess effectively. He argues that in the context of teaching and assessing social workers, reflection involves a metacognitive process to take place but states that there are no existing theories or tools that can assist in teaching or measuring this. Assessment of reflective pieces of work such as journals or essays is problematic because learners may not engage in honest, self-evaluation of their own behaviours and emotions, feeling obliged to write what they think the teacher wants (Cameron and Mitchell, 1993; Smith and Lev-Ari, 2005). Furthermore, people's acquisition of reflective skills alters throughout their lives (Honey and Mumford, 1986; Kolb 1984). The consequences of this is that some people will be better able to reflect than others. The complexity of learning to reflect critically can result in learners writing superficial or even fictional accounts of their learning designed to be just good enough to pass (Finlay, 2008).

Despite the concerns around reflective learning, many advocate its efficacy in a broad range of contexts. Finlay (2008) argues that effective reflective learning can be extremely positive in analysing and transforming practice. Hobbs (2007) suggests reflection is beneficial and should be encouraged in any discipline that involves working with people.

### **2.3.2 Characterising reflective learning in underpinning HEWBL theories**

In this study, characterising reflective learning in theories underpinning HEWBL is crucial in gaining understanding of the role reflective learning plays in developing professional learners' praxis. Section 2.2 (p. 27) reviewed literature relating to theories underpinning HEWBL. Reflective learning plays a major role in all theories discussed, therefore is a major influence in design and delivery of HEWBL programmes. However, unsurprisingly, theorists view reflective learning differently depending on the specific purpose of their proposed model. Examining the purpose of reflective learning in each model permits identification of learning domains.

Learner-centred theorists such as Rogers and Freiberg (1994) see reflection as a collaborative process that helps learners make sense of feelings, ideas and processes through dialogue with peers and teachers. Similarly, Argyris and Schon (1974) propose that professionals can explore their conscious and unconscious reasoning processes by reflecting on feelings, thoughts and actions. These theories emphasise the importance of reflection in understanding personal needs, feelings and emotions. Therefore I argue that they operate in an *affective learning* domain. Knowles (1984) presents reflective learning as one of seven principles of andragogy as a means of continuously helping learners analyse and assess their learning and performance. This focus on continuous learning is closely associated with *lifelong learning*. Despite flaws, the andragogic model is extensively promoted as an effective model for engaging learners in lifelong learning (Tummons and Ingleby, 2014). Informal learning models such as ELT and Dewey's theories of education present reflection as primarily focussed on developing and enhancing professional practice. Likewise, Schon (1983) centralises professional learning viewing reflection as a means of developing practical knowledge within specific professional and organisational contexts. These theories align closely to a *professional learning* domain. However, Schon (1983) also views reflection in the context of promoting organisational learning that is, developing and sharing knowledge that can be used and adapted to enable organisational change and growth. This suggests there is an *organisational learning* domain in which reflective learning operates. Argyris and Schon's (1978) work on learning loops have become fundamental tenets of theory and practice relating to organisational learning.

The theories underpinning HEWBL suggest that reflective learning operates in four learning domains, namely affective, lifelong, professional and organisational. However, the development of praxis central to the notion of critical pedagogy and the focus of this study has a unique role in all four domains. Praxis development underpins the process and outcomes of reflective learning in each domain with ethical principles. This aligns to the idea that an ethical dimension of praxis is rooted in truth, freedom and human wellbeing. Hence, the four domains identified are conceptualised for the purpose of this study as *praxis learning domains*.

### **2.3.3 Specific outcomes of reflective learning**

Quantitative and qualitative studies help to illuminate the process and outcomes of reflective learning. These can be linked to the praxis learning domains identified in 2.3.2. Among the quantitative, experimental studies, Leung and Kember (2003) found that an understanding of critical reflection amongst health science undergraduate students was linked to a deep approach to learning; Lowe and Kerr (1998) found that reflective learning methods are as

effective as traditional methods of teaching and learning in nursing degrees; and Rees, Shepherd and Chamberlain (2005) established that medical students' personal and professional development can be assessed through reflective portfolios. Empirical qualitative studies based on interviews and analysis of students' reflective work such as journals and reflective essays include Antonacopoulou (2004), who found that people are more likely to initiate and support organisational learning and change if critical thinking is purposively incorporated into individual and group reflective learning processes. Wong, Kember and Woke (2001) focused on learners' experiences of reflection impacting on affective learning. They discovered that if reflection is carried out in a supportive environment this helps learners make sense of their emotions, allows challenge and modify attitudes, values and beliefs; and improves self-esteem and confidence. Griffin (2003) found that teachers who critically reflected on critical incidents became more self-aware and able to examine situations from multiple perspectives, making them more open to change. Other studies highlighting the central role reflective learning plays in affective learning include O'Connor, Hyde and Treacy (2003), who explored nurse educators' perceptions and experiences of using reflection with nursing students; Bean and Stevens (2002) who evaluated reflective learning amongst student teachers; and Smith (1998), who investigated the reflective practices of student nurses. Studies examining the role of reflection in professional and lifelong learning include Issitt (2000), who investigated the perspectives and experiences of reflective practice amongst female health, welfare and educational professionals finding that reflective practice often conflicts with authoritarian management cultures. Jennings (1992) found that different types of workplace trainers enrolled on a Graduate Diploma in Education programme use reflection to legitimise their knowledge and evaluate their own performance and learning, while Hamlin (2004) found that reflection helped student teachers develop new pedagogical practices and validate personal and other's practices.

Empirical studies show a variety of outcomes of reflective learning have been specifically identified. Furthermore, these outcomes relate to the praxis learning domains identified in section 2.3.2, providing justification for their validity as a means of categorising praxis learning.

#### **2.4 Initial conceptual framework for the study**

The praxis domains identified were derived deductively from critical analysis of theories underpinning HEWBL and examination of empirical research conducted into outcomes of reflective learning. These domains form the basis for constructing an initial *a priori* conceptual framework for this study. An initial description is established by listing the proposed impacts of

reflective learning, and collective description (Table 2). These four domains are used in data analysis (Chapter Three) as the basis for an initial thematic template in the pilot study. Furthermore, the outcomes of reflective learning described in Table 2 are used to inform development of the novel reflective learning template and the interview questions for the pilot study.

Proposed outcomes of reflective learning	Sources	Description of domain
Improved self-esteem	Hooker and Helyer, (2015); Wong et al. (2001)	<p><b>Affective learning:</b></p> <p>Understanding and expressing emotions, attitudes, values and beliefs and assessing and improving self-worth</p>
Improved motivation	Bellamy (2009); Helyer (2015a); Hooker and Helyer (2015); Ions (2009); Ions and Minton (2012); Svinicki (2005)	
Recognise and challenge attitudes, values and beliefs	Argyris and Schon (1974); Costley and Dikerdem (2012); Griffin (2003); Helyer (2015c); Raelin (1997); Rogers and Freiberg (1994); Solomon (2005); Wong et al. (2001); Workman (2015)	
Openness to change	Costley and Dikerdem (2012); Griffin (2003); Helyer (2015c); Rogers and Freiberg (1994)	
Evaluate and improve learning	Bellamy (2009); Boud and Solomon (2001); Brodie and Irving (2007); Chisholm and Davis (2007); Costley and Dikerdem (2012); Helyer (2015a); Hooker and Helyer (2015); Ions (2009); Jennings (1992); Knowles (1984); Lester (1999); Moon (2004); Workman (2015)	<p><b>Lifelong learning:</b></p> <p>Continuously develop and improve skills and knowledge to become better learners and enhance career development</p>
Evaluate career goals and ambitions	Helyer (2015c); Hooker and Helyer (2015); Workman (2015);	

Proposed outcomes of reflective learning	Sources	Description of domain
Validate professional knowledge and practices	Hamlin (2004); Jennings (1992)	<b>Professional learning:</b>  Develop and validate professional practices within specific organizational and professional contexts
New professional practices	Boud and Solomon (2001); Costley and Dikerdem (2012); Graham, Rhodes and Shiel (2006); Hamlin (2004); Helyer (2015c); Ions and Minton (2012); Kolb (1984); Schon (1983); Solomon (2005); Workman (2015)	
Make tacit knowledge explicit	Costley and Dikerdem (2012); Ions (2009); Lester (1999); Schon (1983); Solomon (2005)	<b>Organisational learning:</b>  Create, capture and transfer new knowledge and enhance learning and change
Implement changes	Antonacopoulou (2004); Argyris and Schon (1978); Bellamy (2009); Boud (2006); Boud and Solomon (2001); Ions and Minton (2012); Lester (1999); Workman (2015)	

**Table 2 Praxis learning domains arising from extant literature**

## 2.5 Chapter summary

The literature review revealed theories underpinning design and delivery of HEWBL programmes. The relevance of a specific theory depends on the purpose and nature of the particular HEWBL programme in question. The review showed that despite their diversity, all theories underpinning HEWBL programmes are rooted in an experiential approach to learning in which reflective learning plays a central role. The review illustrated that theorists' view the process and outcomes of reflective learning differently, depending on perspectives expounded in their models. Differences can categorise outcomes of reflective learning into four praxis learning domains, namely, affective, lifelong, professional and organisational.

The literature highlighted that despite the popularity of reflective learning, this is a much contested pedagogical strategy. A lack of conceptual clarity over its nature, and how to promote reflection make teaching and assessment problematic. This lack of clarity is evidenced by the proliferation of reflective learning models developed to meet the needs of learner groups. Literature emphasises ethical concerns associated with the possibility that reflective learning may evoke potentially damaging emotional responses.

The review showed that empirical research has been conducted into the process and outcomes of reflective learning. These studies relate to affective, lifelong, professional and organisational learning, thus providing support for the four identified praxis learning domains. However, these studies tended to examine specific domains of learning rather than holistic outcomes involving two or more domains. Furthermore, extant studies examined processes and outcomes of reflective learning, not professional praxis. This study conceptualises reflection and action as professional praxis by considering an ethical dimension, namely a concern for truth, freedom and human wellbeing that underpins reflection and action across all four learning domains. This conceptualisation of professional praxis across four domains of learning is unique. Furthermore, the author knows of no prior attempt to map and thus make explicit HE work-based learners' praxis. This is the gap this study seeks to fill.

Findings from the literature review have established an initial conceptual framework. This framework and the research design are explored in greater depth in the next chapter.

## Chapter Three: Methodology

### 3.1 Introduction

The last chapter presented an initial conceptual framework derived from analysis of literature on HEWBL which identified four praxis learning domains namely, affective, lifelong, professional and organisational. In this chapter, this framework informs design of data collection tools and analysis.

The chapter presents an overview of methodology adopted to answer the research question. It begins by providing justification for a qualitative, interpretive approach. Then, an explanation of the research design including a rationale for multiple-case studies and data collection methods adopted is offered. In section 3.5 the sampling methods used to select pilot study and main study participants are described. The data collection processes are discussed in section 3.6 and Ethical considerations of the study are outlined in section 3.7. The purpose and results of the pilot study are examined in 3.8 and a detailed account of data analysis is provided in section 3.9.

### 3.2 Research question and timeline

This small-scale, explorative, empirical study explores ways in which professional learners develop their praxis through participation in HEWBL programmes. More specifically, the study examines learners' experiences of the process and outcomes of reflective learning and its impact on their professional praxis across different domains. The review of literature HEWBL demonstrates a paucity of empirical evidence relating to development of professional praxis of HE work-based learners. Thus, the research question addressed is:

***In what ways do Higher Education work-based learners develop their praxis?***

A timeline showing the main stages of the investigation from conception to end is shown in Table 3.

Activity	Date	
	From	To
Reviewed literature	Nov-10	Aug-11
Designed study	Sep-11	Oct-11
Designed Praxis Representation (PRep) templates for pilot study	Nov-11	Jan-11
Completed and submitted ethics approval documentation	Jan-12	Feb-12
Ethical approval granted	Mar-12	Mar-12
Selected cases for study and gained written consent of selected participants	Mar-12	Mar-12
Pilot study: Participants completed PRep templates	Mar-12	Apr-12
Pilot study: Participants group discussion	Apr-12	Apr-12
Pilot study: Interviews conducted	May-12	May-12
Pilot study: Transcription of interviews	Jun-12	Jun-12
Pilot study: Analysis	Jul-12	Jul-12
Pilot study: Write up for progression review	Aug-12	Sep-12
Prepared presentation of pilot study for progression review	Oct-12	Nov-12
Presentation of pilot study work to progression review panel	Nov-12	Nov-12
Feedback from progression review panel	Dec-12	Dec-12
Designed PRep templates for main study	Jan-13	Feb-13
Main study: Participants' completed PRep templates	Mar-13	May-13
Main study: Interviews conducted	Jul-13	Oct-13
Main study: Transcribed interviews	Jul-13	Dec-13
Main study: Developed initial thematic template	Dec-13	Jan-14
Main study: Coded data and revised thematic template	Feb-14	Jul-14
Main study: Summarised data into tables	Aug-14	Dec-14
Planned thesis write up	Jan-15	Jan-15
Wrote thesis draft	Feb-15	Dec-15
Reviewed and amended thesis	Jan-16	Apr-16
Submitted theses	May-16	May-16
Thesis viva	Jun-16	Jun-16

**Table 3 Research project timeline**

### 3.3 Research paradigm

A paradigm is a shared belief-system which simplifies complexity of the “real world” component to which the paradigm applies (Patton, 2013). Paradigms influence how researchers investigate and make sense of data they collect (Morgan, 2007). Two main paradigms, positivist and interpretivist are open to most educational researchers. The positivist paradigm is characterised by the idea that rules govern human behaviour. Researchers can discover law-like generalisations that function as premises in deductive explanations and predictions (McCarthy, 1981). Positivists believe researchers can discover objective truths about reality through hypothesis testing and predict human behaviour based on outcomes. Positivists tend to favour quantitative research methods because these fit better with a normative model (Silverman, 2013). Such methods typically include highly structured surveys and experiments generating data requiring statistical analysis and interpretation.

The interpretive paradigm focuses on subjective human experience. The approaches used to describe and interpret people’s feelings and experiences are frequently qualitative (Terre Blanche and Kelly, 1999). Qualitative research does not necessarily begin with a hypothesis but may produce one in the early stages (Silverman, 2013). Much qualitative research is conducted from a social-constructivist standpoint that attempts subjective interpretation of the external world (Prowse, 2007). Social constructivists therefore, try to understand how people make sense of the world by investigating how they interpret and construct knowledge and how this encourages particular behaviours. Investigations are carried out by eliciting data then searching for patterns and themes to answer research questions.

This study utilises an interpretivist, social-constructivist stance. This philosophical framework was adopted for several reasons. First, HEWBL is largely context-dependent not context independent (Lee et al., 2004). The context for learning and application of learning is relevant for HE work-based learners, consistent with a social-constructivist perspective. Qualitative researchers assume reality is socially constructed and research explains how people construct and understand their social world (Merriam, 2009). HEWBL is therefore consistent with qualitative methods that explore the subjective world of work-based learners’ experiences. Qualitative approaches explore, describe and interpret the complexity of learning situations within a work-based context. The research question necessitates description and interpretation of professionals’ learning experiences when engaged in HEWBL, therefore an interpretive approach is appropriate.

### **3.4 Research design**

#### **3.4.1 Case-study approach**

A case study approach was adopted comprising mini-case studies and in-depth case studies. A case study is an in-depth analysis of a particular case such as a pupil, class or school (Johnson and Christenson, 2014). Sixteen learners were selected as mini-case studies, who were primarily public sector employees aged over 25 engaged in professional roles within the police, education, engineering and business sectors. Two of these learners were selected for further in-depth analysis, presented as in-depth case studies. A case study approach is justified in this project on the grounds that although some research has been conducted into work and learning little empirical data focuses specifically on HEWBL (Costley, Abukari and Little, 2008). Case studies are valuable in this situation because they offer illustrative insights into areas of education in which little research exists (Merriam, 1998). The literature review (Chapter Two) shows reflective learning is central to many HEWBL programmes, yet its efficacy as a pedagogical strategy is contested. Case studies investigate contemporary issues within a real-life context effectively (Yin, 2003), penetrating learning situations that are not well understood. The approach is useful in developing insight into emerging workplace learning practices (Billett, 1996).

Merriam (1998) notes three categories of educational case study, namely, descriptive, interpretive and evaluative. Descriptive case studies are narrative accounts of a phenomenon which are not guided by theory; interpretive case studies focus on developing conceptual categories or theorising about phenomena; evaluative case studies attempt to make judgements about phenomena (Merriam, 1998). The cases utilised in this study is most closely aligned to the interpretive type. This is because the project attempts to search for patterns that conceptualise the ways in which professional praxis develops.

A second consideration when adopting a case-study approach is whether to use a single-case or multiple-case design. Single-case designs are appropriate when a researcher studies extreme or unique cases. Multiple-case designs are more appropriate when the researcher intends to compare findings to find patterns in data (Yin, 2003). A multiple-case study design was selected for this study because it sought to establish whether typologies of learners could be identified through their engagement in reflective practices. The intention of this study therefore, was to explore similarities and differences in praxis development amongst a group of learners and any reasons for those similarities and differences. To achieve this the multiple-cases selected included sixteen participants for shorter study presented as mini-case studies, two of which

were selected as in-depth illustrative case studies. This approach allowed for what Stake (2010) calls 'progressive focussing' which is a continuing focus on specific issues throughout case study analysis. In this study this was achieved by analysing sixteen mini-cases that enabled two distinct learner groups to be identified from the analysis of their data. From each of these two groups an in-depth case was selected and analysed to illustrate specifically the characteristics and behaviours of learners in each group.

Remanyi, Williams, Money and Swartz (1998) suggests that a research strategy provides the overarching framework for a project which includes the process and direction of the investigation. A rationale for a multiple-case design as an overarching research strategy for this study has been presented. This requires discussion in the context of alternative research strategies available. Any research strategy must fit the purpose of the study, the investigator's theoretical positioning, time and resources available and the depth and breadth of knowledge available on the topic (Saunders, Lewis and Thornhill, 2009). Yin (2003) suggests five research strategies social science researchers consider, namely, experiment, survey, archival analysis, history and case study. Historical research was not considered for this study because it is not suitable for studying contemporary issues (Yin, 2003). Archival analysis involving analysis of documents such as essays and diaries produced by participants can be a framework for the study since such documents can provide qualitative data illustrating the processes and outcomes of reflective learning. The use of secondary data would have saved time (Ghauri and Gronhaug, 2005). However, archived documents are problematic because these were not designed to answer the specific research question(s) of a particular study (Denscombe, 2010). For this reason, using archived documents as a strategy was discounted. In educational research, an experimental investigation involves development and testing of a hypothesis to determine the effectiveness of an intervention such as a learning strategy (Cohen, Manion and Morrison, 2011). Such a strategy was not deemed appropriate for this study for two reasons. Firstly, reflective learning within a HEWBL context is an emerging research area, hence stating a meaningful hypothesis is challenging. Secondly, an experimental approach is more suited to positivist research and therefore is incompatible with the author's position as a social constructivist and qualitative, interpretive researcher. A large-scale survey of HEWBL students was similarly discounted because of its association with positivism, the absence of context and limitations in the depth of enquiry surveys tend to achieve.

### 3.4.2 Data Collection Methods

Case studies allow multiple data collection methods to enable exploration of complex issues (Denscombe, 2010). Multiple methods is a strength of a case study strategy (Yin, 2003). Single methods in qualitative research restrict ways in which data can be analysed and understood. In contrast, pluralist methods provide multi-layered insights into participants' experiences and raise issues for analysis and interpretation (Frost et al., 2010). Hence, a 'pluralist' approach to data collection was adopted. Multiple methods also enabled methodological triangulation to ensure internal validity (Chamberlain, Cain, Sheridan and Dupuis, 2011). The pluralist approach enabled holistic views of participants' professional praxis development through the generation, analysis and interpretation of a rich data set.

Three qualitative methods of data collection were used:

1. A "Praxis Representation" (PRep) template designed for this study
2. Semi-structured interviews
3. Reflective essays completed as part of a reflective learning module (see Appendix B)

The methods selected were manageable in terms of timescale and permitted elicitation of data from participants working in diverse roles and organisational contexts. Additionally, the methods enabled methodological triangulation.

Participants first completed a PRep template (see Appendix C). The PRep template is a novel, in depth qualitative method designed for this study. This was preferred to a questionnaire because the template enhanced the depth and breadth of data needed to meaningfully answer the research question. The template was designed to provide an efficient method of evidencing participants' praxis development. These were followed by semi-structured interviews that provided opportunities for detailed discussion. These allowed participants to provide in-depth personal accounts and insights into development in the praxis learning domains. Although documentary evidence was discounted as an overall research strategy (see section 3.4.1) documents in the form of reflective essays offered a third data source that was readily available.

Two methods considered were participant observation and focus groups. Participant observation involving individuals being observed in their natural setting helps to illuminate context and provides insight into behaviours, relationships and actions (Mack, Woodson, MacQueen, Guest and Namey, 2005). However, participant observation was discounted

because data was too time-consuming to collect within the scale of the project. Additionally, observing participants in their work settings may have generated confidentiality issues arising from individuals' roles, for example as police officers. Focus groups provide insights into how a group of similar participants think and feel about specific issues (Johnson and Christenson, 2014). Although a type of focus group was included in the pilot study it was not particularly valuable in eliciting useful information from participants for the reasons discussed later in section 3.8. Focus groups tend to be valuable in helping to form and observe group norms rather than individual feelings and experiences (Mack et al., 2005). Thus, focus groups was discounted as a data collection method for the main study because this study seeks to illuminate the experiences of individuals rather than groups of participants. Group dynamics are not relevant to this process.

#### **3.4.2.1 The Praxis Representation (PRep) Template**

The PRep templates (see Appendix C) were designed specifically for this study to capture evidence from professionals. The template adapts Mulhall, Berry and Loughran's (2003) Content Representation (CoRe) tool which was designed to document science teachers' Pedagogical Content Knowledge (PCK). A reported benefit from the CoRe tool is gaining understanding of teachers' use of their knowledge about Science in a teaching context. This can be made explicit for guiding other teachers' practice (Mulhall et al., 2003). The PRep template is similar to the CoRe tool in that it allows contextualised knowledge to be captured - about praxis across four praxis learning domains. The PRep template invites reflection on outcomes of reflective learning across these domains; for illustrations of how theory and experiences inform practice; and implications arising for the future. Four PRep templates were designed - one for each praxis learning domain, each with a common structure. The structure is described next.

##### ***Page 1: Purpose, Instructions and Definitions***

The purpose of the template is described. Procedural details about how to complete the PRep, deadline for completion and how to return to the researcher are provided. Language used must be understandable to the target audience (Johnson and Christenson, 2014). Whilst the PRep does not include jargon or technical terms definitions of terms are provided to ensure as far as possible that questions have common meanings to all participants. Adams and Cox (2008) recommend including clear definitions or examples to ensure common understanding of terms used as good practice.

### ***Page 2: PRep grid***

Each column includes statements relating to possible outcomes of reflection. These statements are analogous to the “big science ideas” for teaching science represented in Mulhall et al. (2003) CoRe tool. The “big reflective ideas” in this study were identified initially from the 10 proposed outcomes of reflective learning identified in the literature review (see Table 2, p. 47) plus 7 further outcomes identified inductively from the pilot study (see Table 8, p. 74). Participants are asked to agree or disagree with each statement and, if they agree, to complete five open-ended questions listed in each row on the grid. The questions create a framework for reflection similar to Kolb’s (1984) experiential learning cycle (section 2.2.8, p. 38) in that they ask participants to describe their experiences, analyse them, drawing conclusions/new understandings and identify consequences and implications for future practice. Participants are also asked to reflect on their feelings about their experiences in line with Gibbs (1988) reflective model. The PRep questions were designed to help participants reflect on outcomes of reflective learning by collating evidence from working practices, documenting experiences and theories that led to the outcomes they describe systematically. Responses to the questions provide insight into their thoughts and feelings about their experiences and identify any implications for future practice. Johnson and Christenson (2014) suggest that qualitative questions should be used when finding out about how participants’ thoughts and feelings about experiences and why espoused beliefs are held. The questions on the grid include all these elements, collecting participants’ reflections on their thinking, feelings, experiences and beliefs.

### **3.4.2.2 Semi-structured interviews**

Interview types can be arranged on a continuum according to the degree of flexibility an interviewer has with regards to wording questions and asking questions not prepared in advance (Newby, 2010). In this study, interviews were used as a data collection method following completion of the PRep templates. The interviews provided an opportunity to obtain insights into participants’ thoughts and feelings about their experiences of reflective learning and its impact on professional practice, in so doing providing rich examples of praxis development. Using interviews triangulates PRep evidence.

The most appropriate interview type allowing the interviewer to probe participants about their responses to the questions in the PRep templates was considered. Three types of interview are used commonly, namely, structured, semi-structured and unstructured (Miller and Brewer, 2003). Structured interviews do not allow the interviewer to deviate from pre-prepared

questions, so the same questions are asked of all participants in exactly the same order (Newby, 2010). Structured, qualitative interviews simplify data analysis and allow comparisons between participant responses (Johnson and Christenson, 2014). A structured interview approach including interview questions closely matching those on the PRep templates offered a means of triangulating PRep data. However this was dismissed because data collected would have been a repetition of information already collected, with potentially little or no further elaboration. Structured interviews would therefore validate PRep data, but offer little additional insights. Unstructured interviews tend to be conversational and improvisational in nature with questions relating to the research topic being decided during the interview (Burgess, 1985). An unstructured interview approach may have been useful in exploring participants' experiences in depth, but would not have facilitated interviewer control, risking irrelevant material being generated rather than focusing on experiences highlighted in the PRep templates. Furthermore this would be ineffective for triangulating the PRep data. A semi-structured interview approach was selected because this provided the opportunity to plan key questions whilst being flexible enough to allow the interviewer to develop new lines of enquiry to expose new dimensions of issues being explored (Miller and Brewer, 2003). The combination of control over key topics to be covered whilst allowing flexibility for questions to emerge during the interview provided a sound basis for selecting a semi-structured interview approach to triangulate PRep template data.

An interview guide was developed (see Appendix D). Interview guides provide a useful structure from which to frame interviews (Seidman, 2006). The guide was structured similarly to the PRep template with specific questions based on statements relating to the outcomes of reflection grouped into the four praxis learning domains. The use of this guide in practice, illustrating a semi-structured rather than a structured approach to interviews is discussed in section 3.6.3.

### **3.4.2.3 Reflective essays**

Participants' reflective essays provided insights into how they became critically conscious of their own learning and professional practice through reflection. They were expected to write essays following completion of a Learning Recognition Development module (see Appendix B) which were submitted in March 2012. The assignment brief was as follows:

*Write a critical, reflective essay about your experiences undertaking the module, giving consideration to how the knowledge and skills you have developed relate to your professional practice.*

Word count guidelines for essays were 2000-2500 words and essays were assessed on the basis of participants showing evidence of a critical understanding of knowledge and skills relating to reflection gained during the module and the use of reflective theoretical models to analyse their professional practice.

An advantage of using documentary sources is that these provide relevant, easily accessible, rich data independent of the researcher (Silverman, 2011). Using reflective documents as a documentary source for qualitative research is well established. Silvia, Valerio and Lorenza (2013) analysed medical students' reflective journals to determine how the process promoted professional learning and practice. Letch (2012) found reflective journals a useful source of qualitative data to discover ways in which business students became reflective practitioners. Participants critically analysed their learning and professional practice using theoretical models.

One of the main justifications for including reflective essays as a source of qualitative data in this study was that they provided a readily available, in-depth insight into participants' use of theory in the development of their praxis. The critical role that theory plays in praxis was discussed in the literature review (see 2.2.3) and the reflective essays provided some in-depth, compelling examples of participants' understanding of the role that theory played in their learning. However, the main limitation of their use was the lack of breadth of data they provided in relation to other aspects of praxis development because they were not designed to answer the specific research question of the study.

### **3.5 Sampling strategy**

Sampling can adopt random or non-random techniques. Random sampling techniques allow selection of a representative sample from a wider population, enabling generalisations about

that population to be made (Cohen et al., 2011). Random sampling tends to be used in quantitative research rather than interpretive, qualitative studies (such as this one) which do not seek to generalise and non-random sampling tends to be used in qualitative studies that analyse complex phenomenon (Merriam, 1998).

This study used a purposive sampling technique, a type of non-random sampling. Purposive sampling requires a sample to be selected by the researcher based on knowledge that the sample is likely to produce the most valuable data to answer the research questions (Denscombe, 2010). Purposive sampling is useful in selecting information-rich cases for in-depth study to generate insight into issues being investigated (Patton, 2013). The purposive sampling adopted for this study was intensity sampling, an approach involving selecting rich examples of a specific phenomenon (Patton, 2013). Intensity sampling is useful when, as in this study, investigators wish to select cases that are of sufficient intensity to provide insight into the nature of achievements (Patton, 2013). Intense cases for example can include students who are particularly good at something i.e. being skilled reflective learners. This study sought cases which would help explain the impact and process of reflective learning. Therefore only learners who were sufficiently skilled reflective learners were selected. Selecting intense cases such as these illuminated praxis development of HE work-based learners through rich examples of their experiences. Another purposive sampling technique considered was extreme sampling. This involves selecting cases based on unusually extreme characteristics, such as outstanding successes or failures (Patton, 2013). Extreme sampling may have helped to reveal the most clear cut instances of praxis development, but was considered too narrow an approach because the study does not seek to explore unusual or unique manifestations of praxis. Furthermore, for a study of this size, selecting enough extreme cases to answer the research question in any meaningful way would be problematic.

The procedure for selecting the sample cases for the sixteen mini-case studies involved defining a sampling frame. In purposive sampling, a sampling frame is a resource from which the smaller sample is selected (Mason, 2002). The sampling frame in this study comprised a list of 117 part-time students in full-time employment who enrolled on RU's WBS programme. The intensity sampling strategy required a sample to be selected which would represent 'successful' but not unusually successful reflective learners. Cases were selected on the basis of marks achieved for a reflective learning module they had all studied. Individuals who achieved between 60-79% for their reflective essay were selected on the basis that this represented learners who had produced either 'very good' (60%-69%) or 'extremely good' (70%-79%) reflective essays according to RU's undergraduate marking criteria. A further criterion for selection was that

students were at the same stage on the WBS programme so only students who enrolled in October 2011 were selected. Table 4 illustrates how many participants were selected by applying the criteria described.

Total number in the sampling frame (learners enrolled on programme)	117
Total number enrolled on programme in October 2011	38
Total number achieving between 60%-79% for their reflective essay	22
Total number agreeing to participate	17

**Table 4 Sample selection**

Of seventeen participants agreeing to participate, fourteen were selected to participate in the main study only, two were selected to participate in both the pilot study and the main study and one was selected to participate in the pilot study only. Thus two of the sixteen participants included in the main study, were also in the pilot study. Little guidance about an appropriate sample size for multiple case studies exists (Small, 2009). Patton (2013) suggests there are no rules for sample size in qualitative investigations. Given resource and time limitations for qualitative studies, researchers attempting to determine an appropriate sample size for multiple-case studies must balance breadth and depth (Patton, 2013). Merriam's (1998) assertion that greater numbers of cases in multiple-case study designs leads to convincing analysis was an important factor in deciding on a sample size of sixteen for study. This is large for a multiple-case study design, but using these sixteen participants as mini-case studies from which only two were selected as in-depth case studies made it a viable strategy. Furthermore, sixteen cases provided the necessary range to seek patterns and draw comparisons. The two in-depth cases were selected on the basis that they provided clear illustration of the characteristics of learners in both learner groups identified through the analysis of the mini-case studies (see section 5.2).

Participants selected were primarily public sector employees aged over 25 engaged in professional roles. To ensure anonymity, pseudonyms are used throughout. The pilot study participants are described in Table 6, p 65. A description of main study participants is provided in Table 20 (p. 97).

### 3.6 Data collection process

#### 3.6.1 Reflective essays

All participants' submitted 2500 word reflective essays (see section 3.4.2.3, p. 58) in March 2012. These essays formed the summative assessment for a reflective learning module called "Learning Recognition and Development" (see Appendix B) undertaken from October - December 2011. The purpose of this module was to develop learners' reflective learning skills.

#### 3.6.2 Completion of Praxis Representation (PRep) templates

The four PRep templates were completed by the sixteen participants over eleven weeks. The schedule for distribution and return is shown in Table 5. The PRep templates were distributed and returned by email. This offered a quick, easy and cheap method of distribution and return and did not rely on participants being in a specific geographical location.

<b>PRep no. (Appendix C)</b>	<b>Praxis domain</b>	<b>Sent</b>	<b>Returned</b>
1	Affective learning	01/03/13	13/03/13
2	Lifelong learning	20/03/13	03/04/13
3	Professional learning	11/04/13	25/04/13
4	Organisational learning	03/05/13	17/05/13

**Table 5 PRep template distribution and return schedule**

The response rate for all templates was 100%. Three factors influenced this:

1. There was a gap of one week between the deadline for returning one PRep template and distribution of the next. This was deliberate based on findings of the pilot study (see section 3.8). On several occasions non-respondents were followed up by email and/or telephone. Cohen et al. (2011) suggest a factor in achieving high response rates for questionnaires is a follow-up strategy for non-respondents.
2. Participants were provided with a detailed information sheet describing the study and what was expected of them and a consent form (see Appendix E). All had provided signed consent, indicating their commitment to the study.

3. Approximately two weeks were given to complete and return each PRep template. This recognised the complexity of the task.

Procedures for collecting data using the PRep templates worked well. The time allocated for completion was sufficient, the follow-up strategy for non-respondents was effective and participants did not report any difficulties understanding or completing the templates.

### **3.6.3 Interviews**

Following completion of the PRep templates, participants were contacted by email to arrange a suitable time and location to be interviewed. Participants were given the choice of being interviewed at RU or in their own workplaces. The location of interviews may influence the interview itself, so is important (Atkinson and Hammersley, 2007). For pragmatic reasons fourteen participants chose the workplace as an interview location. The workplace offered a convenient site because interviews could be scheduled to fit in with participants' working patterns, and, took place in familiar environments. All interviews took place in quiet rooms which allowed participants to speak freely without interruption or being overheard. Interviews were conducted over four months from July - October 2013. Johnson and Christenson (2014) highlight the importance of establishing a good rapport and trust between interviewer and interviewee by ensuring the purpose and structure of the interview is fully explained and ensuring participants know their responses will remain confidential. Hence at the beginning of each interview the interviewer delivered a short introduction. This explained that interview questions would relate to the four completed PRep templates, would last for approximately one hour, be digitally recorded, fully-transcribed and remain confidential. Finally, participants were given the opportunity to ask questions to clarify any issues relating to the project in general or the interviews in particular. The researcher had established positive student-teacher relationships with all participants through his role as a Lecturer on the WBS programme. This aided smooth running of the interviews. Ethical issues arising from lecturer-researcher duality are explored in section 3.7.

The interview guide (see Appendix D) provided a useful structure in which to frame interviews, but needs to be used with caution (Seidman, 2006). Participants may need prompting to help facilitate reconstruction of their experiences. Following a scripted semi-structured interview guide too prescriptively may inhibit this facilitative process (Seidman, 2006). A conversational interview style is likely to provide greater breadth and depth of response to issues under examination than an overly formal approach (Best and Kahn, 1989). To maintain a

conversational and situational approach to interviews participants were encouraged to talk freely about their thoughts and feelings about the process and outcomes of reflective learning. Questions were open-ended thus the interviewer was free to include follow-up questions to participants' responses to explore in depth responses given to questions on the PRep templates. This enabled the interviewer to probe deeply; stimulate participants' insight into their thoughts, feelings and experiences relating to reflective learning; and enable reflection on and recall of their authentic stories in their own ways and words.

Interviews lasted between 45-80 minutes. Word for word transcription is preferable to other methods such as writing notes based on interviewees' responses because this avoids potential interviewer bias (Lacey and Luff, 2001).

### **3.7 Ethical considerations**

Educational researchers have the democratic right to ask questions and express ideas while also respecting the truth and ensuring that participants' dignity and privacy are respected (Bassey, 1999). Therefore consideration must be given to research ethics. Prior to conducting the study ethical approval was sought from Durham University's School of Education ethics committee. Once ethics approval was granted in March 2012 the study began. The initial pilot study and main study followed the same process. Firstly, an email inviting participation in the study was sent with a detailed information sheet and a consent form (see Appendix E). Participants were informed of the purpose of the study, what was expected of them, their right to withdraw and what would happen to information they provided.

There were a number of ethical considerations. First was a decision not to preserve participants' anonymity from the researcher. Anonymity means the researcher has no way of knowing who the research participants are and is the best way of protecting their privacy (Johnson and Christenson, 2014). In this study, participants were invited to take part in the study by the researcher, returned their PRep templates by personal or work email and participated in face-to-face interviews. Anonymity was not possible because identification of participants from their PRep templates was necessary so their responses could be explored in more depth during interviews. Furthermore, maintaining anonymity during face-to-face interviews is impossible (Cohen, et al., 2011). Where anonymity cannot be achieved protecting participants' privacy is essential, for example, by ensuring that data collected are confidential which means not disclosing participants' identities (Johnson and Christenson, 2014). Confidentiality was achieved in various ways. All data relating to participants including consent

forms, completed PRep templates, interview transcripts and digital recordings of interviews were stored electronically on a password protected computer with files only accessible to the researcher. Participants are not identifiable in the thesis and have been given pseudonyms. Their employers are not named ensuring participants' responses are not traceable to individual employees.

Secondly, the inconvenience to students caused by the time taken to complete PRep templates and be interviewed was considered. This was minimised by splitting PReps into four separate templates which could be completed individually over eleven weeks and by scheduling interviews at participants' convenience.

Thirdly, Seidman (2006) recognises that participants may disclose personal information during research interviews which causes emotional discomfort. Reflecting on emotions plays a crucial role in learning from reflection (Dewey, 1933; Kolb, 1984). Although topics discussed during interviews do not seem to be sensitive, the interviewer sought to examine participants' experiences of reflective learning from emotional and cognitive perspectives. This feature of the study coupled with the fact that some participants were employed in roles with high emotional demand (e.g. police officers) required careful consideration so anxiety, distress or embarrassment were minimised. This was achieved by, for example, ensuring that interviews took place in a quiet, private and familiar setting (see section 3.6.3). Questions were worded sensitively and participants were informed within the preamble that they could take a break if they felt uncomfortable at any point.

Finally, the dual role of the researcher as lecturer and researcher was considered. Some ethical concerns arising from lecturer-researcher duality are highlighted by Regan (2013). A main fear highlighted is the power differential between lecturers and students. Students invited to participate in research by a lecturer may be concerned that declining may impact negatively on them, for example, gaining unfavourable grades for assignments or a less positive teacher-student relationship (Regan, 2013). Students may therefore feel coerced into participating even though this is not the researcher's intention. Although this risk could not be completely eliminated, efforts were made to mitigate risk. Data collection was not carried out during timetabled classes, so students did not feel they had to 'opt out' of a perceived teaching and learning activity. All participants had received their reflective essays grades, ensuring non-participation could not have been interpreted as disadvantaging them. The written information provided to participants clarified they were not under any pressure to participate and could withdraw from the study at any time without giving a reason.

### 3.8 The pilot study

Conducting a pilot study helps identify methodological and practical issues relating to the research design of a main study (Yin, 2011). The effectiveness of the data collection methods used and processes for delivering them can be assessed prior to revision and improvement for the main study (Kilbourn, 2006). In this study a pilot study was conducted for three main reasons:

1. To examine the extent to which the data collection methods (PRep templates, semi-structured interviews and reflective essays) yielded useful data to answer the research question.
2. To identify any problems with regards to the data collection processes and procedures.
3. To determine whether the four praxis learning domains identified deductively through the literature review have validity and could be used as *a priori* themes for use in the main study.

Three participants were selected to take part in the pilot study using the sampling strategy outlined in section 3.5 (p. 58). Two, Daniel and Olive, became participants in the main study. Table 6 describes each pilot study participant.

<b>Name</b>	<b>Age</b>	<b>Occupation</b>	<b>Employing Organisation</b>	<b>Description</b>
Daniel	47	Operations Supervisor	Oil and Gas Pipe Manufacturer and Installer	Responsible for the day-to-day operation of a marine testing facility and for maintaining and enhancing customer relationships.
Olive	48	Early Years Education Lecturer	Further Education College	Responsible for the design and delivery of a range of Early Years Education programmes (levels 1-4 on the National Qualifications Framework) and related courses and is course leader of several courses.
Jane	46	Assistant Senior Tutor	University	Provides advice and guidance to students on a range of issues relating to student welfare including student accommodation, admissions and general student wellbeing.

**Table 6 Description of pilot study participants**

Data collection was undertaken over eight weeks and consisted of completion of four pilot PRep templates, a focus group discussion and individual semi-structured interviews. Students' reflective essays were collated during this period.

Each pilot PRep template (see Appendix F) was sent out in consecutive weeks by email with one week allowed for completion and return by email. Participants then met as a group two weeks post-completion of the final PRep to share, discuss and reflect on their responses. The focus group session allowed participants to check common understanding of questions and to elaborate on, or amend answers. Instructions provided to participants for the focus group discussion are in Appendix G. Following the focus group session an interview guide was developed (see Appendix H) and semi-structured interviews were arranged and conducted at participants' work places. Interviews lasted between 30 and 45 minutes and were digitally recorded and fully transcribed.

The procedures for collecting data using the PRep templates worked well, however reminders had to be sent to all participants during the data collection process when they failed to meet completion deadlines. Feedback indicated participants felt the language used in the PRep templates was very formal but understandable because of the clear definitions provided. Participants also thought the questions were complex and required detailed answers that were difficult to provide in the timescales required given their other time commitments. In the main study, time to complete the PRep templates was extended, with a gap between the submission deadline for returning one PRep template and sending out the next to allow time for following-up non-completers.

The time allocated to the focus group session was adequate. Participants did not report any difficulties understanding the purpose or requirements of the session. However, on examination of the final updated PRep templates the researcher discovered that few changes had been made to the original documents. The changes were superficial, such as to grammar or slight rewording. When questioned, participants reported they did not find the session useful in helping them to explore their understanding of questions or elaborate on answers. Hence, as the group session required time commitment for little gain in terms of depth and breadth of data collected, a focus group was not included in the main study.

However, one positive outcome of the focus group was to assist in confirming the reliability of the PReps by allowing pilot study participants to verify and confirm that their understanding of the five questions on the PRep was the same and that the answers they had provided as a

group were consistent with the questions. Involving two or more participants in this way is acknowledged as a useful method of improving internal reliability in small scale research projects where multiple researchers are not feasible (Nunan, 1999). Increasing reliability of PReps was assisted by ensuring that the same questions, instructions and definitions of terms were included for all participants. Additionally, PReps were independently assessed by an academic colleague. This is a type of third party verification known as a peer review and is a useful way of ensuring reliability in qualitative research (Long and Johnson, 2000). In this study, the academic peer-reviewer had over ten years' experience in the design and delivery of HEWBL programmes. She had an in-depth understanding of the concepts of reflective learning having extensively delivered reflective learning workshops to HE learners and having completed research into the use of reflection in developing experiential learning portfolios. The researcher explained to the reviewer the purpose of the PRep, the rationale behind its design and how the data was collected. The reviewer was provided with the PReps completed by all three participants and independently checked for consistency between questions and answers. A discussion between the researcher and reviewer then took place with the reviewer verifying that the participants had interpreted the questions correctly and that their responses were consistent with the questions i.e. there was a good match between questions and answers. Having checked the reliability of the pilot PReps using the procedures outlined, their overall design including the five questions remained the same for the main study.

Semi-structured interviews were conducted using the pilot interview guide (see Appendix H) in a relaxed, informal and conversational style. The pilot interviews were valuable for assessing and improving the researcher's interview skills. After examination of the first of three pilot interviews I took further steps to change my role from lecturer to researcher. The interviews were conducted within my 'comfort zone' rather than the less familiar researcher role which carried a sense of risk and possibility of failure. This manifested itself in being over directive, talking too much and being tempted to debate participants' answers. This insight enabled me to adjust the remaining two interviews to being less directive, listening carefully and consciously thinking about my feelings and actions during the interview process. The pilot interviews enabled assessment of the effectiveness of the pilot interview guide. The guide provided a useful structure for the interviews, but the pre-defined questions proved problematic. Each question was too broad. Apart from the introductory question, all questions had too many component parts. Each related to a whole praxis learning domain which meant that participants found it difficult to know which aspect of the domain to focus on when answering the question. In practice, during the pilot interviews I simplified questions by breaking them down to focus on one aspect of the process and outcome of reflective learning,

such as “emotions”. The interview guide was therefore changed for the main study (see Appendix D) to provide a structured approach that closely matched how pilot study interviews were conducted in practice. Despite the issues identified, the interviews elicited useful information. They provided an opportunity for participants to provide in-depth information and elaborate on examples of the process and outcomes of reflective learning outlined on the PRep templates.

Following collection, data were examined to determine whether extracts could be matched to the four praxis learning domains identified in the literature review (Table 2, p. 47), and specifically the ten statements in each PRep template which were based on the specific outcomes of reflective learning also specified in the literature review (Table 2, p. 47). Detailed data coding was not performed because it was not deemed to be a necessary step in determining the validity of the domains. Table 7 shows selected changes to praxis compiled from each source and matched to PRep statements in each of the praxis learning domains. This table shows that all three data sources, namely PRep templates (P), interview transcripts (I) and reflective essays (R) yielded data which could be matched to each praxis learning domain statement .

Praxis learning domain description	PRep statement: Reflection helps learner workers...	Jane	Olive	Daniel
<b>Affective learning:</b> Understanding and expressing emotions, attitudes, values beliefs and assessing and improving self-worth	...improve self-esteem	Improved self-esteem as a consequence of critically reflecting on learning journal entries which demonstrate competence in work role (P, I)	Raised awareness of how own self-esteem is affected by factors such as self-doubt and ego (P, I)	Improved self-esteem through personal and academic recognition of the value and significance of learning gained through work over a 30 year period (P, R, I)
	...improve motivation	Awareness of personal motivators has helped develop strategies for maintaining motivation (P, I)	Reflective learning activities have provided insight into own motivations, emotions and attitudes resulting in a strong desire to become a proficient reflective practitioner (P, R, I)	Improved motivation gained from understanding that work is a source of deep learning has resulted in new professional and personal development opportunities (P, R, I)
	...identify and question underlying attitudes, values and beliefs	Keeping a reflective learning journal to reflect on and challenge attitudes, feelings, behaviour and decisions (P, R, I)	Enhanced capacity to reveal inner feelings and challenge pre-conceived ideas (values, attitudes) about self (P, R, I)	
	...be open to change	Reduced fear of change in the workplace. (P, I)		Changed attitude to work-related change: now embraces and is pro-actively involved in changes in contexts relating to continuous improvement (P, I)

Praxis learning domain description	PRep statement: Reflection helps learner workers...	Jane	Olive	Daniel
<p><b>Lifelong learning:</b></p> <p>Continuously develop and improve skills and knowledge to become better learners and enhance career development</p>	<p>...recognise, evaluate and improve learning</p>	<p>Enhanced curriculum vitae to include previously unacknowledged learning and development (P, I)</p> <p>Keeping a reflective journal to document learning and development and identify learning needs (P, R, I)</p> <p>Embraces new methods of learning (P, R, I)</p>	<p>Critically reflected on own reflective learning skills to identify skill level on the 'competency ladder' and to identify future learning needs (R, I)</p> <p>Enhanced understanding of the ways in which she prefers to acquire new knowledge and skills and how it can be improved (R, I)</p>	<p>Consciously (rather than unconsciously) learning through work has resulted in a sense of ownership of both work and learning (P, I)</p> <p>Constantly reviews, evaluates and improves own learning using the reflective process (P, R, I)</p> <p>Reflected on learning and practice using team development and change theory to understand and plan learning (P, R)</p>
	<p>...evaluate career goals and ambitions</p>	<p>Examined career goals critically to reinforce goals and ambitions (P, I)</p>		<p>Personal acknowledgement of the value of own significant learning gained through work has been a catalyst for change with regards to ambition and career goals resulting in significant promotion (P, I)</p> <p>Changed mindset relating to purpose of work – now sees it as a vehicle for personal and career advancement not just a job (P, I)</p>

Praxis learning domain description	PRep statement: Reflection helps learner workers...	Jane	Olive	Daniel
<b>Professional learning:</b> Develop and validate professional practices within specific organizational and professional contexts	...validate existing professional practices	Keeping a reflective learning journal to document, validate and reflect on professional practices (P, I)		Critically reflected on complex practices relating to increasing machine capacity utilisation and manufacturing processes to confirm their effectiveness (P, I)
	...extend professional practice	Seeks advice from other professionals to gain a holistic view of work based problems to evidence decision making (P, I)  Uses a critical approach (rather than an instinctive approach) to decision making relating to professional role (P, R, I)	Incorporated new reflective learning strategies into own teaching to help students become better reflective practitioners (P, R, I)  Critically reflecting on own and others examples of reflecting-in-action and reflecting-on-action in a professional context has provided awareness into own decision making and cognitive processes resulting in a more rational approach to planning, decision making and action (P, R, I)	Contextualised and applied reflective learning theory in practice to identify errors in decision making processes, clarify problems and plan future actions relating to manufacturing process improvements (P, I)

Praxis learning domain description	PRep statement: Reflection helps learner workers...	Jane	Olive	Daniel
<b>Organisational learning:</b> Create, capture and transfer new knowledge and enhance learning and change	...convert tacit knowledge into explicit knowledge	Developed best working practices relating to various student support scenarios e.g. repatriation of students (P, I) Developed case studies using reflective learning journal as a source of information to train new staff (P, I)		Shares knowledge relating to manufacturing problems to change manufacturing processes (P, I, R)
	...implement changes in organisations			Promote new continuous improvement culture (P, I)  Initiated the development of Communities of Practice (P, I)

Data source:

P = PRep      I = Interview      R = Reflective essay

Table 7 Changes reported by pilot study participants mapped to praxis learning domains

However, the data also generated outcomes not represented by any of the statements in the pilot PRep templates. For example:

- Daniel reported significantly improved self-confidence through reflecting on significance of his learning over a 30 year period (P, I, R)
- Jane and Daniel strongly identified themselves as learner-workers as a consequence of reflective learning (P, I)
- Jane and Daniel used reflection to identify gaps in their skills and knowledge, thus identifying learning needs (P, I)
- Daniel engaged in deep learning by critically reflecting on theoretical ideas relating to team and change theory (P, I, R)
- Daniel, Olive and Jane reported using reflection as a means of making rational, evidence based professional decisions (P, I)
- Daniel reflected on organisational culture to help him understand how the organisation constrained him professionally (I, R)
- Daniel and Jane helped to facilitate transfer of tacit knowledge to others in their organisations (I, P)

Consequently, the PRep templates and interview guides were amended for the main study to incorporate these outcomes, each relating to a specific domain incorporated into the PRep template and interview questions used in the main study. These additional outcomes are shown in Table 8.

The pilot study proved helpful in piloting data collection processes and methods to identify improvements needed for the main study. Changes to data collection processes included:

1. Removing the focus group
2. Increasing time for participants to complete the PRep templates to two weeks each
3. Including a one week gap between the deadline for returning one PRep template and distributing the next to allow time for chasing up non-respondents

#### 4. An improved interview technique

Changes were made to PRep templates (see Appendices C and F) and interview guides (see Appendices D and H). The pilot study confirmed reliability of the data collection methods and usefulness in eliciting data. The praxis learning domains were confirmed as valid *a priori* themes for main study data collection and analysis.

Praxis learning domain	Statement
Affective	<ul style="list-style-type: none"><li>• Reflection helps to improve learner-workers self-confidence</li><li>• Reflection helps learner-workers define/re-define their self-identity</li></ul>
Lifelong	<ul style="list-style-type: none"><li>• Reflection promotes deep learning</li><li>• Reflection helps learner-workers to identify their learning and development needs</li></ul>
Professional	<ul style="list-style-type: none"><li>• Reflection helps learner-workers to improve learner-workers professional decision making skills</li><li>• Reflection helps learner-workers to understand the organisational context in which they work and learn</li></ul>
Organisational	<ul style="list-style-type: none"><li>• Reflection helps to facilitate the transfer of learner workers knowledge to others in the organisation</li></ul>

**Table 8 New outcomes for inclusion in main study**

### 3.9 Data Analysis

Qualitative data analysis creates order from rich qualitative data enabling interpretation to answer research questions (Newby, 2010). A rigorous and systematic approach to qualitative data analysis is required to prevent poor results (Pope, Ziebland and Mays 2000). However, qualitative data analysis is messy and time consuming (Marshall and Rossman, 2011) with few accepted standards for its execution (Miles and Huberman, 1994). For this study, three methods were considered, namely, qualitative content analysis, thematic analysis and grounded theory.

Content analysis is a quasi-statistical method of analysing textual data in which explicit, mutually exclusive codes are determined, counted and compared to determine valid inferences from text (Weber, 1990). Content analysis lacks compatibility with the interpretivist, social-constructivist stance taken by the researcher, so was discounted for this study. For example, this method does not allow for supporting excerpts in participants' own words to illustrate how

respondents make sense of the world. Co-coding, also used in this study, is not supported by this method.

Grounded theory is an inductive approach that involves coding data, contrasting and comparing findings and making connections between data components (Cohen et al., 2011). Such an approach allows rich and original findings to emerge but does not allow the researcher to engage with literature relating to research questions prior to data analysis to determine *a priori* themes. Grounded theory is a purely inductive, bottom up strategy considered too inflexible approach for this study. Furthermore, full grounded theory is achievable in large-scale research projects (Pidgeon and Henwood, 1997) rather than small projects such as this one.

Thematic analysis involves interpreting qualitative data by searching and sorting into themes or patterns leading to comprehensive explanations (Boyatzis, 1998). Thematic analysis was selected as the primary method of analysing the qualitative data in this study. In contrast to grounded theory thematic analysis is not bound to a specific theoretical framework (Braun and Clarke, 2006). For example, it can be used deductively and inductively to analyse data (Hayes, 2000). This top-down and bottom-up approach is compatible with this study in which limited *a priori* themes (praxis learning domains) were derived from literature relating to the research question (deductive), whilst others emerged from the data during the analysis (inductive). Thematic analysis is suitable when the researcher intends to discover and explain participants' behaviours, actions and thoughts; and helps understand current practices (Alhojailan, 2012). A thematic approach therefore helps illuminate how participants' developed praxis through a reflective approach with specific emphasis on their behaviours, actions and thoughts. However, despite its popularity as a qualitative analytic method there is little agreement about how thematic analysis should be carried out (Boyatzis, 1998; Attride-Stirling, 2001).

The thematic analysis technique selected for this study was a modified form of template analysis. Template analysis provides a structure, applicable to textual data including interview transcripts, answers to open questions and reflective documents (King, 2012). Thus, the approach is appropriate for all three textual documents used in this study, that is, reflective essays, PRep templates and interview transcripts. The technique is useful for examining individuals' perceptions within an organisational context (King, 2012) so is suitable for a study in which organisational contexts are important features.

Template analysis involves developing an initial coding scheme based on a subset of data and/or *a priori* themes, applying this to the full data set, then revising and modifying where

inadequacies are discovered (King, 2012). Template analysis allows data to be co-coded and organised into hierarchies with general themes near the top and defined sub-themes emerging below as analysis progresses (King, 2012). The final template and coded data provide the basis for the researcher's interpretation (King, 2012). The technique provides a systematic way of ordering data, whilst being sufficiently flexible to be modified (King, 2012).

The technique comprises six main stages namely:

1. Defining *a priori* themes
2. Transcribing interviews
3. Initial coding of data
4. Produce an initial template
5. Develop the template
6. Interpret findings

For this study whilst all six stages were carried out, a further two stages were added between stages 5-6. This study aimed to map praxis across four praxis learning domain therefore these additional stages enabled this process. The additional stages are an extension of the template analysis technique which allows quantification and graphing to aid data reduction and interpretation. Thus, these stages of data analysis were followed:

1. Defining *a priori* themes,
2. Transcribing interviews,
3. Initial coding of data,
4. Produce an initial template,
5. Develop the template
6. Summarise the data into tables
7. Produce praxis learning maps of each participant
8. Interpret findings and write up

The extension of template analysis contributes methodologically by enabling praxis to be mapped across four domains thus making participants' learning explicit.

### ***Stage 1: Define a priori themes***

In template analysis *a priori* themes relating to the research question can be identified prior to data being analysed (King, 2012). Four *a priori* praxis learning domains were identified in the

literature review (Table 2, p. 47). The pilot study confirmed these as valid. These domains were used as level 1 *a priori* themes described in Table 9.

Level 1 <i>a priori</i> themes (praxis learning domains)	Description
1. Affective Learning	Understanding and expressing emotions, attitudes, values and beliefs and assessing and improving self-worth
2. Lifelong Learning	Continuously develop and improve skills and knowledge to become better learners and enhance career development
3. Professional Learning	Develop and validate professional practices within specific organisational and professional contexts
4. Organisational Learning	Create, capture and transfer new knowledge and enhance learning and change

**Table 9 *a priori* themes (level 1)**

Sub-themes based on the seventeen statements on the PReps were considered. The resulting initial template would have been identical to the framework used in the PRep templates. The use of additional *a priori* themes was discounted. Firstly, King (2012) advises limiting the number of *a priori* themes because too many results in narrow data analysis. Secondly, including *a priori* themes closely related to the questions asked of participants during data collection means there has been little analysis to identify patterns. Consequently, poor analysis emerges (Braun and Clarke, 2006). Thus, the *a priori* themes identified were considered as provisional and used cautiously (King, 2012) with the researcher bearing in mind these could be modified or discarded if they did not prove useful.

**Stage 2: Transcribe interviews**

Interviews were digitally recorded then transcribed word for word, resulting in sixteen transcriptions, one transcript per participant. Transcribing interviews word for word is preferable to writing summary notes that may bias transcription by only including sections that seem significant to the interviewer (Lacey and Luff, 2001).

**Stage 3: Initial coding of data**

In template analysis, deciding the point at which an initial template is created is vital (King, 2012). An initial template tends to be based on a sub-set of data. Although the number of data-

sets is not prescribed, practical considerations of time and diversity of participants' descriptions of their experiences should be considered (King, 2012). In this study, reading all the PRep templates provided a reasonable basis on which to assess the extent of diversity. Consequently initial coding in the main study was carried out on data relating to two participants (Eve and James). All three data sources (interview transcripts, reflective essays and PRep templates) for Eve and James were coded. To aid coding the tabulated format of PRep templates data, responses were copied to a new, non-tabulated Microsoft Office 2013 document. Coding was carried out using Microsoft Word's *New Comment* function within the Review toolbar to attach preliminary themes to highlighted sections of text that are relevant to the research question. Each coded piece of text was prefixed with a P (to represent a PRep template), an I (interview transcript) or an R (reflective essay) followed by a number representing its location within the document.

***Stage 4: Produce initial template***

Following the initial coding of two participants' data, level 2 sub-themes were organised meaningfully by matching them to the relevant praxis learning domains producing an initial coding template (Table 10). Eleven new level 2 sub-themes were identified which were matched to praxis learning domains.

<b>Level 1 Praxis learning domains</b>	<b>Level 2 sub-themes</b>
1. Affective Learning	1.1 Confidence & self-esteem 1.2 Supporting & mentoring colleagues 1.3 Motivation 1.4 Openness to change
2. Lifelong Learning	2.1 Evaluate and improve learning 2.2 Career goals and ambitions 2.3 Deep learning
3. Professional Learning	3.1 Decision making 3.2 Validating & applying new knowledge, skills and practices
4. Organisational Learning	4.1 Capturing & transferring knowledge 4.2 Initiating learning to change

**Table 10 Initial coding template**

***Stage 5: Develop the template***

Data are coded by applying the template to each source in turn, modifying the scheme where inadequacies are discovered (King, 2012). Development is iterative, involving re-coding earlier versions when a new template is developed (King, 2012). This process involved development of two significant further versions of the template.

*Version 2:*

Significant changes were made to the initial template at levels 2 and 3 of the hierarchy based on the data of six participants (Eve, James, Simon, Haley, Sarah and Anna). Table 11 shows changes made at level 2, with a rationale for each.

Change	Rationale	Praxis learning domain
<p>New level 2 sub-theme added: <i>Self-awareness</i></p> <p>Level 2 sub-theme <i>Confidence &amp; self-esteem</i> became a level 3 sub-theme of <i>Self-awareness</i></p>	<p>Data showed that participants became more aware of their feelings, behaviours and personality traits but there were no other themes that represented these changes.</p> <p>Provides a clearer understanding if <i>confidence and self-esteem</i> is seen as one aspect of self-awareness</p>	Affective
<p>New level 2 sub-theme added: <i>Managing working relationships</i></p> <p>Level 2 sub-theme <i>Supporting &amp; mentoring colleagues</i> became a level 3 sub-theme of <i>Managing working relationships</i></p>	<p>A broader theme than <i>supporting &amp; mentoring</i> others was required to represent interactions with others in the workplace</p> <p>The notion of supporting &amp; mentoring others can be better considered in the context of <i>managing working relationships</i></p>	Affective
<p>New level 2 sub-theme added: <i>Change initiatives</i></p> <p>Level 2 sub theme <i>Initiating learning to change</i> became a level 3 sub-theme of Change initiatives</p>	<p>Data shows that there are two aspects to change – supporting and initiating.</p> <p>Initiating change seen as one aspect of change initiatives that needs to be distinguished from supporting change</p>	Organisational

**Table 11 Changes to level 2 themes**

New level 3 sub-themes were added as shown in Table 12. Changes to level 2 themes and new level 2 sub-themes resulted in version 2 of the coding template which is shown in Table 13.

<b>New level 3 sub-themes</b>	<b>Rationale</b>	<b>Praxis learning domain</b>
Impact of own behaviour & feelings on others and self	A sub-theme of <i>self-awareness</i> to represent participants' awareness of the impact their behaviour and emotions has on themselves and others.	Affective
Impact of others behaviour on self	A sub-theme of <i>self-awareness</i> to represent participants' awareness of the impact others behaviour has on them	Affective
Conflict management	A sub-theme of <i>managing working relationships</i> to represent participants ability to deal with conflict in the workplace	Affective
Open-mindedness	A sub-theme of <i>managing working relationships</i> to represent participants willingness to consider different perspectives from colleagues which may conflict with own attitudes and beliefs	Affective
Initiating & sustaining action	A sub-theme of <i>motivation</i> to represent participants passion about driving themselves forward to succeed in their goals	Affective
Effort equals success	A sub-theme of <i>motivation</i> to represent participants understanding of the relationship between effort and success	Affective
Objective evaluation of change	A sub-theme of <i>openness to change</i> to represent participants ability to objectively weigh up pros and cons of change	Affective
Accept and adapt to change	A sub-theme of <i>openness to change</i> to represent participants ability to try out and adjust to new unfamiliar ideas and experiences	Affective
Analysis of own behaviour and practice using theory	A sub-theme of <i>deep learning</i> to represent how participants used theory to analyse their behaviour	Lifelong

<b>New level 3 sub-themes</b>	<b>Rationale</b>	<b>Praxis learning domain</b>
Analysis of others behaviour and practice using theory	A sub-theme of <i>deep learning</i> to represent how participants used theory to analyse others behaviour	Lifelong
Analysis of organisation using theory	A sub-theme of <i>deep learning</i> to represent how participants used theory to analyse their own organisation	Lifelong
Consulting and collaborating	A sub-theme of <i>decision making</i> to the role of consulting with other professionals in the professional decision making process	Professional
Decision making methods	A sub-theme of <i>decision making</i> to represent the methods/tools used by participants in making professional decisions	Professional
Validating knowledge skills and practices	A sub-theme of <i>validating and applying new practices</i> to represent how participants validated their practices	Professional
New practices	A sub-theme of <i>validating and applying new practices</i> to represent participants new professional ways of working	Professional
Supporting learning and change	A sub-theme of <i>change initiatives</i> to represent supporting organisational learning and change	Organisational

**Table 12 New level 3 sub-themes incorporated into coding template version 2**

Level 1 Praxis learning domains	Level 2 sub-themes	Level 3 sub-themes
1. Affective Learning	1.1 Self-awareness	1.1.1 Confidence and self esteem
		1.1.2 Impact of own behaviour & feelings on others and self
		1.1.3 Impact of others behaviour on self
	1.2 Managing working relationships	1.2.1 Supporting and mentoring colleagues
		1.2.2 Conflict management
		1.2.3 Open-mindedness
	1.3 Motivation	1.3.1 Initiating and sustaining action
		1.3.2 Effort equals success
	1.4 Openness to change	1.4.1 Objective evaluation of change
		1.4.2 Accept and adapt to change
2. Lifelong Learning	2.1 Evaluate and improve learning	
	2.2 Career goals and ambitions	
	2.3 Using theory to deepen learning	2.3.1 Analysis of own behaviour and practice using theory
		2.3.2 Analysis of others behaviour and practice using theory
		2.3.3 Analysis of organisation using theory
	3. Professional Learning	3.1 Decision making
3.1.2 Decision making methods		
3.2 Validating & applying knowledge, skills and practices		3.2.1 Validating knowledge skills and practices
		3.2.2 New practices
4. Organisational Learning	4.1 Capturing & transferring knowledge	
	4.2 Change initiatives	4.2.1 Supporting learning & change
		4.2.2 Initiating learning & change

**Table 13 Coding template version 2**

*Final Coding Template (Version 3):*

Changes were made to version 2 of the template at level 3 of the hierarchy based on data of nine participants (Eve, James, Simon, Haley, Sarah and Anna, Adam, Daniel and Edward). Table 14 shows six new level 3 sub-themes. These changes resulted in version 3 of the coding template shown in Table 15.

<b>New theme</b>	<b>Rationale</b>	<b>Praxis learning domain</b>
Performance analysis	A sub-theme of <i>evaluating and improving learning</i> to represent how participants' assess their own skills and knowledge against performance criteria to determine skills and knowledge gaps.	Lifelong
Learning opportunities and strategies	A sub-theme of <i>evaluate and improve learning</i> to represent how participants' seek, plan and apply new approaches to learning to develop new skills and knowledge	Lifelong
Identify career goals and ambitions	A sub-theme of <i>career goals and ambitions</i> to represent how participants recognise their what they want from a career	Lifelong
Strategies for achieving career goals and ambitions	A sub-theme of <i>career goals and ambitions</i> to represent how participants seek, plan and apply different approaches to achieve their goals and ambitions	Lifelong
Capturing knowledge, skills and practices	A sub-theme of <i>knowledge capture and transfer</i> to represent how participants formalise tacit knowledge in a form that can be stored and retrieved	Organisational
Transferring knowledge and skills	A sub-theme of <i>knowledge capture and transfer</i> to represent how participants disseminate knowledge, skills and practices throughout the organisation.	Organisational

**Table 14 New level 3 sub-themes incorporated into template version 3**

<b>Level 1 Praxis learning domains</b>	<b>Level 2 sub-themes</b>	<b>Level 3 sub-themes</b>	
1. Affective Learning	1.1 Self-awareness	1.1.1 Confidence and self esteem	
		1.1.2 Impact of own behaviour & feelings on others and self	
		1.1.3 Impact of others behaviour on self	
	1.2 Managing working relationships	1.2.1 Supporting and mentoring colleagues	
		1.2.2 Conflict management	
		1.2.3 Open-mindedness	
	1.3 Motivation	1.3.1 Initiating and sustaining action	
		1.3.2 Effort equals success	
	1.4 Openness to change	1.4.1 Objective evaluation of change	
		1.4.2 Accept and adapt to change	
2. Lifelong Learning	2.1 Evaluate and improve learning	2.1.1 Performance analysis	
		2.1.2 Learning opportunities and strategies	
	2.2 Career goals & ambitions	2.2.1 Identify career goals and ambitions	
		2.2.2 Strategies for achieving career goals and ambitions	
	2.3 Using theory to deepen learning	2.3.1 Analysis of own behaviour and practice using theory	
		2.3.2 Analysis of others behaviour and practice using theory	
		2.3.3 Analysis of organisation using theory	
	3. Professional Learning	3.1 Decision making	3.1.1 Consulting and collaborating
			3.1.2 Decision making methods
3.2 Knowledge, skills and practices		3.2.1 Validating knowledge skills and practices	
		3.2.2 New practices	
4. Organisational Change	4.1 Knowledge capture and transfer	4.1.1 Capturing knowledge and skills	
		4.1.2 Transferring knowledge and skills	
	4.2 Change initiatives	4.2.1 Supporting learning and change	
		4.2.2 Initiating learning and change	

**Table 15 Template version 3 (final template)**

Table 16 describes the level 3 themes. These were applied to code the data from seven participants (William, Harriet, Karl, Phillip, Olive, Gareth and Harry). No absolute point exists at which a template is deemed complete, but when no un-coded sections of text remain that relate to the research question(s) a coding scheme can be regarded as satisfactory (King, 2012).

<b>Level 3 sub themes</b>	<b>Description</b>
1.1.1 Confidence and self esteem	Awareness of how reflection has improved participants confidence and self-esteem
1.1.2 Impact of own behaviour & feelings on others and self	Awareness of the impact that own behaviour and emotions has on others and on self
1.1.3 Impact of others behaviour on self	Awareness of the impact that others behaviour has on self (how others behaviour influences how they feel/act)
1.2.1 Supporting and mentoring colleagues	Supporting and encouraging others to manage their own learning, help them maximise their potential, develop their skills and improve their performance.
1.2.2 Conflict management	Dealing with conflict that arises within a workplace setting by using skills and knowledge to minimise the negative aspects of conflict, maximise the positive aspects and enhance learning.
1.2.3 Open-mindedness	Being willing to consider new and different ideas about and from colleagues, which, may be contradictory to currently held attitudes and beliefs. These ideas may be about learning, work and behaviours for example.
1.3.1 Initiating and sustaining action	Passionate about driving oneself forward for the sake of achievement because of an interest or pleasure of the task itself; eagerness, drive and ambition to succeed.
1.3.2 Effort equals success	Belief that there is a strong relationship between the amounts of sustained effort an individual puts into learning and mastering something (e.g. business skills, managing a project, developing a successful career etc.).
1.4.1 Objective evaluation of change	Dispassionately seeks to understand the reasons for different types of change (e.g. organisational, personal etc.) and/or their potential impact.
1.4.2 Accept and adapt to change	A willingness to try out and adjust to new ideas and experiences that are unfamiliar.

<b>Level 3 sub themes</b>	<b>Description</b>
2.1.1 Performance analysis	Assessing own skills and knowledge against those required for particular work-related activities to identify skills and knowledge deficiencies which will impact on performance.
2.1.2 Learning opportunities and strategies	Seeking, planning and applying new approaches to learning to develop new skills and knowledge
2.2.1 Identify career goals and ambitions	Recognising what an individual wants from their career which will enable them to have a rewarding working life
2.2.2 Strategies for achieving career goals and ambitions	Seeking, planning and applying different approaches to achieve career goals and ambitions
2.3.1 Analysis of own behaviour and practice using theory	Using theory to critically examine own behaviours and practices to gain developmental insight.
2.3.2 Analysis of others behaviour and practice using theory	Using theory to critically examine others behaviours and practices to gain developmental insight.
2.3.3 Analysis of organisation using theory	Using theory to critically examine organisations (e.g. culture, change) to gain developmental insight.
3.1.1 Consulting and collaborating	Having dialogue with others to gain a deep insight into the issues surrounding professional decisions
3.1.2 Decision making methods	Using particular tools, techniques and processes (e.g. reflective journals, force-field analysis, SWOT analysis etc.) to strengthen decision making by helping to objectively consider decision making options and review decisions.
3.2.1 Validating knowledge skills and practices	Confirmation that the strategies and approaches used in a professional context are effective
3.2.2 New practices	Developing and implementing new practical ways of professional working within a practical professional environment.
4.1.1 Capturing knowledge and skills	Making tacit knowledge explicit by formally recording it in some way so that it can be stored.
4.1.2 Transferring knowledge and skills	Transmitting and disseminating knowledge, skills and practices between colleagues within the organisation
4.2.1 Supporting learning and change	Supporting organisational learning and change
4.2.2 Initiating learning and change	Initiating the development of new organisational policies, practices and training

**Table 16 Description of level 3 themes**

### **Stage 6: Summarising the data**

Summarising and tabulating data is crucial to data analysis process. This helps check if sufficient evidence exists for the themes identified and assists recognition of patterns in the data (Gale, Heath, Cameron, Rashid and Redwood, 2013). However, template analysis does not provide much useful guidance on organisation of data to aid interpretation. To address this, a tabulated summary of praxis changes was produced for each participant. This summarises participants' self-reported changes mapped to level 3 sub-themes.

The tabulated praxis changes were produced by examining coded PRep templates, interview transcripts and reflective essays. By working through each document for each participant evidence for each level 3 sub-themes was identified individually. Thus, a table of praxis changes arising during the WBL programme was developed for each participant. Chapter Four offers a full set of the resulting tables developed from this process. Table 17 provides an illustrative example of the structure and content.

<b>Level 3 sub-theme</b>	<b>Praxis changes</b>	<b>Number of Changes</b>
1.1.1	<ul style="list-style-type: none"><li>• Feels pride in ability to be assertive when interacting with colleagues (P5, I1, I3)</li><li>• Feels competent to submit case files (P6)</li><li>• Feels confident in volunteering for prisoner handovers (P10)</li><li>• Feels a more rounded person (P43, I6)</li><li>• Feels that colleagues recognise her skills and knowledge (I11, I43)</li><li>• Feels confident in ability to act rationally (I13)</li></ul>	6

**Table 17 Summary of praxis changes for a single theme (Eve)**

This example is for the level 3 sub-theme *1.1.1 Confidence and self-esteem*, and presents evidence obtained from one participant, pseudonym "Eve". Each point represents an example of a change relating to Eve's recognition of her improved confidence and/or self-esteem arising from her participation in the programme. The coded extracts relating to each summarised statement can be tracked back to original text via reference to letters, for example:

*Feels a more rounded person (P43, I6)*

The letter “P” indicates the statement was found in in Eve’s PRep template (Microsoft word comment number 43). The letter “I” shows the same comment in her interview transcript (Microsoft word comment number 6). Both statements were coded “1.1.1” on the PRep and interview transcript. The table also records the number of praxis changes identified for each level 3 sub-theme. For this example, six statements were coded as evidence for sub-theme 1.1.1, hence the number shown in the final column is 6. These numbers are used in mapping participants’ praxis learning domain patterns. Summarising this way balanced data reduction while retaining illustrative examples of participants’ praxis changes in their original contexts. The change tables do not include verbatim quotations but these can be located by tracking back to the original data using the reference letters and numbers.

Counting praxis changes for each sub-theme is not intended to be a positivistic way of signifying evidence on its own merit. King (2012) advocates counting themes and frequencies purely to assist selecting those requiring closer examination. He warns against using this information to draw conclusions. In this study the counts are an *indication* of the *strength* of a change to participants’ praxis. Quantifying qualitative data is useful in establishing salience of themes to be explored and comparing identified domains (Namey, Guest, Thairu and Johnson, 2008). Counting praxis changes for each participant offered a means of comparing participants’ praxis across the four learning domains. However, the numbers were treated cautiously as a useful component to aid development of a holistic picture of participants’ experiences.

**Stage 7: Produce participants’ praxis learning maps**

The first stage in producing praxis learning maps involved calculating the numbers of praxis changes per domain. Table 18 shows the praxis changes calculated for Eve.

	Affective Learning	Lifelong learning	Professional learning	Organisational learning	Total changes
Eve	28	22	15	8	73

**Table 18 Eve’s Total numbers of praxis changes per learning domain**

Once totals were calculated for all participants, median praxis change figures were calculated for each domain for the group. The median figure was calculated so that it could be plotted on the praxis learning maps to enable comparisons to be made against the median for the group. These figures are shown in Table 19.

	Affective Learning	Lifelong learning	Professional learning	Organisational learning
Median	12.5	14	8.5	5

N=16

**Table 19 Median numbers of praxis changes for each learning domain**

Graphical illustrations, called “praxis learning maps” were created using the numbers of praxis changes established from the template analysis. The median figures for each domain were included on to permit comparisons between each participant’s praxis and the whole group median. Figure 2 provides an example praxis learning map for Eve. Graphing qualitative data is a visually useful way of exploring differences and similarities between participants (Namey et al., 2008).



**Figure 2 Example praxis learning map**

***Stage 8 Interpreting and presenting data***

Sixteen individual mini-case studies were presented consisting of a praxis change table, praxis learning map and a short narrative account of praxis development for each participant. Discussing individual cases provides a rich, contextualised account of perspectives and

characteristics (King, 2004). The praxis learning maps enabled cross-case analysis of the mini-cases resulting in identification of two learners groups. Typological theorising relies on cross case analysis (George and Bennett, 2005). A narrative account of the characteristics of participants in each learner group was developed. Two cases were selected (one case from each group) as in-depth case studies to further illustrate praxis development of learners in each group. The method offered a powerful, compelling illustration of participants' experiences.

### **3.10 Reliability**

Oluwatayo (2012) suggests that reliability is concerned with the extent to which uniformity of results are achieved regardless of location, time or day in which the research is conducted. However, this is a traditional view of reliability: there is debate as to whether reliability is a meaningful concept in interpretive, qualitative studies. Stenbacka (2001) maintains that reliability is irrelevant because qualitative research does not rely on measurement. Patton (2013) however, argues that qualitative researchers should consider reliability in the design of any qualitative study. In this study, reliability is considered from Trauth's (1997) position. This emphasises producing results that can be trusted rather than trying to show consistent results by repeated analyses.

To increase reliability, the PRep templates contained the same questions, instructions for completion and definitions of terms. The same procedures were used for all participants. Semi-structured interviews included a degree of flexibility. Additionally, meanings of questions vary as interviewer-interviewee interactions differ (Seidman, 2006). To minimise these factors the same verbal preamble was given and the interview schedule ensured control over key topics. Participants' reflective essays were challenging in ensuring reliability because of their subjective nature. Nevertheless, the essay title, guidance provided about the content and format was identical for all participants. Essays were assessed using identical criteria. Participants had undertaken the reflective learning module with constant learning outcomes for everyone, delivered by the same tutor.

### **3.11 Validity**

Validity is rooted in the positivist paradigm and is concerned with truthfulness and accuracy of results, focussing specifically on whether an instrument measures what it is supposed to measure (Golafshani, 2003). For qualitative studies validity is concerned with ensuring studies are rigorously designed to ensure results are credible and defensible (Johnson, 1997). A further distinction exists between external validity which is the degree to which research results can be

generalised to a larger group or other contexts and internal validity which is the extent to which data represents the phenomena being studied (Cohen et al., 2011).

This study does not attempt to demonstrate external validity. Results are not generalised to a wider population. The sample size is small and is not representative. Repeating the study using the same methods with other groups would increase the potential for generalisations. However, the interpretive, social-constructivist approach adopted means that specific contexts relating to participants' experiences of reflective learning are explored. This focus on context makes generalisability difficult (Erlandson, Harris, Skipper and Allen, 1993). This study is concerned with transferability rather than generalisability. Transferability replaces generalisability by focussing on the extent to which research results relate to new situations rather than demonstrating application to a wider population (Shenton, 2004). A factor in ensuring transferability is providing sufficient contextual information about the fieldwork to allow a reader to relate findings to their position (Shenton, 2004). In this study this is achieved by providing contextual information about participants, the environments in which they work and contexts in which professional praxis develops.

Strategies were employed to enhance internal validity. Consideration was given to design of the research instruments. The PRep templates included definitions of terms to ensure participants had clear understandings of the meaning of questions so could respond appropriately. With regards to interviews, as participants and researcher had had a positive relationship and rapport, this posed a threat to internal validity because participants might try to please the researcher by providing answers they thought he might want to hear. Burgess (1985) recognises many researchers believe that such relationships should be avoided because they raise issues of bias. Also, the conversational nature of the interviews allowed for interaction between interviewer and interviewee. Open interviews offer opportunities for interviewer bias (Cohen et al., 2011). To minimise bias, the interviewer used non-directive, open questions, neutral probing techniques and maintained an impartial manner and neutral body language. The interview schedule was designed to ensure that the meaning of questions was clear. Interviews were transcribed verbatim rather than summarised to avoid collection of selective data. All methods employed were based on self-report, which, whilst providing data that expressed participants' perspectives in their own words, could have compromised internal validity. Barker and Pistrang (2005) for example suggests that in studies using self-report data, internal validity can be threatened because participants may not always tell the truth, or be unable to provide the detail required. Using observational data to complement self-report data reduces these problems (Barker and Pistrang, 2005). This was not possible in this study,

therefore validity issues relating to self-report is a limitation. Finally, methodological triangulation (Denzin, 1989) addresses internal validity issues. Triangulation enhances confidence in research findings by comparing results from two different methods (Newby, 2010). In this study three methods were used which enabled methodological triangulation to be applied.

### **3.12 Chapter summary**

In this chapter the research question has been clarified and the philosophical framework outlined, placing it within a qualitative, interpretivist paradigm. The chapter has discussed and provided a rationale for the research design including justification for the choice of a multiple-case study approach and data collection methods. The sampling strategy used to select three participants for the pilot study and sixteen participants for the main study was illustrated. The process for collecting data along with associated ethical issues was discussed. The purpose and outcomes of the pilot study and how this informed the main study was demonstrated. A detailed, step-by step illustration of how the data were analysed using an extended form of template analysis was provided. In the next chapter, data are explored through a comprehensive presentation of mini-case studies of all sixteen participants.

## **Chapter Four: Mini-Case Studies**

### **4.1 Introduction**

To answer the research question, and according to the methodology described in the previous chapter, this chapter presents the data obtained from sixteen participants. It begins with an outline description of all sixteen followed by an explanation of how data are structured and presented. A comprehensive set of data illustrating praxis development for each participant is then presented. Finally, two distinct learner groups are identified and characteristics are discussed.

### **4.2 Description of participants**

Table 20 provides a brief description of each participant. The details are based on information provided during interviews which took place between July 2013 and October 2013. The sixteen participants were mature learners over the age of 25 engaged in professional roles. They were undertaking HEWBL voluntarily to promote their careers. Pseudonyms were used to ensure anonymity.

### **4.3 Explanation of data**

Each participant's dataset comprises:

1. A summary of praxis changes. This summarises participants' self-reported changes resulting from reflective learning mapped to each of the level 3 sub-themes. This table counts praxis changes for each level 3 theme.
2. A table showing total praxis changes across each praxis learning domain
3. A praxis learning map providing a graphical illustration of the 'strength' of praxis learning across each domain. The median strength for the whole group is included to allow comparisons.
4. A narrative account of praxis learning in each domain. Narratives were produced with reference to the summary of praxis changes.

Name	Age	Occupation	Type of employing organisation	Description
Adam	42	Detective Inspector	Police Force	Adam manages a multi-agency Regional Intelligence Unit. He leads a specialised team of plain-clothes officers and is responsible for targeting and investigating organised criminal groups utilising overt and covert investigation techniques.
Anna	50	Detective Inspector	Police Force	Anna manages a police force child protection unit. She leads a team of plain-clothed officers and works with organisations (e.g. social services) to investigate child abuse and safeguard children from harm.
Daniel	47	Operations Supervisor	Oil and Gas Pipe Manufacturer and Installer	Daniel is responsible for day-to-day operation of a marine testing facility and maintaining and enhancing customer relationships.
Edward	40	Facilities Manager	Oil and Gas Pipe Manufacturer and Installer	Edward is responsible for the working environment in which employees perform their role and therefore must ensure that the organisation's facilities meet the needs and activities.
Eve	41	Police Constable	Police Force	Eve works as part of a small Neighbourhood Police Team whose role is to make the police more visible to reduce fear, aid interaction between the public and the police and to solve local problems.
Gareth	43	Detective Chief Inspector	Police Force	Gareth leads major investigations into serious crimes such as murder and is responsible for building public confidence in the police by actively engaging with local communities, partners and stakeholders.

Name	Age	Occupation	Type of employing organisation	Description
Haley	59	Education Manager	Borough Council	Haley's role includes working with a diverse range of partners including the careers service, local schools and colleges in strategic planning, commissioning and development of education provision for 16-19 year olds.
Harriet	44	Senior Early Years Practitioner	Childrens Nursery	Harriet takes a lead role in the day to day planning and implementation of activities and experiences for children in the nursery and for communicating with parents. She is responsible for supervising junior colleagues.
Harry	54	Inspector	Police Force	Harry is head of a Police Professional Development and Assessment unit dedicated to training and development of police personnel. He develops partnerships with local colleges and universities to develop and deliver a range of police focussed education and training programmes.
James	47	Detective Inspector	Police Force	James leads a team of Detective Sergeants who specialise in investigation of serious crime. He is responsible for ensuring the team is proactive in tackling crime and that crime targets are met.
Karl	32	Police Constable	Police Force	Karl works closely with the community to prevent and detect crime. He acts up to the rank of sergeant which involves being responsible for additional management responsibilities such as roll call at the beginning of a shift, conducting training sessions and helping to implement new laws and policies.

Name	Age	Occupation	Type of employing organisation	Description
Olive	48	Early Years Lecturer	Further Education College	Olive is responsible for design and delivery of a range of Early Years Education (levels 1-4 on the National Qualifications Framework) related courses and is course leader for several courses.
Phillip	37	Production Supervisor	Oil and Gas Pipe Manufacturer and Installer	Phillip's role is varied and includes health and safety duties and planning delivery of products to clients. He provides a link between support departments and the shop floor to enable products to be produced to a high standard and on time.
Sarah	49	Owner Manager	Business Advisors Consultancy & Training	Sarah's company provides accountancy, taxation and business advisory services to a diverse range of business clients. She is responsible for all aspects of the business including managing a small team of specialist consultants, developing new income streams, providing strategic direction and ensuring quality of service.
Simon	46	Production Supervisor	Offshore Renewable Energy	Simon leads a team of 108 production operatives split over three shifts and is responsible for ensuring production schedule targets are met and quality of product is maintained.
William	33	Inspector	Police Force	William has overall operational responsibility for a control room, leading a team of control room operators in deploying officers to deal with a wide variety of incidents.

**Table 20 Participants' backgrounds and work contexts**

## **4.4 Participant data sets**

### **4.4.1 Adam**

Table 21 provides a summary of praxis changes for Adam. The total praxis changes are shown in Table 22 and a praxis learning map is shown in Figure 3.

#### ***Affective learning***

Adam has gained insight into aspects of his personality that impact on his interpersonal relationships with colleagues and on his professionalism. He has recognised that he has a “bullish” personality, giving his opinions in an over-confident manner which may come across as aggressive; he does not listen to others’ opinions and does not consider their feelings. He has become aware that he believed previously there was an expectation from others that he should act autocratically and unemotionally. He has recognised that this behaviour can impact negatively on his professionalism. He is now more open to others’ perspectives because he has recognised that they might have something valuable to say which will help meet work objectives.

#### ***Lifelong learning***

This is the most significant domain in which Adam has developed his praxis.

Adam is ambitious and keen to gain promotion. To this end he has performed a skills gap analysis by using a person specification for the next rank he wants to achieve as a benchmark that has helped him to develop a plan for achieving promotion. One of the most significant ways in which Adam has learnt to understand his behaviours and practices is by using theory. He has used learning theory to understand the advantages and disadvantages of his pragmatist learning style and has identified key learning points relating to his role as a Detective Inspector by using reflective learning frameworks. He has also recognised that he engages primarily in single loop learning (see section 2.2.6, p. 35) to solve problems and that this is largely the consequence of the constraints of his role in the police force. However, he has identified areas where double-loop learning (see section 2.2.6, p. 35) may be more beneficial because this will enable him to think “outside the box” e.g. intelligence gathering.

### ***Professional learning***

Adam has used policy logs to review decisions that made under pressure to determine whether they were the 'right' decisions. He has examined whether there was a sound rationale for decisions made and if courses of action in criminal investigations adhered to best practices. Adam feels that he has become more co-operative when working with a range of different organisations.

### ***Organisational learning***

Adam did not report any changes relating to this domain.

<b>Theme</b>	<b>Praxis changes</b>	<b>Number of changes</b>
1.1.1	<ul style="list-style-type: none"> <li>• Feels confident about interacting with staff in a positive way (P3)</li> <li>• Feels confident that he has a high level of skills relating to policy decisions in criminal investigations (P6, I1)</li> </ul>	2
1.1.2	<ul style="list-style-type: none"> <li>• Aware that he has often been too task focussed at the expense of considering others feelings (I5, I7, P2)</li> <li>• Aware that his bullish personality means he has to consciously make an effort to consider others objectives during multi-agency initiatives otherwise the objectives will not be inclusive (I9)</li> <li>• Aware that he has felt that there was an expectation to act unemotionally and in an autocratic manner but that this style actually impacts negatively on his professionalism (R17)</li> </ul>	3
1.1.3	NONE	0
1.2.1	NONE	0
1.2.2	NONE	0
1.2.3	<ul style="list-style-type: none"> <li>• Accepts that it is important to seek to understand colleagues peoples perspectives because they may have something valuable to say which will help meet objectives in developing workable strategies (P4, I8, I10, R11)</li> </ul>	1
1.3.1	NONE	0
1.3.2	NONE	0

<b>Theme</b>	<b>Praxis changes</b>	<b>Number of changes</b>
1.4.1	NONE	0
1.4.2	NONE	0
2.1.1	<ul style="list-style-type: none"> <li>• Evaluate competency leading operational reviews of investigations and multi-agency working to determine areas for improvement (P12, P14, I15)</li> <li>• Mapping his skills, knowledge, attitudes and values against those required at a higher rank to determine gaps that need to be addressed (P19, I12)</li> <li>• Assesses how his learning style impacts on his performance as a detective inspector (R15)</li> </ul>	3
2.1.2	<ul style="list-style-type: none"> <li>• Uses reflective journal to identify and build on learning gained from policing experiences (I3, I19, P7, P13, P16, P17, R5)</li> <li>• Identify and structure learning opportunities that best suit his learning style (R2, R12)</li> <li>• Preparing a learning map to identify, plan and structure learning to meet goals (R16, R18)</li> </ul>	3
2.2.1	NONE	0
2.2.2	<ul style="list-style-type: none"> <li>• Developed a plan for achieving promotion (P18, I13)</li> </ul>	1

<b>Theme</b>	<b>Praxis changes</b>	<b>Number of changes</b>
2.3.1	<ul style="list-style-type: none"> <li>• Used reflective learning frameworks to analyse work experiences as a detective inspector to identify learning points (R1, R3)</li> <li>• Gained insight into what motivates him to learn (e.g. performance review feedback, feedback in operational briefings) using learning theory (R4)</li> <li>• Gained insight into the important role that reflection-in-action plays in his job as a detective inspector and how reflection-in-action skills can be improved (R7, R8)</li> <li>• Used learning theory to help him understand the advantages and disadvantages of his pragmatist learning style in his role as a detective inspector (R10)</li> <li>• Recognises that he tends to engage in single-loop learning but that there are opportunities to engage in double-loop learning with regards to intelligence gathering opportunities, parameters of operational deployment and consider other avenues of activity over and above accepted standards (R13)</li> </ul>	5
2.3.2	NONE	0
2.3.3	NONE	0
3.1.1	NONE	0
3.1.2	<ul style="list-style-type: none"> <li>• Uses policy logs to objectively review decisions made under pressure (e.g. relating to investigations or multi-agency working) to reflect on the rationale for the decisions and their effectiveness to improve future decision making (P1, P8, P9, P11, P15, P21, I2, I4, I14, I20, I21, I22, I23)</li> <li>• Consciously reflects-in-action when in-the moment decisions need to be made relating to policing (R9)</li> </ul>	2
3.2.1	<ul style="list-style-type: none"> <li>• Confirmation that courses of action followed in criminal investigations adhered to best practices guidelines (P5, P20, I17)</li> </ul>	1

<b>Theme</b>	<b>Praxis changes</b>	<b>Number of changes</b>
3.2.2	<ul style="list-style-type: none"> <li>• Uses policy logs as a means of reflecting on courses of action, policy decisions etc. to identify good and poor practice and lessons learned (P10, I16, I18, R6, R14)</li> <li>• Clearer communication/presentation of his instructions and decisions with a sound rationale to his team (I6)</li> <li>• More co-operative working with public and private sector organisations (I11)</li> </ul>	3
4.1.1	NONE	0
4.1.2	NONE	0
4.2.1	NONE	0
4.2.2	NONE	0

**Table 21 Adam's summary of praxis changes**

	1. Affective learning										2. Lifelong Learning						3. Professional Learning			4. Organisational Learning				Grand total						
	1.1 Self-awareness			1.2 Managing working relationships			1.3 Motivation		1.4 Openness to change		Total	2.1 Evaluate and improve learning		2.2 Career goals and ambitions		2.3 Using theory		Total	3.1 Decision making		3.2 Knowledge, skills & practices	Total	4.1 Knowledge capture & transfer		4.2 Change initiatives		Total			
	1.1.1	1.1.2	1.1.3	1.2.1	1.2.2	1.2.3	1.3.1	1.3.2	1.4.1	1.4.2		2.1.1	2.1.2	2.2.1	2.2.2	2.3.1	2.3.2	2.3.3		3.1.1	3.1.2	3.2.1	3.2.2			4.1.1	4.1.2	4.2.1	4.2.2	
Adam	2	3	0	0	0	1	0	0	0	0	6	3	3	0	1	5	0	0	12	0	2	1	3	6	0	0	0	0	0	24

Table 22 Total praxis changes (Adam)

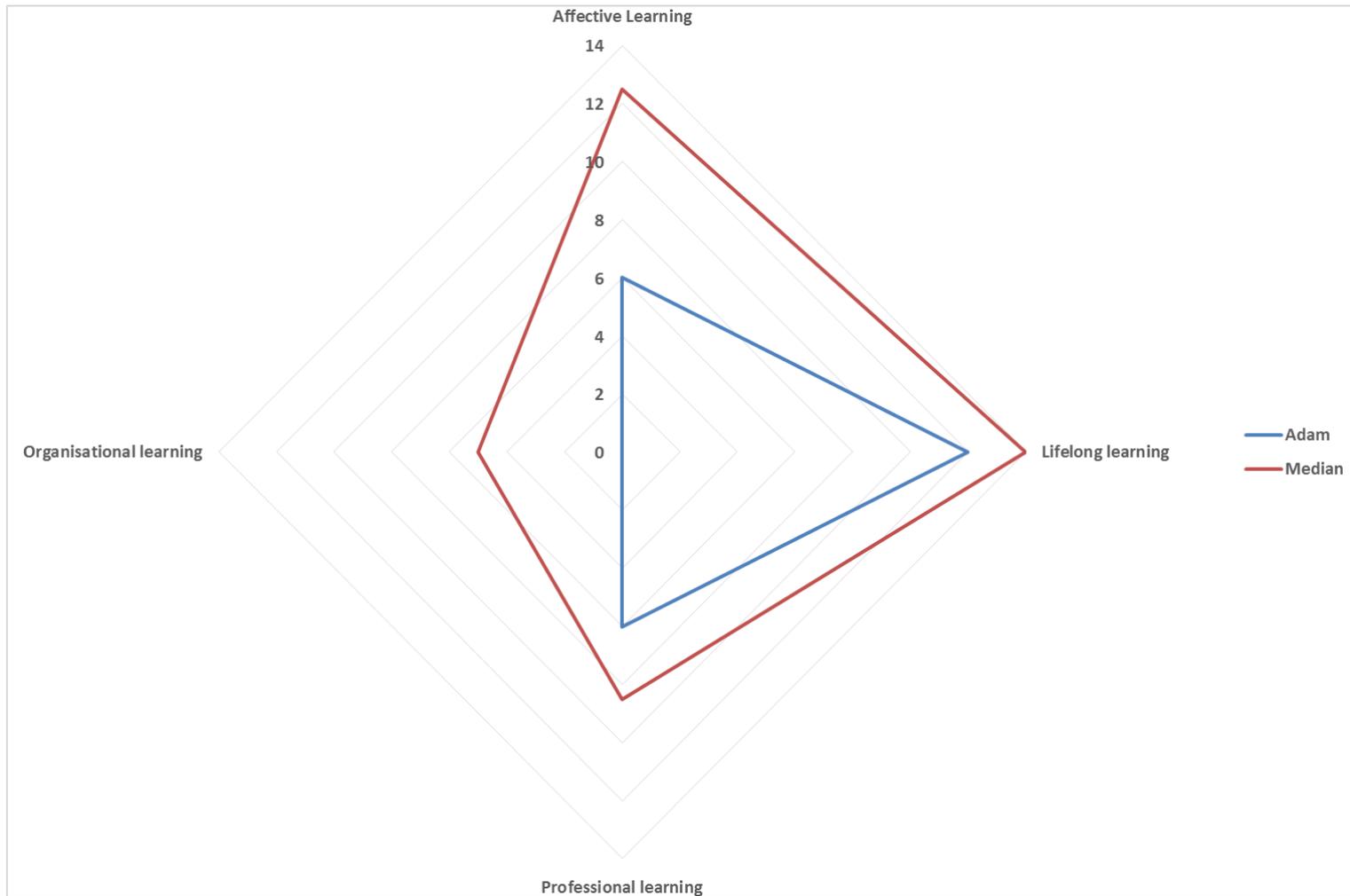


Figure 3 Adam's praxis map

#### **4.4.2 Anna**

Table 23 provides a summary of praxis changes for Anna. The total praxis changes are shown in Table 24 and a praxis learning map is shown in Figure 4.

##### ***Affective learning***

Anna has become aware that in the past she has taken risks by not carrying out rigorous risk assessments and that this had the potential to cause harm to colleagues. This tendency for risk taking and not considering her colleagues' feelings during incidents (e.g. spontaneous firearms incidents) in her role as a Detective Inspector impacted negatively on how her colleagues feel about her, damaging her working relationships. She is aware that she needs to consider the feelings of those she manages, accept they work in different ways and be supportive in helping them to reflect-on-action in structured ways.

##### ***Lifelong learning***

This is the most significant domain in which Anna developed her praxis.

Anna reflected on how her dominant activist learning style impacted on her performance. For example, she used learning style theory to examine how particular traits relating to her activist style (such as taking unnecessary risks, not completing tasks) have contributed to poor relationships with colleagues and a tendency to start but not finish initiatives. Consequently Anna became keen to improve her versatility as a learner by developing a pragmatist and theorist learning style. She is likely to look for opportunities to help develop these styles so that she is a more rounded learner. Anna realised she does not want to continue a career in the police force and is developing new knowledge and skills she can use on retirement. She used organisational learning theory to help her understand the role of Communities of Practice in developing and sharing new practices and in facilitating employee-led change.

##### ***Professional learning***

Anna changed the way that she deals with critical incidents such as spontaneous firearms incidents. During such incidents she consciously considers the feelings of her team and listens to their concerns rather than acting on impulse. She now ensures she facilitates debriefing sessions following all such incidents to identify lessons learned and make recommendations for future practice.

### ***Organisational learning***

Anna developed training materials and case studies relating to critical incidents involving firearms (for example, the deployment of weapons to police officers) and shared these with colleagues. She has disseminated best practices relating to female police officers (for example, gender equality issues, types of firearms) through informal social networks.

<b>Theme</b>	<b>Praxis changes</b>	<b>Number of changes</b>
1.1.1	<ul style="list-style-type: none"> <li>• Feels confident that she involves colleagues in decision making (I4, P8)</li> <li>• Feels that she recognises and focuses more on the positive aspects of her personality and performance (rather than just the negatives) and consequently feels good about herself (P38, P41)</li> <li>• Feels confident to challenge senior colleagues if she feels they have behaved unprofessionally (P42)</li> </ul>	3
1.1.2	<ul style="list-style-type: none"> <li>• Aware that she can take too much on and then become impatient with progress so does not finish tasks (R6, P21, I16)</li> <li>• Aware that she sometimes she takes risks and needs to undertake more risk assessments to avoid potentially harmful consequences (R9, P27)</li> <li>• Aware that she has often been too task focussed at the expense of considering others feelings e.g. when managing spontaneous firearms incidents (R13, R24, P1, P5, P55, I1, I7, I14)</li> <li>• Aware that being over-critical of herself makes her place unrealistic expectations on herself (P9, P36, I23, I44)</li> </ul>	4
1.1.3	NONE	0
1.2.1	<ul style="list-style-type: none"> <li>• Encourages her team to see organisational changes as an opportunity to develop new skills and facilitate solidarity and camaraderie in the pursuit of common goals (P83)</li> <li>• Assists members of her team to reflect on practice following incidents in structured and supportive manner to help them to explore feelings, attitudes and practices (I13, R21)</li> </ul>	2

<b>Theme</b>	<b>Praxis changes</b>	<b>Number of changes</b>
1.2.2	NONE	0
1.2.3	<ul style="list-style-type: none"> <li>• Accepts that is important to seek to understand and consider colleagues feelings about how she manages them (P3, P56, I3, I8, I15, R14, R28)</li> <li>• Accepts that people work in different ways e.g. some people find reflection-in-action difficult (P18, R36)</li> </ul>	2
1.3.1	NONE	0
1.3.2	NONE	0
1.4.1	NONE	0
1.4.2	NONE	0
2.1.1	<ul style="list-style-type: none"> <li>• Evaluates the strengths and weaknesses of her actions immediately following policing incidents (hot debriefs) to identify areas for development (P10, P12, P17, P32, P35, P48, P54, P61, I5, I11, R3, R11, R29)</li> <li>• Assesses how her learning style impacts on her performance as a detective inspector (P26, I18, R7, R10)</li> <li>• On a regular basis she analyses her performance to determine her development needs (I28, I30, R19, R27, R39)</li> </ul>	3
2.1.2	<ul style="list-style-type: none"> <li>• Uses reflective diary daily to identify and build on learning gained from policing experiences (P13, P19, P33, P63, I29, I32, R1, R12, R18, R26)</li> <li>• Conducts hot debriefs with her team immediately following policing incidents to identify lessons learned and build on learning (P15, P49, P52, I12, R34)</li> <li>• Identify strategies to strengthen pragmatist and theorist learning styles to help her develop as a rounded learner capable of learning from a wider variety of different experiences (P23, P25, P28, I20, R8, R38)</li> </ul>	3

<b>Theme</b>	<b>Praxis changes</b>	<b>Number of changes</b>
2.2.1	<ul style="list-style-type: none"> <li>Recognises that she has no ambition to go further in the police force than her current role as a detective inspector and therefore wants to retire from the police force in two years to develop a new career (P37, I25)</li> </ul>	1
2.2.2	<ul style="list-style-type: none"> <li>Uses a reflective journal to plan and document new knowledge and skills which will help her develop a challenging new career outside the police force (R15, P31, P39, I26)</li> </ul>	1
2.3.1	<ul style="list-style-type: none"> <li>Uses learning theory to help her understand and challenge her own attitudes, beliefs and actions and examine her personality traits (e.g. how her activist learning style impacts on her interaction with her colleagues by not considering their feelings when dealing with critical incidents and how it means she often starts initiatives that she does not finish (P4, P7, P22, P59, P60, I6, I17, I21, I24, R4, R5, R17, R22, R23, R30, R35)</li> <li>Gained insight into the important role that reflection-in-action plays in her job as a detective inspector and how reflection-in-action skills can be improved by debriefs immediately following policing incidents (P14, P44, P45, P50, R31, R32)</li> </ul>	2
2.3.2	<ul style="list-style-type: none"> <li>Used social learning theory (Communities of Practice) to gain insight into how people interact to share ideas and solutions to common problems (P71)</li> <li>Uses learning theory to help her to understand the different ways in which her colleagues perform during critical policing situations (R37)</li> </ul>	2
2.3.3	<ul style="list-style-type: none"> <li>Used organisational learning theory to gain insight into how Communities of Practice are formed in the police force how they facilitate bottom up change (P69, P70)</li> <li>Used organisational change models to gain insight into the barriers to organisational change in the police force (P81, I41)</li> <li>Uses organisational change models to gain insight into triggers for change and how change is managed in the police force (P85)</li> </ul>	3

<b>Theme</b>	<b>Praxis changes</b>	<b>Number of changes</b>
3.1.1	NONE	0
3.1.2	<ul style="list-style-type: none"> <li>• Spontaneous incident decision making consciously reflects-in-action during spontaneous policing incidents specifically about how others are feeling so that she can weigh up the pros and cons of different options (P58)</li> <li>• Uses a reflective journal to review decisions and their outcomes relating to a wide variety of policing contexts (P64, P65, I35, I45)</li> </ul>	2
3.2.1	<ul style="list-style-type: none"> <li>• Confirmation that actions taken during critical policing incidents were effective (I33, P43, P46, P51)</li> </ul>	1
3.2.2	<ul style="list-style-type: none"> <li>• Deals with spontaneous firearms incidents in an empathetic way (P2, P6, P57, I2, I9, I36)</li> <li>• Uses reflective journals help to identify areas of concern and set actions/targets in order to improve professional practice (P11, P20, P30, P34, P40, P53, P62, P66, I19, I22, I27, I31, I34, I43, R2, R16, R40)</li> <li>• Conducts reflection-on-action debriefs after critical incidents to identify lessons learned and recommendations for future practice (P16, P47, I10, R20, R25, R33)</li> <li>• Nurtures new Communities of Practice e.g. relating to women police officers (P68, I37)</li> <li>• Converts lessons learned into teaching material and case studies (P73)</li> <li>• Uses strategies to get her teams buy-in to organisational changes (P79, P82)</li> </ul>	6
4.1.1	<ul style="list-style-type: none"> <li>• Documenting best practice relating to stop and search (I39)</li> <li>• Developing training materials and case studies about firearms situations and authorising firearms officers to deploy their weapons (P75)</li> </ul>	1

<b>Theme</b>	<b>Praxis changes</b>	<b>Number of changes</b>
4.1.2	<ul style="list-style-type: none"> <li>Disseminate best practices relating to female specific issues within the police force (e.g. equality, types of firearms appropriate for female officers) through practice based social networks such as Communities of Practice (P67, P72, P76, P77, P78, I38)</li> <li>Training materials and case studies about firearms situations and authorising firearms officers to deploy their weapons disseminated via discussion forums/training events (P74)</li> <li>Sharing documented best practice relating to stop and search (I40)</li> </ul>	3
4.2.1	<ul style="list-style-type: none"> <li>Supports colleagues to understand the need for and accept organisational culture change (e.g. operation ORBIS which is major structural organisational change) (P80, P84, P85, I42)</li> </ul>	1
4.2.2	NONE	0

**Table 23 Anna's summary of praxis changes**

	1. Affective learning											2. Lifelong Learning						3. Professional Learning				4. Organisational Learning				Grand total				
	1.1 Self-awareness			1.2 Managing working relationships			1.3 Motivation		1.4 Openness to change		Total	2.1 Evaluate and improve learning		2.2 Career goals and ambitions		2.3 Using theory		Total	3.1 Decision making		3.2 Knowledge, skills & practices		Total	4.1 Knowledge capture & transfer			4.2 Change initiatives		Total	
	1.1.1	1.1.2	1.1.3	1.2.1	1.2.2	1.2.3	1.3.1	1.3.2	1.4.1	1.4.2		2.1.1	2.1.2	2.2.1	2.2.2	2.3.1	2.3.2	2.3.3		3.1.1	3.1.2	3.2.1	3.2.2		4.1.1		4.1.2	4.2.1	4.2.2	
Anna	3	4	0	2	0	2	0	0	0	0	11	3	3	1	1	2	2	3	15	0	2	1	6	9	1	3	1	0	5	40

Table 24 Anna's total praxis changes

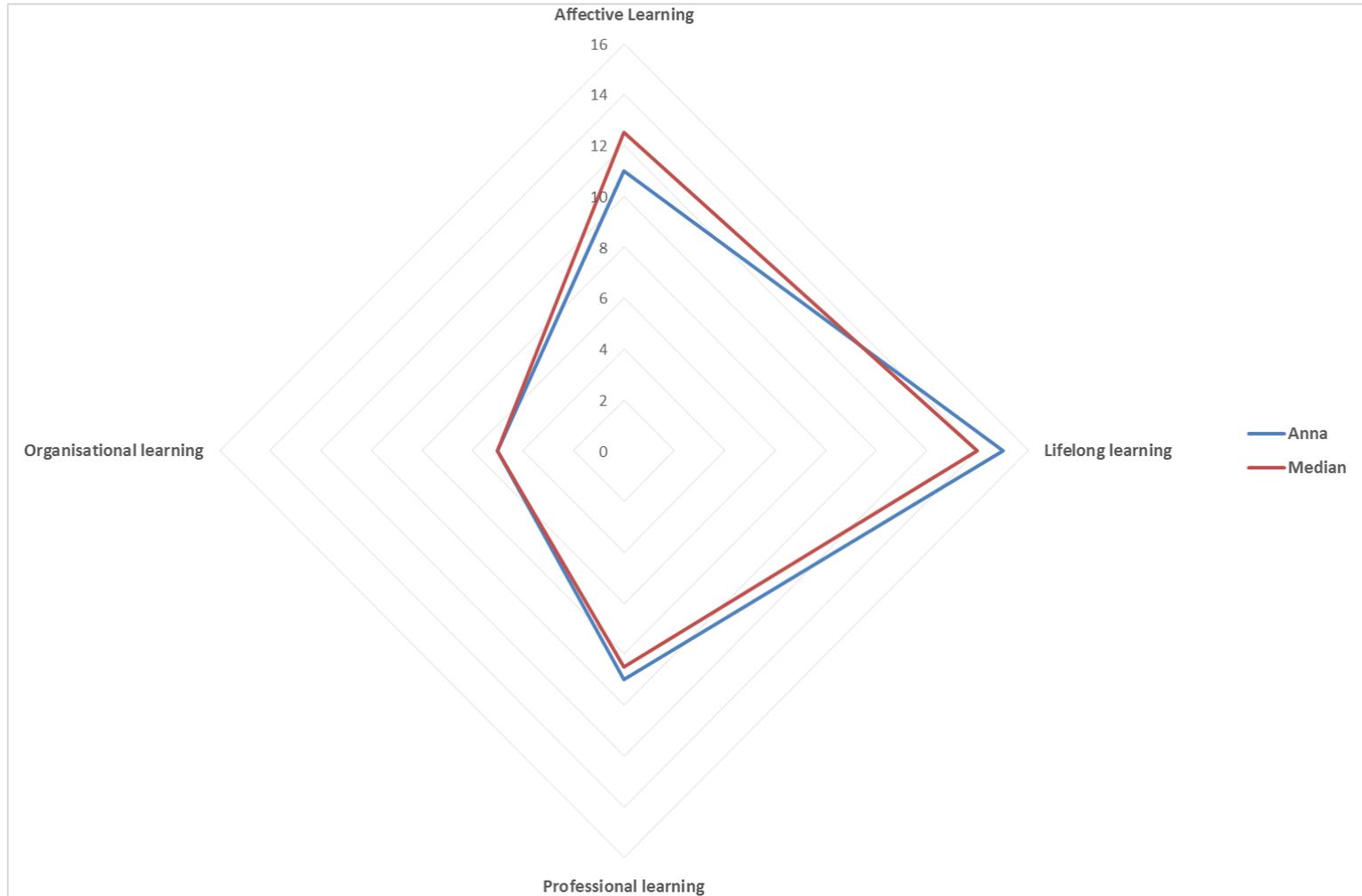


Figure 4 Anna's praxis map

#### **4.4.3 Daniel**

Table 25 provides a summary of praxis changes for Daniel. The total praxis changes are shown in Table 26 and a praxis learning map is shown in Figure 5.

##### ***Affective learning***

Daniel has become aware that his confidence improved significantly as a consequence of personally recognising and valuing the experiential learning he gained during his career. His improved confidence means that he does not now have feelings of inferiority when discussing work issues with colleagues who he previously viewed as being better qualified and consequently he has confidence to voice his opinions with managers, engineers and clients. Daniel is more motivated and feels success will come if he pushes himself to engage in unfamiliar experiences to learn new knowledge and skills. This motivation has led to his securing a new post in a different company after working for the same organisation for fourteen years.

##### ***Lifelong learning***

This is the most significant domain in which Daniel developed his praxis.

Daniel's mind-set relating to learning and work changed significantly. These changes have been profound in terms of the impact on his career development. He recognised he was stagnating in his previous role which he had held for fourteen years and was keen to take on a new and more diverse career in different organisations. He secured a new management position in a dynamic organisational environment which offered opportunities to learn and develop. Daniel now views work not just as a 'job' but as a valuable source of learning, and he recognises that through further experiential learning he can continue to develop his career and be personally fulfilled. He has critically reviewed his performance in a range of contexts (for example, his delivery of training courses, offshore certification criteria, project management competencies and knowledge of health and safety legislation and employment law) and has planned new learning opportunities to help him achieve his long term goal of becoming self-employed.

### ***Professional learning***

Daniel has confirmed that the standard operating procedures that developed in his previous role are transferable to a range of manufacturing environments. He developed his professional practices in a number of ways including giving presentations to clients, providing health and safety training and using new technology (for example, SharePoint). As a supervisor he now involves his team in planning new initiatives. When implementing new strategies for improving the performance of his team he considered the impact on the team of organisational culture.

### ***Organisational Learning***

Daniel has adapted standard operating procedures originally devised for his previous organisation so they are applicable to the organisation he now works for. These procedures have been formally documented and shared and Daniel has implemented them throughout the organisation.

<b>Theme</b>	<b>Praxis changes</b>	<b>Number of changes</b>
1.1.1	<ul style="list-style-type: none"> <li>• Feels that he values his own skills more and consequently has the confidence to voice his opinions with managers and engineers who are more academically qualified than him (R7, I1, I2, I3)</li> <li>• Feels that the confidence he has gained by recognising his own skills and knowledge enabled him to focus on career development and consequently secure a new job (P1, I10, I20)</li> <li>• Feels competent in knowledge and application of health and safety and employment legislation (P11)</li> <li>• Feels competent to interact with clients fluently and in a range of contexts (I12)</li> </ul>	4
1.1.2	NONE	0
1.1.3	NONE	0
1.2.1	<ul style="list-style-type: none"> <li>• Empowers project teams by involving them at the project planning stage to seek their views and decide project roles and responsibilities (I39, P30)</li> <li>• Help team to reflect on practice to identify improvements (P31)</li> </ul>	2
1.2.2	NONE	0
1.2.3	NONE	0
1.3.1	<ul style="list-style-type: none"> <li>• Seeks out new work-related opportunities to learn new things e.g. giving presentations to clients, improving safety in the work place (P4, P23, I7, I13)</li> <li>• Seeks out new career challenges which has led to securing a new post after many years working in the same company (I5, I24)</li> </ul>	2

<b>Theme</b>	<b>Praxis changes</b>	<b>Number of changes</b>
1.3.2	<ul style="list-style-type: none"> <li>Believes that continued career success is possible only if he continues to push himself out of his familiar and comfortable environment, making the effort to learn new things and develop more diverse skills and knowledge (I8, R1)</li> </ul>	1
1.4.1	<ul style="list-style-type: none"> <li>Evaluates the pros and cons of work related changes (P5)</li> </ul>	1
1.4.2	<ul style="list-style-type: none"> <li>Excited about changing from working in a factory environment to other more diverse working environments and the potential opportunities this offers for personal and professional development (I11)</li> <li>Enthusiastic about trying out new working practices he is unfamiliar with (P6)</li> </ul>	2
2.1.1	<ul style="list-style-type: none"> <li>Evaluates his performance delivering training courses to colleagues to identify improvements (I17)</li> <li>Mapping own skills and knowledge against those required to achieve offshore certification to determine gaps that need to be addressed (I28)</li> <li>Assesses own project management competency to determine areas for improvement (P7, P9, P17)</li> <li>Assesses own knowledge of health and safety legislation and employment law to determine knowledge gaps (P12, P19)</li> </ul>	4
2.1.2	<ul style="list-style-type: none"> <li>Critically reviews work experiences (e.g. project management, leadership) to identify, evaluate, apply and build on new learning and plan new learning opportunities (P2, P3, P8, P18, I16, I44, R3)</li> <li>Critically analyses learning gained from formal training events (e.g. health and safety, employment law) within the context of own role and experiences (P14, I19)</li> <li>Identifies and plans new learning opportunities which will enable him to take on new roles and responsibilities (I31)</li> </ul>	3

<b>Theme</b>	<b>Praxis changes</b>	<b>Number of changes</b>
2.2.1	<ul style="list-style-type: none"> <li>Recognised that he was stagnating in his current role which he had had for 14 years and set a goal of securing a higher management position in a different company with a more diverse and dynamic environment (I4, I21, P15)</li> <li>Recognises that he want to develop a diverse career which he will enjoy and learn from rather than just to have a job which offers little enjoyment but will just pay the bills (I23, I25)</li> <li>Has set a long term goal to be self-employed doing lucrative contract work around the world which will enable him to travel and work only 6 months of the year (I26, I30)</li> </ul>	3
2.2.2	<ul style="list-style-type: none"> <li>Sought and secured two new jobs in different organisations to develop knowledge and skills to achieve long term goal of being self-employed (I6, I22, P16, P10)</li> <li>Planned to achieve offshore certification to enable him to secure offshore working contracts (I27, I29)</li> </ul>	2
2.3.1	<ul style="list-style-type: none"> <li>Uses reflective learning frameworks to reflect on work related experiences (e.g. giving presentations to clients) to identify learning points and develop new knowledge to improve practice (I18, R4)</li> <li>Gained insight into what motivates him to develop his career rather than be job focussed (R2)</li> <li>Gained insight into what motivates him to learn using learning theory (R5)</li> <li>Gained insight into the important role that reflection-in-action plays in his job as an engineer working in a fast paced, dynamic manufacturing environment (R6)</li> </ul>	4
2.3.2	NONE	0
2.3.3	<ul style="list-style-type: none"> <li>Uses organisational learning theory to gain insight into the different types of organisational learning (e.g. single loop and double loop) occurring in his organisation (P28)</li> </ul>	1

<b>Theme</b>	<b>Praxis changes</b>	<b>Number of changes</b>
3.1.1	NONE	0
3.1.2	<ul style="list-style-type: none"> <li>• Uses reflective frameworks to review decisions made previously about production issues and what their outcomes were in order to inform future decision making (P27, I36, I37)</li> </ul>	1
3.2.1	<ul style="list-style-type: none"> <li>• Confirmation that standard operating procedures that he developed are transferable to diverse manufacturing environments (I32)</li> <li>• Confirmation that knowledge relating to health and safety and employment legislation is current (P13, P20)</li> </ul>	2
3.2.2	<ul style="list-style-type: none"> <li>• Gives professional presentations to clients (I14)</li> <li>• Provides training to colleagues e.g. Health &amp; Safety (I15, I19)</li> <li>• Reflects daily in a structured way as a supervisor to learn from mistakes and actions to identify lessons learned and future actions (I38, I45, P21)</li> <li>• Involves team in planning new initiatives (I40)</li> <li>• Uses contact management system such as SharePoint (P24)</li> <li>• Considers the impact of organisational culture when putting in place strategies for improving performance of team (P29)</li> <li>• Supports colleagues skills and knowledge development</li> </ul>	7
4.1.1	<ul style="list-style-type: none"> <li>• Documented standard operating procedures for a manufacturing organisation (I34, I41, P25, P35)</li> </ul>	1
4.1.2	<ul style="list-style-type: none"> <li>• Shared documented Standard Operating Procedures throughout the organisation (P26, I33, I43)</li> <li>• Shared own knowledge and skills relating to a variety of projects during inter-departmental meetings (P33, P34)</li> </ul>	2

<b>Theme</b>	<b>Praxis changes</b>	<b>Number of changes</b>
4.2.1	NONE	0
4.2.2	<ul style="list-style-type: none"> <li>Designed and introduced new standard operating procedures (I35, I42, P22)</li> </ul>	1

**Table 25 Daniel's summary of praxis changes**

	1. Affective learning												2. Lifelong Learning						3. Professional Learning				4. Organisational Learning				Grand total			
	1.1 Self-awareness			1.2 Managing working relationships			1.3 Motivation		1.4 Openness to change		Total	2.1 Evaluate and improve learning		2.2 Career goals and ambitions		2.3 Using theory		Total	3.1 Decision making		3.2 Knowledge, skills & practices		Total	4.1 Knowledge capture & transfer		4.2 Change initiatives		Total		
	1.1.1	1.1.2	1.1.3	1.2.1	1.2.2	1.2.3	1.3.1	1.3.2	1.4.1	1.4.2		2.1.1	2.1.2	2.2.1	2.2.2	2.3.1	2.3.2	2.3.3		3.1.1	3.1.2	3.2.1	3.2.2		4.1.1	4.1.2		4.2.1	4.2.2	
Daniel	4	0	0	2	0	0	2	1	1	2	12	4	3	3	2	4	0	1	17	0	1	2	7	10	1	2	0	1	4	43

**Table 26 Daniel's total praxis changes**

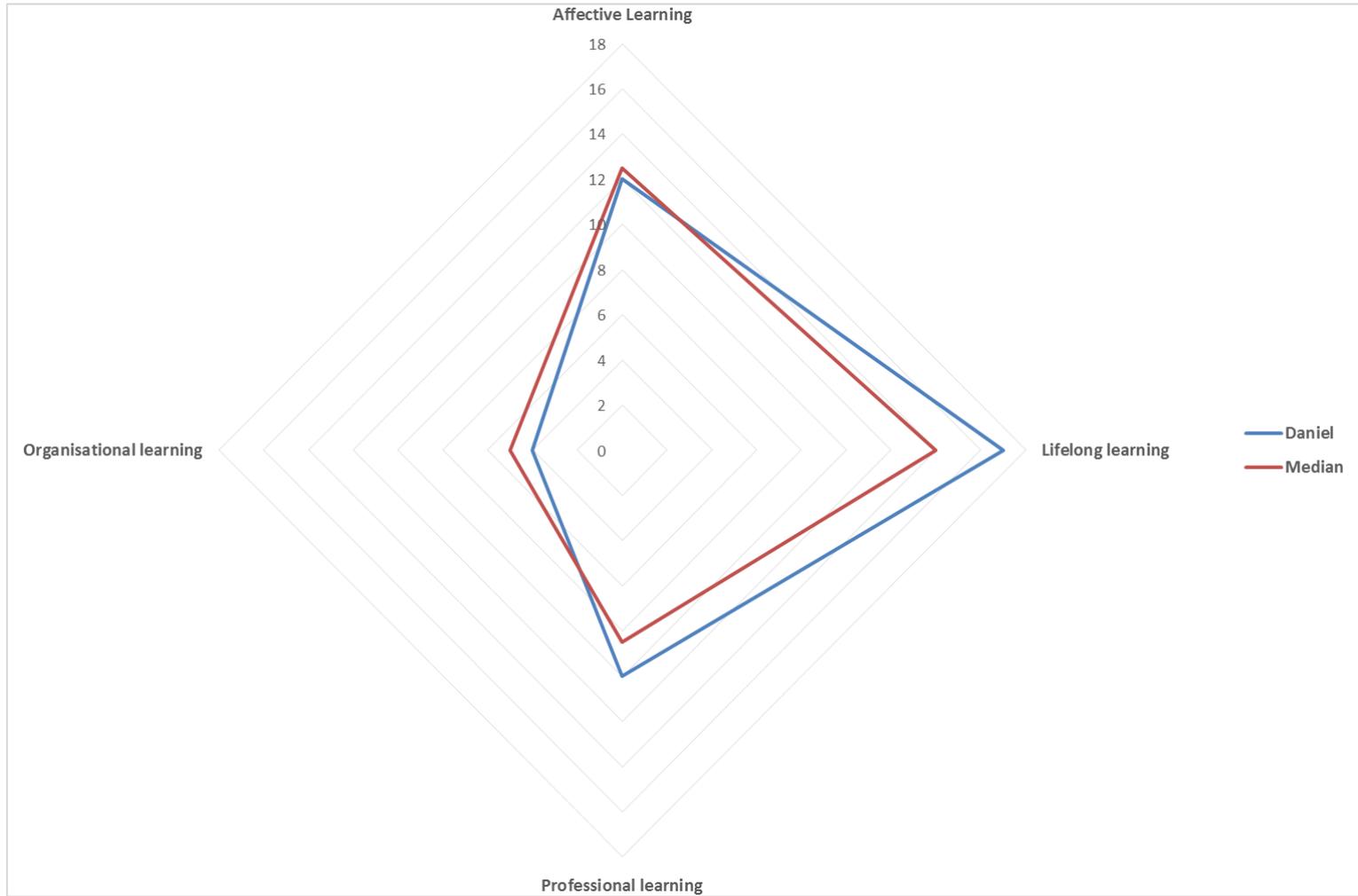


Figure 5 Daniel's praxis map

#### **4.4.4 Edward**

Table 27 provides a summary of praxis changes for Edward. The total praxis changes are shown in Table 28 and a praxis learning map is shown in Figure 6.

##### ***Affective learning***

Edward has become aware that his confidence has grown in a number of areas. He feels he has become more confident to take on extra responsibilities, is more assertive in voicing his opinions and can objectively assess behaviours, practices and attitudes of colleagues in the organisation. He now values his own knowledge and skills and feels that these make him an asset to the company he works for. Edward has become open minded about how his colleagues work, accepting that some may need more supervision and support than others; and that poor performance may be the consequence of personal problems. He feels that as a supervisor he tries to better understand reasons for poor performance amongst his team. He has shown empathy when team members have had personal problems that impact on their performance and he has considered such matters when allocating roles and responsibilities.

##### ***Lifelong learning***

This is the most significant domain in which Edward has developed his praxis.

Edward assesses his performance as a facilities manager on a monthly basis by benchmarking his performance against best practices. He has developed strategies for improving his learning which include producing a monthly report which is a critical review of work practices including identifying new learning and how this can be applied, using the reference library as a learning resource and reflecting on how to apply learning from formal training events. Edward has recognised he does not want to be promoted or be employed by another organisation but is keen to ensure that he continues to develop his employability skills and knowledge by getting involved in new initiatives such as environmental sustainability which offer opportunities for further learning and development. Edward has used theory to understand the ways in which he and his team are motivated and to assess the organisational culture changes that have taken place as a consequence of a take-over by a multi-national organisation.

### ***Professional learning***

Edward has implemented several new practices. One is the production of a monthly report which provides an analysis of successes, failures, opportunities and threats within his department. This provides valuable information to identify best practices and support future decision making and is the basis for challenging decisions and practices made without a clear rationale.

### ***Organisational Learning***

Edward has developed a factory compliance framework used for organisational equipment audits. This quality assurance framework has been shared throughout the organisation and Edward has taken a lead role in its implementation. Edward has shared his knowledge and skills relating to energy efficiency through practice based social networks.

<b>Theme</b>	<b>Praxis changes</b>	<b>Number of changes</b>
1.1.1	<ul style="list-style-type: none"> <li>• Feels confident that the skills he has makes him an asset to the company (P3, I1)</li> <li>• Feels confident to take on greater levels of responsibility (P13, P28, I27)</li> <li>• Feels that he values his own skills more and consequently has the confidence to voice his opinions more (I5)</li> <li>• Feels confident to objectively assess behaviours, attitudes and practices within the organisation (I9)</li> <li>• Feels capable of being a supervisor (I21)</li> </ul>	5
1.1.2	NONE	0
1.1.3	NONE	0
1.2.1	<ul style="list-style-type: none"> <li>• Is approachable and shows empathy when members of his team have personal problems that impacts on their performance and considers these issues when allocating roles and responsibilities (I16, I20, I25, P45)</li> <li>• Facilitate colleagues to reflect on their practice to identify good and bad practices and to plan improvements (I47, I51, P51, P55)</li> <li>• Shares knowledge and experiences with peers to help them support their development (P26, P29)</li> </ul>	3
1.2.2	NONE	0
1.2.3	<ul style="list-style-type: none"> <li>• Accepts that people work in different ways e.g. some need minimal supervision and others prefer to be briefed in detail (I15)</li> <li>• Accepts that poor performance of members of his team may be the consequence of experiencing personal problems and he needs to determine what the issues are so that he can manage them appropriately (I14, I26, I55, P2, P42)</li> </ul>	2
1.3.1	<ul style="list-style-type: none"> <li>• Seeks out new work-related challenges which will enable him to apply new knowledge and skills and take on new responsibilities (P8, P14, P27, P47, P48, I8)</li> </ul>	1
1.3.2	NONE	NONE
1.4.1	<ul style="list-style-type: none"> <li>• Evaluates the rationale for organisational culture changes resulting from a the company being taken over by a large multi-national organisation (P10, I19)</li> </ul>	1

<b>Theme</b>	<b>Praxis changes</b>	<b>Number of changes</b>
1.4.2	<ul style="list-style-type: none"> <li>Accepts the organisational culture changes taking place as a consequence of a take-over by a large multi-national organisation (P11, I18)</li> </ul>	1
2.1.1	<ul style="list-style-type: none"> <li>On a monthly basis analyses the strengths and weaknesses of his performance as a facilities leader against best practice to determine his development needs (P16, P19, P20, P32, P37, P39, P53, I24, I30, R4, R6)</li> </ul>	1
2.1.2	<ul style="list-style-type: none"> <li>Produces a report which is a monthly critical review of work practices which identifies new learning and how it can be applied to future practice to improve performance (P4, P17, P21, P23, P34, P35, P54, I4, I23, I24, I)</li> <li>Uses company reference library and other information sources as learning resources to learn how to solve identified work related problems (I31, I32)</li> <li>Critically analyses learning gained from formal training events within the context of own role and experiences (P6, P7)</li> <li>Identify opportunities to strengthen weak learning styles to help him develop as a rounded learner capable of learning from a wide variety of different experiences (R9, R10)</li> <li>Plans out learning to meet knowledge and skills deficiencies identified in performance appraisal (R5)</li> </ul>	5
2.2.1	<ul style="list-style-type: none"> <li>Recognises that he has no ambition to be promoted or move to another organisation because he is happy in his current role but would like to be involved in initiatives that arise from time to time that interest him (I29)</li> </ul>	1
2.2.2	<ul style="list-style-type: none"> <li>Develops his employability skills and knowledge by getting involved in new initiatives (e.g. involvement in environmental and sustainability issues) and taking on new responsibilities (P30, I28)</li> </ul>	1

<b>Theme</b>	<b>Praxis changes</b>	<b>Number of changes</b>
2.3.1	<ul style="list-style-type: none"> <li>• Gained insight into what motivates him to learn new skills to take on new responsibilities using learning theory (P24, P46, R2)</li> <li>• Uses reflective learning frameworks to reflect on work-related problems and issues to develop new knowledge to improve practice (R1, R3)</li> <li>• Used learning theory to help him understand the advantages and disadvantages of his pragmatist learning style in his role as a facilities leader (R10)</li> <li>• Gained insight into the important role that reflection-in-action plays in his job as a facilities leader in a fast paced, dynamic manufacturing environment (R8)</li> </ul>	4
2.3.2	<ul style="list-style-type: none"> <li>• Uses motivation theory to gain insight into the ways in which different members of his team can be motivated to perform effectively (P1, P9, P43)</li> </ul>	1
2.3.3	<ul style="list-style-type: none"> <li>• Uses organisational culture models to analyse organisational culture change resulting from takeover by large multi-national company (P12, P49, I17)</li> </ul>	1
3.1.1	NONE	0
3.1.2	<ul style="list-style-type: none"> <li>• Writes a monthly report to review what has gone well and what has gone poorly to inform decision making (I42, I43)</li> </ul>	1
3.2.1	<ul style="list-style-type: none"> <li>• Confirmation that the leadership knowledge and skills she applies are current according to current best practices (P36, P38, P40, I3)</li> <li>• Confirmation that knowledge and skills relating to quality assurance adheres to best practice guidelines (I34)</li> </ul>	2

<b>Theme</b>	<b>Praxis changes</b>	<b>Number of changes</b>
3.2.2	<ul style="list-style-type: none"> <li>• Reflects daily in a structured way as a supervisor to learn from mistakes and actions to identify lessons learned and future actions (P5, P15, P25, P41, P56, I10, I44)</li> <li>• Completes a monthly report to analyse and reflect on successes, failures, opportunities and threats, within his department (P18, P22, P33, I22, I49)</li> <li>• Assertively challenge the decisions and practices in the setting when they do not have a sound rationale (I7, )</li> <li>• Supports apprentices to develop and reflect on their knowledge, skills and practices (I11, I48)</li> <li>• Created and uses a compliance framework for auditing equipment (I38, I39)</li> </ul>	5
4.1.1	<ul style="list-style-type: none"> <li>• Documented quality assurance processes relating to on-site equipment (I37, I41, I52)</li> </ul>	1
4.1.2	<ul style="list-style-type: none"> <li>• Shares documented quality assurance processes relating to on-site equipment (I36, I40)</li> <li>• Transfers own skills and knowledge relating to health and safety and reflective skills in a range of contexts (e.g. using power tools) with apprentices (I13, I50)</li> <li>• Disseminate best practices relating to energy efficiency through practice based social networks such as Communities of Practice (I33, I46, I54, P31)</li> <li>• Shares knowledge of organisational culture with new employees (P50, P52)</li> </ul>	4
4.2.1	<ul style="list-style-type: none"> <li>• Supports colleagues to understand the need for and accept organisational culture change (e.g. takeover by large multi-national company) (I45)</li> </ul>	1
4.2.2	<ul style="list-style-type: none"> <li>• Developed and introduced factory equipment compliance framework for equipment audits (I35, I53, P57)</li> </ul>	1

**Table 27 Edward's summary of praxis changes**

	1. Affective learning										2. Lifelong Learning						3. Professional Learning				4. Organisational Learning				Grand total						
	1.1 Self-awareness			1.2 Managing working relationships				1.3 Motivation			1.4 Openness to change		Total	2.1 Evaluate and improve learning		2.2 Career goals and ambitions		2.3 Using theory		Total	3.1 Decision making		3.2 Knowledge, skills & practices			Total	4.1 Knowledge capture & transfer		4.2 Change initiatives		Total
	1.1.1	1.1.2	1.1.3	1.2.1	1.2.2	1.2.3	1.3.1	1.3.2	1.4.1	1.4.2		2.1.1	2.1.2	2.2.1	2.2.2	2.3.1	2.3.2	2.3.3		3.1.1	3.1.2	3.2.1	3.2.2			4.1.1	4.1.2	4.2.1	4.2.2		
Edward	5	0	0	3	0	2	1	0	1	1	13	1	5	1	1	4	1	1	14	0	1	2	5	8	1	4	1	1	7	42	

Table 28 Edward's total praxis changes

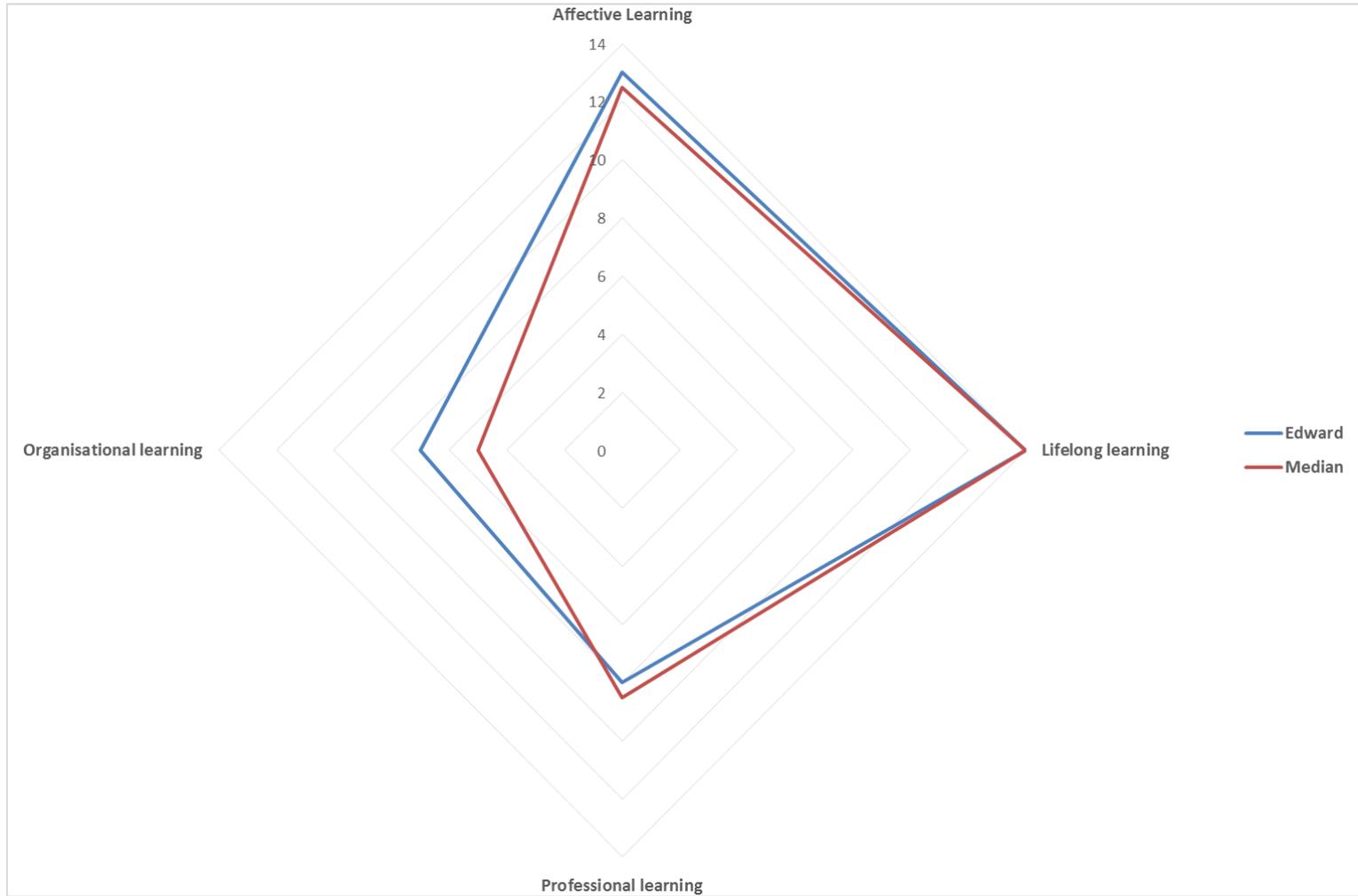


Figure 6 Edward's praxis map

#### **4.4.5 Eve**

Table 29 provides a summary of praxis changes for Eve. The total praxis changes are shown in Table 30 and a praxis learning map is shown in Figure 7.

##### ***Affective Learning***

This is the most significant domain in which Eve has developed her praxis.

One of the most significant ways in which Eve has developed her praxis is the way in which she now interacts with her colleagues. By recognising the negative impact that her previously aggressive communication style has had on herself and her relationships with colleagues she has adopted an assertive style of communication. This has helped her to resist negative aspects of organisational culture in the police force such as racism and misogyny. She has the confidence to challenge racist and misogynistic behaviours in an assertive manner. She has become empathetic to colleagues when they have performed poorly in their job role or resisted change. She has become less judgemental, adopting a supportive role in helping colleagues improve their attitude and performance. Eve has become passionate about her role as a community officer and the value of community policing in general. This is apparent from her enthusiasm for initiating new community initiatives for vulnerable groups such as the elderly to provide them with a better quality of life.

##### ***Lifelong learning***

Eve identified ways to develop her own unique selling point to help her achieve her career goal of becoming a Sergeant during a period of organisational restructuring and contraction. She feels that she has become known as someone who is pro-active in volunteering to get involved in new tasks and initiatives. This has included setting up informal meetings to discuss crime prevention or any other local issues (beat surgeries), organising information days for the elderly, putting together multiple drug warrants, project management and developing funding bids. Many activities have carried a risk of failure because of Eve's inexperience in many of these areas but she feels that the risk has been worth it because of the opportunities to learn. One way she has identified to help to mitigate risk relating to her inexperience is to identify senior colleagues who will mentor her.

### ***Professional Learning***

Eve feels that she has consulted and collaborated with others and has checked information closely in a number of professional contexts. This has included consulting information sources before taking action (for example consulting experts in specific police cases to aid decision making, checking case histories of those in custody) and working with other organisations (for example, public transport organisations to help in missing persons investigations, cross-border policing, working with agencies to develop community initiatives).

### ***Organisational Learning***

Eve has participated in communities of practice to develop and disseminate new knowledge relating to community policing and also to develop a rationale for change (for example, new ways of boundary policing and dealing with illegal off-road bikes).

<b>Theme</b>	<b>Praxis changes</b>	<b>Number of changes</b>
1.1.1	<ul style="list-style-type: none"> <li>• Feels pride in ability to be assertive when interacting with colleagues (P5, I1, I3)</li> <li>• Feels competent to submit case files (P6)</li> <li>• Feels confident in volunteering for prisoner handovers (P10)</li> <li>• Feels a more rounded person (P43, I6)</li> <li>• Feels that colleagues recognise her skills and knowledge (I11, I43)</li> <li>• Feels confident in ability to act rationally (I13)</li> </ul>	6
1.1.2	<ul style="list-style-type: none"> <li>• Aware of how her behaviour as a supervisor can affect supervisees motivation and productivity (R9, I21)</li> <li>• Awareness that when she becomes frustrated it can result in an aggressive communication style (P34, I60)</li> <li>• Developing an awareness of how her behaviour can impact on others has made her feel more grounded, happier and less stressed (P38)</li> <li>• Developed an awareness of the reasons why she made poor decisions in the past that impacted negatively on her career (I4, I35)</li> </ul>	4
1.1.3	<ul style="list-style-type: none"> <li>• Aware that in the past she was influenced by peers and this made her intolerant and narrow minded and as a consequence of this realisation she has become more independent minded (I18, I26, I36, P17, P24)</li> </ul>	1
1.2.1	<ul style="list-style-type: none"> <li>• Helping members of her team who have frequent complaints against them to reflect on their behaviour in a structured manner to enable them to learn from their mistakes and plan alternative actions in similar situations (R7, I23, I51, I53)</li> <li>• Providing advice and guidance to others on personal and professional matters whilst thinking, feeling, and behaving with genuineness, empathy and honesty towards them (P33, P35, P39, P41, P51, P55, P67)</li> </ul>	2

<b>Theme</b>	<b>Praxis changes</b>	<b>Number of changes</b>
1.2.2	<ul style="list-style-type: none"> <li>• Challenges aggressive, racist or sexist behaviour of colleagues in an assertive manner and supports them to reflect on their behaviour to help them to understand its impact on themselves and on others (R21, P1, P3, P4, P18)</li> <li>• As a change agent she uses persuasion and active listening to break down barriers/resistance to organisational change initiatives (P32)</li> <li>• During disagreements and conflict with others she recognises own impulses to act without thinking and redirects her energy to building a rapport and finding common ground to ensure a positive resolution (I2, I5)</li> </ul>	3
1.2.3	<ul style="list-style-type: none"> <li>• Accepts that people work in different ways e.g. some need minimal supervision and others prefer to be briefed in detail (R13, I22, P37, P49, P52)</li> <li>• Accepts that during periods of change people will react emotionally in different ways and it is important to try to understand their feelings and emotions rather than be over critical of them (P26)</li> <li>• Accepts that her supervisees who do not perform well and are unpunctual are not necessarily inherently lazy but may be experiencing personal or other difficulties which is impacting on their behaviour and consequently they need to be listened to and supported (P40, P54)</li> </ul>	3
1.3.1	<ul style="list-style-type: none"> <li>• Volunteered to develop an information days for the elderly initiative which involved multi-agency working, recruitment of volunteers, organising funding and arranging venue and transport (I16, I45, I50)</li> <li>• Volunteered to put together multiple drugs warrants which is not normally something a PC would be involved in (I47)</li> <li>• Set up new beat surgeries on her policing ward (P12)</li> <li>• Passionate about proactively developing community based policing initiatives that will provide a better quality of life for others (P15)</li> </ul>	4

<b>Theme</b>	<b>Praxis changes</b>	<b>Number of changes</b>
1.3.2	<ul style="list-style-type: none"> <li>• Believes that promotion will be possible if she continues to make a sustained effort to build a portfolio of skills and knowledge by various means e.g. engaging in communities of practice, volunteering to initiate and implement new projects (P45, P46, I33)</li> <li>• Believes that she can develop her emotional intelligence through a determination to continue to learn and practice becoming more self-aware and empathetic (I62, R11)</li> <li>• Believes that aspects of community policing that are considered too problematic to deal with (e.g. patrolling some areas of the community) can be tackled through a determined effort by herself and other community officers (I57)</li> </ul>	3
1.4.1	<ul style="list-style-type: none"> <li>• Seeks to understand the economic drivers of organisational restructuring in the police force and how these changes will impact emotionally on colleagues (P21, P25, I25)</li> </ul>	1
1.4.2	<ul style="list-style-type: none"> <li>• Enthusiastic about organisational structural changes taking place within the police force and the potential opportunities they offer for personal and professional development (I19, I27, I30, P29, P30)</li> </ul>	1

<b>Theme</b>	<b>Praxis changes</b>	<b>Number of changes</b>
2.1.1	<ul style="list-style-type: none"> <li>Analysing own competence of putting different types of case files together to identify knowledge gaps (I9)</li> <li>Mapping own skills and knowledge against those required at a higher rank (Sergeant) to determine any deficiencies (I32, I34, I40)</li> <li>Mapping own skills and knowledge against those required at his current rank to determine any deficiencies (P44)</li> <li>Assesses how closely her own values are aligned to the stated core values of the police force (P22)</li> </ul>	4
2.1.2	<ul style="list-style-type: none"> <li>Uses learning journal and action plans to identify and build on new learning and plan and monitor new learning relating to her role (P48, P50, I37)</li> <li>Identify case file champions (experts in particular police cases) who can provide expert advice and guidance about compiling case files (I7)</li> <li>Plan and implement new community policing initiatives that will provide her with opportunities to learn new skills (e.g. senior citizens information day provides opportunity to learn project management, funding and procurement skills) (I17)</li> <li>Volunteer for tasks that will provide learning opportunities e.g. putting together multiple drugs warrants (I49)</li> <li>Identify experienced senior colleagues from different departments who may be a source of new learning and can coach and mentor her (I31, I29)</li> <li>Identify opportunities to strengthen weak learning styles to help her develop as a more rounded learner capable of learning from a wide variety of different experiences (R2, R14, R16, R17, R19)</li> </ul>	6
2.2.1	NONE	0
2.2.2	<ul style="list-style-type: none"> <li>Volunteering to carry out prisoner handovers to impress supervisor and improve promotion prospects (P11)</li> <li>Proactively developing new community policing initiatives to demonstrate work ethic to senior officers and to use as evidence during a promotion board (P16, P47, I29)</li> <li>Identified a senior ranking officer who's agreed to coach her for promotion (I38)</li> </ul>	3

<b>Theme</b>	<b>Praxis changes</b>	<b>Number of changes</b>
2.3.1	<ul style="list-style-type: none"> <li>• Gained insight into what motivates her to learn (e.g. looking for new experiences) using learning theory (R3, R15)</li> <li>• Uses reflective learning frameworks to help her solve problems when faced with feelings of doubt and uncertainty (R4, R18)</li> <li>• Gained insight into the important role that reflection-in-action plays in her job as a police officer and how reflection-in-action skills can be improved by articulating her actions to others following policing incidents (R6, R8)</li> <li>• Uses motivation theory to gain insight into how own attitudes affect her motivation, how she deals with other people and how she approaches work related activities (P42)</li> </ul>	4
2.3.2	<ul style="list-style-type: none"> <li>• Uses emotional intelligence models to gain insight into the underpinning reasons for colleagues attitudes and why they behave in an inappropriate way (e.g. rude comments, racist/sexist behaviour)(P2, P20)</li> <li>• Uses grief cycle models to understand colleagues feelings and emotions during periods of change (P27, P63, R10)</li> <li>• Uses learning theory to helped her to understand the different ways in which her colleagues learn and their strengths and weaknesses when learning new skills and knowledge (P36)</li> <li>• Uses motivation theory to gain insight into the ways in which colleagues may be affected by personal issues and change (P56, P66)</li> </ul>	4
2.3.3	<ul style="list-style-type: none"> <li>• Uses organisational change models to gain insight into triggers for change and how change is managed in the police force (I24, I28, I60)</li> </ul>	1
3.1.1	<ul style="list-style-type: none"> <li>• Consults case file champions when making decisions relating to case files (I9, I10)</li> </ul>	1

<b>Theme</b>	<b>Praxis changes</b>	<b>Number of changes</b>
3.1.2	<ul style="list-style-type: none"> <li>• Uses national decision making model more effectively to strengthen decision making process relating to different policing contexts (e.g. missing person investigations) (P58, P59, R1, R5, P64)</li> <li>• Researches relevant manuals/documents to objectively inform decision making (e.g. when putting case files together) (I8)</li> <li>• Uses a reflective journal to help her make competent decisions by allowing her to more objectively consider possible outcomes of different decisions (R5, R11, R20, P64)</li> </ul>	3
3.2.1	<ul style="list-style-type: none"> <li>• Confirmation that practices relating to finding missing persons (e.g. using taxi drivers as information sources) are effective (I44)</li> <li>• Confirmation that dealing with staff personnel issues (e.g. lateness or sickness) should be handled in a supportive rather than critical manner (P53)</li> <li>• Confirmation that checks should be carried out relating to suspects previous history to ensure that correct action is taken (e.g. caution or charge) (I42)</li> </ul>	3
3.2.2	<ul style="list-style-type: none"> <li>• Uses reflective journals help to identify areas of concern and set actions/targets in order to improve professional practice (P9)</li> <li>• Generated new 'beat surgeries' on policing ward (P13, I12)</li> <li>• More inter-agency working to develop creative community policing initiatives (P14)</li> <li>• Uses public transport employees as an information source in missing persons investigations (P57)</li> <li>• Works more closely with cross-border police forces (I14)</li> <li>• Developed information days for specific sections of the community e.g. elderly (I15, I46)</li> <li>• Checks the history of people taken into custody to inform best course of action (I41)</li> <li>• Puts together multiple drugs warrants (I48)</li> </ul>	8
4.1.1	<ul style="list-style-type: none"> <li>• Generated checklist sheets to identify what forms were required for various case files e.g. remand/advice/guilty/not guilty (P7)</li> </ul>	1

<b>Theme</b>	<b>Praxis changes</b>	<b>Number of changes</b>
4.1.2	<ul style="list-style-type: none"> <li>• Shared information with colleagues relating to putting various case files together (P8)</li> <li>• Disseminate best practices relating to community policing initiatives (e.g. information days for the elderly) through practice based social networks such as Communities of Practice (P60, P61, P62, I55, I56)</li> <li>• Transfer own skills and knowledge to probationer constables (P65, I52, I54)</li> </ul>	3
4.2.1	<ul style="list-style-type: none"> <li>• Has become knowledge intervention champion to support changes relating to the use of new judicial tools for tackling crime (P19)</li> <li>• Supports colleagues to understand the need for and accept organisational culture change (e.g. operation ORBIS which is major structural organisational change) (P23, P28, P31, I20)</li> </ul>	2
4.2.2	<ul style="list-style-type: none"> <li>• Developed a case for introducing boundary policing (I58)</li> <li>• Developed and put forward a case for dealing with the illegal use off-road bikes in the community (I59)</li> </ul>	2

**Table 29 Eve's summary of praxis changes**

	1. Affective learning											2. Lifelong Learning						3. Professional Learning				4. Organisational Learning				Grand total				
	1.1 Self-awareness			1.2 Managing working relationships			1.3 Motivation		1.4 Openness to change		Total	2.1 Evaluate and improve learning		2.2 Career goals and ambitions		2.3 Using theory		Total	3.1 Decision making		3.2 Knowledge, skills & practices		Total	4.1 Knowledge capture & transfer			4.2 Change initiatives		Total	
	1.1.1	1.1.2	1.1.3	1.2.1	1.2.2	1.2.3	1.3.1	1.3.2	1.4.1	1.4.2		2.1.1	2.1.2	2.2.1	2.2.2	2.3.1	2.3.2	2.3.3		3.1.1	3.1.2	3.2.1	3.2.2		4.1.1		4.1.2	4.2.1	4.2.2	
Eve	6	4	1	2	3	3	4	3	1	1	28	4	6	0	3	4	4	1	22	1	3	3	8	15	1	3	2	2	8	73

Table 30 Eve's total praxis changes



Figure 7 Eve's praxis map

#### **4.4.6 Gareth**

Table 31 provides a summary of praxis changes for Gareth. The total praxis changes are shown in Table 32 and a praxis learning map is shown in Figure 8.

##### ***Affective learning***

Gareth now feels good about his ability to learn and develop as well as his personal qualities and characteristics. He has become confident as a leader, feeling able to lead his team through the substantial organisational changes occurring in the police force; and he feels that he has become a competent reflective professional who can reflect honestly on his progress and development. Gareth's resistance to organisational culture change (such as technological change) has lessened because he is better able to understand and rationalise the drivers for change. This acceptance of positive aspects change can bring has manifested itself in the way that Gareth challenged the status quo when he has believed this would lead to real improvements. An example of this is his passion for implementing new strategies for dealing with criminal offence's motivated by prejudice based upon the victim's disability (disability hate crime).

##### ***Lifelong learning***

This is the most significant domain in which Gareth has developed his praxis.

Gareth conducted research to seek new ways of dealing with ongoing policing issues such as disability hate crime. He has become very career focussed, continuously looking for ways of gaining promotion. For example, he has sought feedback from supervisors through mock promotion boards to enhance his promotion prospects. He has raised his profile by being proactive in communities of practice and by looking for opportunities to influence and lead change. Gareth has used theory significantly to examine his behaviour and practice. This is particularly evident in using theory to understand the roles he plays in a team, the ways in which he is motivated and advantages and disadvantages of his learning style. He has become able to identify when he has used single and double loop learning and has recognises himself as a social learner in the way in which he participates in communities of practice. Gareth has used theory to analyse how his organisation manages change and the impact that it has on organisational culture.

### ***Professional learning***

The way in which Gareth makes decisions has changed. His decision making has become structured because he now uses the police national decision model (College of Policing, 2016). He has tended to seek feedback from colleagues about decisions he made relating to critical incidents for example. Gareth has become able to challenge accepted orthodox working practices if he feels there is no clear rationale for them. Two examples of this are how he has dealt with people who are drunk and disorderly; and the way in which he has handled operational orders. As a supervisor he feels that he has a clearer strategy for helping his team to develop their professionalism. He has attempted to cultivate a team that feels empowered by being trusting, involving them in decision making process and by developing a personal mentoring type relationship to enable him to guide their development as professionals.

### ***Organisational learning***

Gareth has made important changes to his organisation based on his own learning. At a strategic level he has contributed to development of a strategic action plan in which his recommendations for dealing with disability hate crime based on his own research were accepted. He has been instrumental in introducing a documented policy for dealing with people who are drunk and disorderly. Gareth is enthusiastic about sharing his knowledge and skills about reflective practice and organisational change with colleagues and he has become an advocate of the power of social learning to develop and disseminate practical solutions to common policing problems. To support organisational change Gareth has identified change agents who he feels have the personal characteristics to act as catalysts for the significant organisational culture changes that are occurring in the police force.

<b>Theme</b>	<b>Praxis changes</b>	<b>Number of changes</b>
1.1.1	<ul style="list-style-type: none"> <li>• Feels more confident in his ability to reflect honestly on his progress and development (P1, P4, I2)</li> <li>• Feels confident to participate in communities of practice (P38)</li> <li>• Feels confident to lead his team through organisational change (P41, P44)</li> <li>• Feels good about his own ability to learn and develop and his personal characteristics (I1, I3, I56)</li> <li>• Feels confident to make improvements in the workplace (I6)</li> </ul>	5
1.1.2	NONE	0
1.1.3	NONE	0
1.2.1	<ul style="list-style-type: none"> <li>• Helping his team to reflect and improve on their practice (I8, I50, P3, P33)</li> <li>• Supporting his team to accept and adapt to organisational change (I34)</li> </ul>	2
1.2.2	<ul style="list-style-type: none"> <li>• NONE</li> </ul>	0
1.2.3	<ul style="list-style-type: none"> <li>• Considers it important to review attitudes, values and beliefs (P7)</li> </ul>	1
1.3.1	<ul style="list-style-type: none"> <li>• Passionate about implementing new strategies e.g. response to disability hate crime (P16, I27)</li> </ul>	1
1.3.2	<ul style="list-style-type: none"> <li>• Believes that as a leader continuously challenging the status quo will lead to improvements (I7)</li> <li>• Recognises that learning can be continuously improved through sustained effort (I40)</li> </ul>	2
1.4.1	<ul style="list-style-type: none"> <li>• Objectively assesses the need for continuous improvement (e.g. changing case file process) (P11)</li> <li>• Objectively assesses organisational change (e.g. drivers of change, organisational culture, outsourcing) (P45, I21, I23)</li> <li>• Objectively examine how to implement change involving operational orders (I13)</li> </ul>	3

<b>Theme</b>	<b>Praxis changes</b>	<b>Number of changes</b>
1.4.2	<ul style="list-style-type: none"> <li>• Receptive to new approaches to continuous improvement (P12)</li> <li>• Willingness to accept organisational change which will impact on organisational culture (e.g. outsourcing) (P21, P23, P42, I17, I24)</li> <li>• Receptive to new approaches to implementing operational orders (I15)</li> <li>• Positive about technological change (I22)</li> </ul>	4
2.1.1	<ul style="list-style-type: none"> <li>• Evaluates effectiveness of the way in which he learns (P5, P18, I38)</li> <li>• Assesses own work performance (R6)</li> </ul>	2
2.1.2	<ul style="list-style-type: none"> <li>• Seeks feedback from peers and managers about his actions and performance (R5, P24, P39, I43)</li> <li>• Undertakes own research to check rationale for existing policies/processes/strategies e.g. disability hate crime (I10, I39)</li> <li>• Carries out regular debriefs to learn from practice (I33)</li> </ul>	3
2.2.1	NONE	0
2.2.2	<ul style="list-style-type: none"> <li>• Evaluates own learning in the context of career development (P19, I4)</li> <li>• Seeks feedback from supervisors (e.g. mock promotion boards) to support promotion prospects (P27, I44, I45)</li> <li>• Uses communities of practice to aid career development (P40)</li> <li>• Seeks opportunities relating to change that will aid career development (I18)</li> </ul>	4

<b>Theme</b>	<b>Praxis changes</b>	<b>Number of changes</b>
2.3.1	<ul style="list-style-type: none"> <li>• Uses team theory to identify the types of roles he takes on in a team and how to develop as a better team player (P6)</li> <li>• Uses reflective models as a structure for understanding self (P26)</li> <li>• Uses motivation theory to understand how he is motivated (R1, I42)</li> <li>• Uses learning styles theory to understand strengths and weaknesses of own learning style (R2)</li> <li>• Distinguishes between reflection-in-action and reflection-on-action in the context of his practice (R3)</li> <li>• Identifies whether own learning is single-loop or double loop and the circumstances in which each might be applied (R4, I5)</li> <li>• Uses social learning theory to recognises his role in communities of practice (I51)</li> </ul>	7
2.3.2	<ul style="list-style-type: none"> <li>• Uses motivation theory to help him understand how others are motivated (I41)</li> </ul>	1
2.3.3	<ul style="list-style-type: none"> <li>• Uses organisational learning theory to understand how double loop learning can challenge established practices in his organisation (P8)</li> <li>• Uses change models to understand what drives change in his organisation (P10, P43, I19, I57)</li> <li>• Uses change models to understand how top down and bottom up change strategies are used (P13)</li> <li>• Analyses organisational culture using organisational culture models (P37)</li> </ul>	4
3.1.1	<ul style="list-style-type: none"> <li>• Considers feedback from colleagues about decisions he has made relating to critical incidents (P29)</li> </ul>	1
3.1.2	<ul style="list-style-type: none"> <li>• Reflects on decision making in a range of contexts (e.g. decisions made relating to critical incidents, processes and procedures) in a structured way using reflective models(P30, P31, I37, I47)</li> </ul>	1

<b>Theme</b>	<b>Praxis changes</b>	<b>Number of changes</b>
3.2.1	NONE	0
3.2.2	<ul style="list-style-type: none"> <li>• Mentors colleagues to help improve their learning, practice and professionalism (P2, P35, I49)</li> <li>• Contributes to strategic action planning e.g. how to deal with disabled hate crime (P17, I26)</li> <li>• Questions accepted orthodoxy to improve productivity and efficiency e.g. dealing with drunken and disorderly offenders, dealing with the way operational orders are handled (P20, I9, I14)</li> <li>• Seeks feedback from peers to review performance (P25)</li> <li>• Reviews decision making relating to critical incidents (P28, I48)</li> <li>• Uses national decision making model (P32)</li> <li>• Carries out regular debriefs (I32)</li> <li>• Empowers his team to develop their own solutions to problems (I36)</li> <li>• Develops formal action plans (I46)</li> </ul>	9
4.1.1	<ul style="list-style-type: none"> <li>• Documented new procedure for dealing with people who are in custody because they are drunk and disorderly (I11)</li> <li>• Contributed to strategic action plan which included response to dealing with disability hate crime (I28)</li> </ul>	2
4.1.2	<ul style="list-style-type: none"> <li>• Shared change management strategy for significant organisational change with team (P14, I52)</li> <li>• Shares reflective practice techniques with colleagues through mentoring processes (P34)</li> <li>• Participates in communities of practice (P36)</li> <li>• Disseminated knowledge relating to disability hate crime (I29)</li> </ul>	4

<b>Theme</b>	<b>Praxis changes</b>	<b>Number of changes</b>
4.2.1	<ul style="list-style-type: none"> <li>• Supports team through organisational changes e.g. case file processes (P9, P22, P46)</li> <li>• Identifies change agents who will support organisational change (I25)</li> <li>• Supports implementation of new changes relating to neighbourhood policing (I53)</li> </ul>	3
4.2.2	<ul style="list-style-type: none"> <li>• Contributed to development of strategic action plan relating to disability hate crime (P15, I30)</li> <li>• Introduced new policy for dealing with people who are arrested for being drunk and disorderly (I12)</li> <li>• Contributed to implementation of strategic organisational change (I20, I35)</li> <li>• Changed roles and shift patterns (I54, I55)</li> </ul>	4

**Table 31 Gareth's summary of praxis changes**

	1. Affective learning											2. Lifelong Learning						3. Professional Learning				4. Organisational Learning				Grand total				
	1.1 Self-awareness			1.2 Managing working relationships			1.3 Motivation		1.4 Openness to change		Total	2.1 Evaluate and improve learning		2.2 Career goals and ambitions		2.3 Using theory		Total	3.1 Decision making		3.2 Knowledge, skills & practices		Total	4.1 Knowledge capture & transfer			4.2 Change initiatives		Total	
	1.1.1	1.1.2	1.1.3	1.2.1	1.2.2	1.2.3	1.3.1	1.3.2	1.4.1	1.4.2		2.1.1	2.1.2	2.2.1	2.2.2	2.3.1	2.3.2	2.3.3		3.1.1	3.1.2	3.2.1	3.2.2		4.1.1		4.1.2	4.2.1	4.2.2	
Gareth	5	0	0	2	0	1	1	2	3	4	18	2	3	0	4	7	1	4	21	1	1	0	9	11	2	4	3	4	13	63

**Table 32 Gareth's total praxis changes**

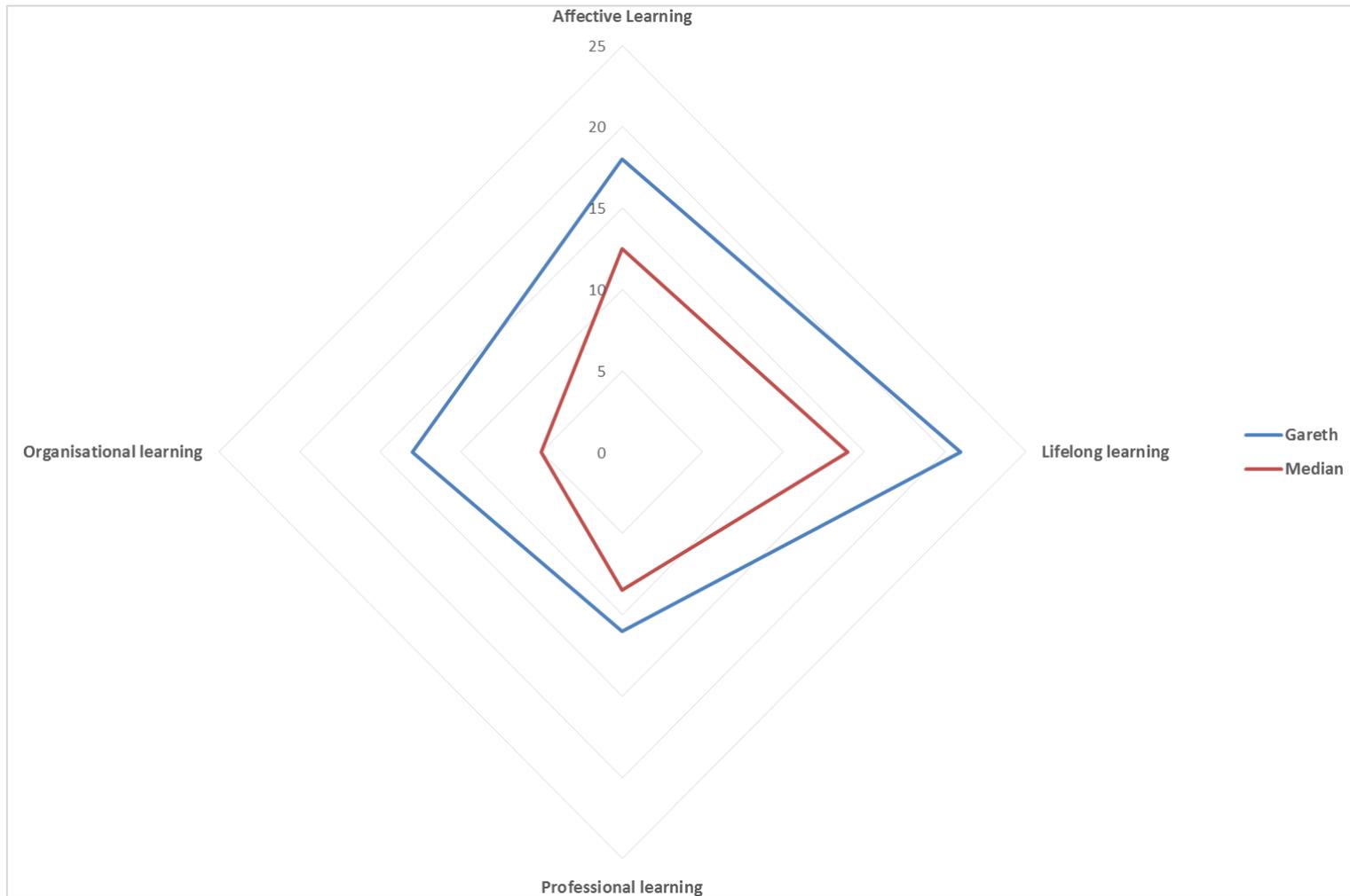


Figure 8 Gareth's praxis map

#### **4.4.7 Haley**

Table 33 provides a summary of praxis changes for Haley. The total praxis changes are shown in Table 34 and a praxis learning map is shown in Figure 9.

##### ***Affective Learning***

Haley has become open to new ideas from other professionals even if they have initially challenged her own views. Consequently she has become willing to take calculated risks trying out new innovative techniques for example, assisting learners with special needs using the Steiner model of education (Steiner Waldorf School Fellowship, 2016). This openness to new ways of working is apparent in her enthusiasm to embrace the transfer of her team from the Local Skills Council to the Local Authority because she saw this as an opportunity for personal and professional development. Haley has become motivated to volunteer to take on new roles and responsibilities such as managing complex projects which involve working across the organisation and with external collaborative partners.

##### ***Lifelong Learning***

This is the most significant domain in which Haley has developed her praxis.

Haley has developed a strategy for assessing her own knowledge and skills: she examines the person specification of new roles that she is enthusiastic about (for example, commissioner for the council) and uses these to perform a skills gap analysis. She then looks for opportunities which will address these gaps. Haley has identified that she needs to develop an activist learning style. To this end she has involved herself in projects such as volunteering to take the lead on contracts and initiatives, something of which she has had little experience. Haley now has an ambition to move into a creative role which involves project and contract management. She feels that this can be achieved by continuing her approach to performance analysis, seeking new learning opportunities, developing her learning style and working with other professionals she can learn from within and external to her own organisation. She has adopted the use of theory as a key learning and development tool, using this to gain insight into her relationships with others, to develop her learning style and understand her motivations and attitudes.

### ***Professional Learning***

Haley has consulted with a greater range of professionals (for example, education, youth offending and careers) than previously to make decisions and implement new practices relating to the provision of education and training for young people. She has also become better at workload planning, setting specific targets for herself and her team and having a sound rationale for allocation of roles and responsibilities.

### ***Organisational Learning***

Haley has developed educational pathways for educational/career progression for young people which she has shared with relevant agencies and partners. Haley has identified and shared best practices (e.g. course commissioning, project management) with colleagues through different forums such as staff meetings and debriefing sessions.

<b>Theme</b>	<b>Praxis changes</b>	<b>Number of changes</b>
1.1.1	<ul style="list-style-type: none"> <li>• Recognises and feels proud about her successes in being able to influence senior managers (I1, I2, P1, P7)</li> <li>• Feels confident to take on greater levels of responsibility (I17)</li> <li>• Feels confident in working collaboratively with parents, children and educators to implement new practices relating to special educational needs (P29)</li> </ul>	3
1.1.2	NONE	0
1.1.3	NONE	0
1.2.1	<ul style="list-style-type: none"> <li>• Supported colleagues studying for professional qualifications by setting up study groups (P9, P11)</li> <li>• Considers team members learning styles when allocating tasks and responsibilities (P32, I25, I40)</li> <li>• Assists members of her team to reflect on their behaviour in an informal but structured and supportive manner to help them to improve their practice (I29, I30, I38)</li> </ul>	3
1.2.2	NONE	0
1.2.3	<ul style="list-style-type: none"> <li>• Accepts that even when she thinks her views are right it is still important to listen to contradictory views because compromising may lead to more innovative strategies e.g. introducing elements of the Steiner method of education for children with special educational needs (I8, I11, I16, I24, P15, P54, P57, P58)</li> <li>• Accepts that people work in different ways e.g. planning and prioritising tasks (I26)</li> </ul>	2
1.3.1	<ul style="list-style-type: none"> <li>• Managing partners in the joint commissioning of educational provision (P3)</li> <li>• Voluntarily organised study groups to motivate and support colleagues and arranged for study buddies to support learning (P10, I6)</li> <li>• Volunteers to take on more responsibilities and get involved in new initiatives that she is not necessarily experienced in e.g. managing complex new projects that include working across the organisation (P21, P39, P44, P47, P65, P78)</li> </ul>	3

<b>Theme</b>	<b>Praxis changes</b>	<b>Number of changes</b>
1.3.2	NONE	0
1.4.1	<ul style="list-style-type: none"> <li>Assessed the potential implications of using a new teaching method for supporting children with special educational needs (I10, P59)</li> </ul>	1
1.4.2	<ul style="list-style-type: none"> <li>Despite having reservations about new methods of supporting children with special educational needs (using the Steiner method) she was willing to try them out to see how they worked in practice and adapt them if necessary to make them work (I9, P60)</li> <li>Enthusiastic about her team being transferred to the Local Education Authority from the Learning and Skills Council and the potential opportunities it offers for personal and professional development (P18)</li> </ul>	2
2.1.1	<ul style="list-style-type: none"> <li>Uses feedback from colleagues to help her accurately assess the positive and negative aspects of her relationships with others that impact on her performance as a manager and to identify areas for development (P23, P24, P25, P26, P30, P36, P50)</li> <li>Assesses how her learning style impacts on her performance as a manager (P45, P68, I20)</li> <li>Mapped own competencies against the requirements for new and more complex roles (e.g. commissioner for the council) which require a diverse range of knowledge and skills (e.g. project management, multi-partner working, funding mechanisms) to determine skills and knowledge gaps (P4, P62, P66, I12, I18)</li> </ul>	3

<b>Theme</b>	<b>Praxis changes</b>	<b>Number of changes</b>
2.1.2	<ul style="list-style-type: none"> <li>• Uses organisational change (e.g. transfer of department to the Local Authority control) as an opportunity to identify and access new learning opportunities and resources (P17, P19, P20)</li> <li>• Seeks opportunities which will enable her to develop a more activist learning style (e.g. volunteering to take the lead on contracts and new funding initiatives) (P46, P49, P51, R4)</li> <li>• Identify and liaise with colleagues from different departments/organisations (e.g. Connexions, school admissions, youth offending team, educational providers) who are a source of new learning relating to her role in managing initiatives to support the education of young people (P67, P69, P82)</li> <li>• Develops learning plans to plan and monitor new learning to improve her performance in her role and enable her to take on new responsibilities (I13, I14)</li> </ul>	4
2.2.1	<ul style="list-style-type: none"> <li>• Made an informed choice to progress into a more creative role involving project and contract management (P37, P40, P42)</li> </ul>	1
2.2.2	NONE	0
2.3.1	<ul style="list-style-type: none"> <li>• Use reflective learning frameworks to analyse how she manages the multi-partnership joint commissioning of educational provision (P5, P6, P41, I5, I37, R7)</li> <li>• Gained insight into what motivates her to learn (e.g. inspiring others) using learning theory (P8)</li> <li>• Used reflective learning frameworks and transformative learning models to challenge her own attitudes and beliefs relating to the provision of educational support for post 16 learners with special educational needs (P13, P55, P81, R8)</li> <li>• Uses learning theory (e.g. learning styles), cognitive psychology tools and team theory to help her better understand her relationship with self and others to determine her strengths and weaknesses as a leader (P22, P34)</li> <li>• Used learning theory to help her understand her learning style and how she can develop a more activist learning style by for example taking the lead on contracts and new funding initiatives (P48, P63, I19, R1, R2, R3, R5)</li> </ul>	5

<b>Theme</b>	<b>Praxis changes</b>	<b>Number of changes</b>
2.3.2	<ul style="list-style-type: none"> <li>• Uses learning theory to help her to understand the different ways in which her colleagues learn and their strengths and weaknesses when learning new skills and knowledge (I27, I41)</li> <li>• Uses team theory to gain insight into the strengths and weaknesses of her team and the roles they will be suited for (P33)</li> </ul>	2
2.3.3	NONE	0
3.1.1	<ul style="list-style-type: none"> <li>• Consults a wide range of professionals (e.g. educators, youth offending team, careers staff) when making decisions about supporting students with special educational needs (I23, P52, P61)</li> </ul>	1
3.1.2	<ul style="list-style-type: none"> <li>• Uses reflective frameworks to review decisions made and what their outcomes were (I36)</li> </ul>	1
3.2.1	<ul style="list-style-type: none"> <li>• Confirmation that she has developed the skills and knowledge to lead projects with multiple partners/stakeholders (I2, I22, P2, P12)</li> </ul>	1
3.2.2	<ul style="list-style-type: none"> <li>• Seeks and considers carefully the views of a range of professionals in the provision of education and training for young people with learning difficulties (P16, P28, P38, P53, P56, I7, I15, I35)</li> <li>• Develops a clear rationale for the allocation of work and responsibilities (P31, P35, P43, I39)</li> <li>• Maintains accurate financial records, recording cost information and preparing accounts relating to projects (P64)</li> <li>• Uses reflective journals help to identify areas of concern and set actions/targets in order to improve professional practice (I4, I21, R6)</li> <li>• Assists her team in helping them to reflect on their performance and plan their workload (I28)</li> </ul>	5
4.1.1	<ul style="list-style-type: none"> <li>• Developed documented educational pathways to progression for young people, including flow charts and pathway guide (P73)</li> </ul>	1

<b>Theme</b>	<b>Praxis changes</b>	<b>Number of changes</b>
4.1.2	<ul style="list-style-type: none"> <li>Facilitated the sharing of knowledge and skills relating to project management, commissioning courses and negotiation through a variety of staff forums e.g. staff meetings, debriefing sessions P27, (P70, P71, P72, I31</li> <li>Shared documented educational pathways to progression for young people with relevant agencies and partners (P74, P77, I34)</li> </ul>	2
4.2.1	NONE	0
4.2.2	<ul style="list-style-type: none"> <li>Developed pathways for learner which explicitly state roles and responsibilities of different partner organisations (I33, P75, P76)</li> <li>Influenced partner organisations (e.g. learning providers, council) to design new learning programmes for young people with disabilities that are more tailored to their needs (P79, P83, P84)</li> </ul>	2

**Table 33 Haley's summary of praxis changes**

	1. Affective learning											2. Lifelong Learning						3. Professional Learning				4. Organisational Learning				Grand total				
	1.1 Self-awareness			1.2 Managing working relationships			1.3 Motivation		1.4 Openness to change		Total	2.1 Evaluate and improve learning		2.2 Career goals and ambitions		2.3 Using theory		Total	3.1 Decision making		3.2 Knowledge, skills & practices		Total	4.1 Knowledge capture & transfer			4.2 Change initiatives		Total	
	1.1.1	1.1.2	1.1.3	1.2.1	1.2.2	1.2.3	1.3.1	1.3.2	1.4.1	1.4.2		2.1.1	2.1.2	2.2.1	2.2.2	2.3.1	2.3.2	2.3.3		3.1.1	3.1.2	3.2.1	3.2.2		4.1.1		4.1.2	4.2.1	4.2.2	
Haley	3	0	0	3	0	2	3	0	1	2	14	3	4	1	0	5	2	0	15	1	1	1	5	8	1	2	0	2	5	42

Table 34 Haley's total praxis changes

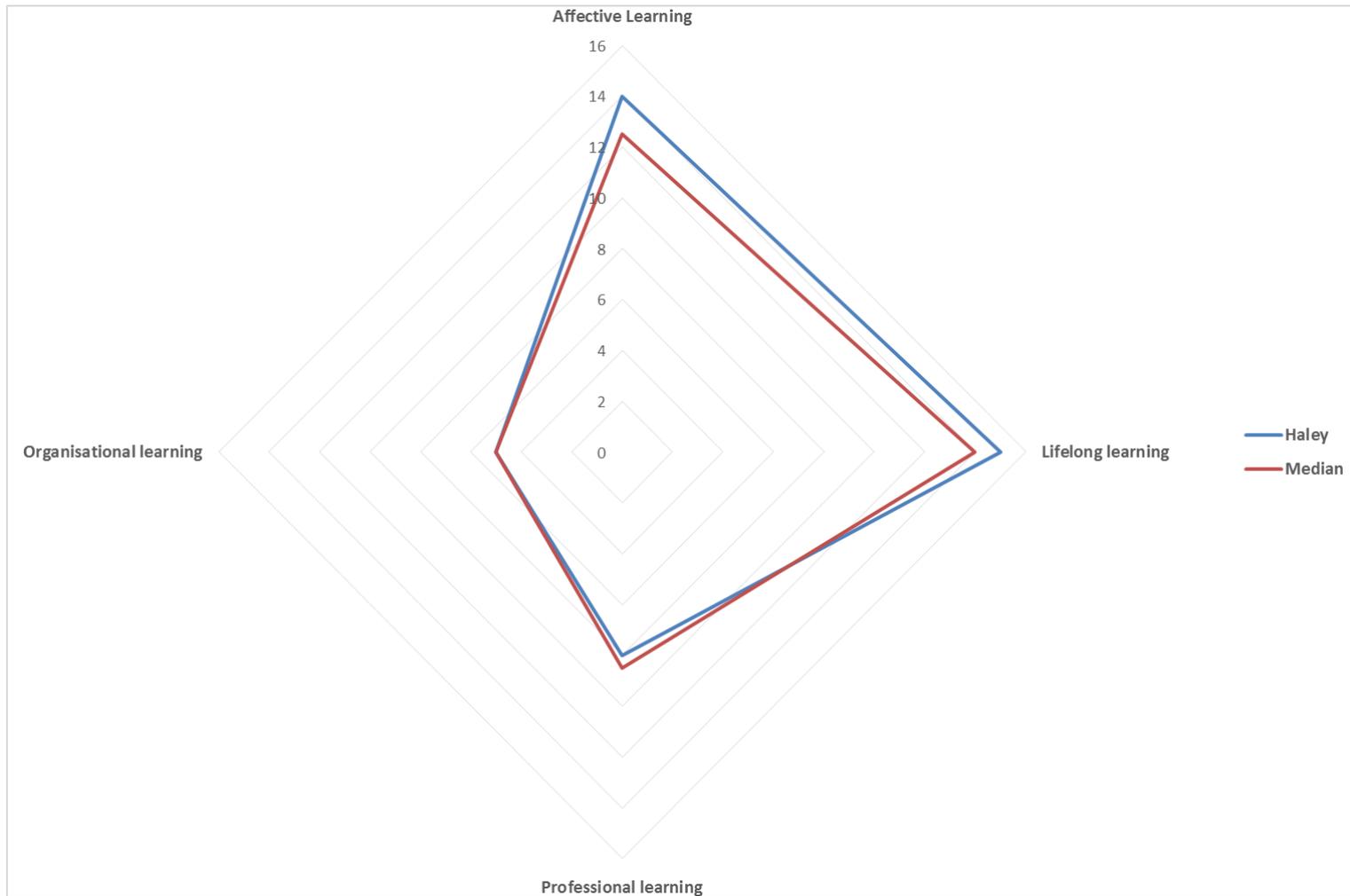


Figure 9 Haley's praxis map

#### **4.4.8 Harriet**

Table 35 provides a summary of praxis changes for Harriet. The total praxis changes are shown in Table 36 and a praxis learning map is shown in Figure 10

##### ***Affective learning***

This is the most significant domain in which Harriet has developed her praxis.

Harriet has become aware that her confidence has improved significantly in a number of areas. She now values her own knowledge and skills and feels that she is an asset to her employer and has taken on greater responsibilities specifically related to interacting and advising parents. She has become a confident staff supervisor and has confidence in expressing her opinions to other professionals involved with the children in her Early Years Education setting such as speech therapists and physiotherapists. Harriet has become aware of how her behaviours can impact on others. For example, when facilitating parenting classes she behaves less impulsively than previously and as a senior practitioner she now feels a role model to other staff.

##### ***Lifelong learning***

Harriet has recognised that she wants to continue working in an Early Years education setting but would like to move into a role that involves working with parents to help them learn how to develop their children. As a learner she has become enthusiastic about looking for formal training opportunities to improve her knowledge and skills and she has requested support for training from her employer. She now engages in learning on an informal basis using a range of resources (such as a library) to help her learn about solutions to work related problems. Harriet has used team theory to help her understand her strengths and weaknesses as a team member and she has used learning styles theory to help her understand the strengths and weaknesses of her activist learning style.

##### ***Professional learning***

Harriet has developed a number of new practices. For example, she has coached parents to help them develop knowledge and skills in developing their children and she has supported care assistants developing their skills. She has assertively challenged decisions and practices in the setting when these have not been underpinned with a sound rationale. With regards to

decision making she has collaborated with other professionals in relation to decisions such as timing of outdoor play sessions.

***Organisational learning***

Harriet has developed training materials about good practices in communicating with parents and has delivered this material to others in her organisation. She has also planned and developed new indoor and outdoor area layout for the whole setting.

<b>Theme</b>	<b>Praxis changes</b>	<b>Number of changes</b>
1.1.1	<ul style="list-style-type: none"> <li>• Feels confident to take on greater levels of responsibility such as working with parents (P1, P25, I10)</li> <li>• Feels that she values her own skills and knowledge more and consequently feels she is an asset to her organisation (P11, P15, I15, I16)</li> <li>• Feels confident in her supervisory skills (P23, I5)</li> <li>• Feels that she has the confidence to voice her opinions about the children in her care to other professionals such as speech therapists and physiotherapists (I1, I3)</li> <li>• Feels confident to challenge current practice within the Early Years setting (I22)</li> </ul>	5
1.1.2	<ul style="list-style-type: none"> <li>• Aware that reflecting carefully on own actions when facilitating parenting classes has led to her behaving in a less impulsive and more measured manner (P8)</li> <li>• Aware that she feels more able to challenge practice and this has led to positive changes within her Early Years setting (I4)</li> <li>• Aware that she has a greater responsibility as a senior practitioner to share information and initiatives with less senior and experienced staff to promote inclusivity (I7, I17, I21)</li> </ul>	3
1.1.3	NONE	0
1.2.1	<ul style="list-style-type: none"> <li>• As a senior practitioner takes time out to shares knowledge and experiences with more junior members of staff such as childcare assistants support their development (R5, I6, I20, I26)</li> </ul>	1
1.2.2	<ul style="list-style-type: none"> <li>• Persuading managers who have fixed ideas about children's play activities without a rationale to back them up to change their viewpoint using logical arguments (I23)</li> </ul>	1
1.2.3	NONE	0
1.3.1	<ul style="list-style-type: none"> <li>• Seeks out new work related training opportunities (P4, I9)</li> <li>• Constantly looking for new and improved ways of working (P26, I13)</li> </ul>	2

<b>Theme</b>	<b>Praxis changes</b>	<b>Number of changes</b>
1.3.2	NONE	0
1.4.1	NONE	0
1.4.2	NONE	0
2.1.1	<ul style="list-style-type: none"> <li>Assesses strengths and weaknesses of own practice as an Early Years practitioner to determine development needs (P14)</li> </ul>	1
2.1.2	<ul style="list-style-type: none"> <li>Identifies and requests formal training from employer to help her improve her knowledge and skills (P2, P3, P7, P13, P19)</li> <li>Uses a range of learning resources (e.g. libraries) to independently seek learning to solve work related problems (I8)</li> </ul>	2
2.2.1	<ul style="list-style-type: none"> <li>Recognised that whilst she wants to remain working in an Early Years setting she wants to work more in a role that involves supporting parents with their children (I11, P12)</li> </ul>	1
2.2.2	NONE	0
2.3.1	<ul style="list-style-type: none"> <li>Uses team theory to help her better understand her to understand her strengths and weaknesses as a team member (P21)</li> <li>Uses reflective learning frameworks to reflect on work-related problems and issues to develop new knowledge to improve practice (P24, R4)</li> <li>Used learning theory to help her understand the weaknesses and strengths of her activist learning style in her role as an Early Years practitioner (R1, R2)</li> </ul>	3
2.3.2	<ul style="list-style-type: none"> <li>Uses team theory to gain insight into the strengths and weaknesses of her team and the roles they will be suited for (P22, I24, I25)</li> </ul>	1
2.3.3	NONE	0
3.1.1	<ul style="list-style-type: none"> <li>Consult other Early Years practitioners to make decisions about structure of the day for children (e.g. timing of outdoor play) (I18)</li> </ul>	1
3.1.2	<ul style="list-style-type: none"> <li>Uses reflective journal to review decisions relating to a range of Early Years contexts (e.g. facilitating parenting classes) (P10, P17, P18)</li> </ul>	1
3.2.1	<ul style="list-style-type: none"> <li>Confirmation that practices supporting parents were effective (P6, P16, I2, I14)</li> </ul>	1

<b>Theme</b>	<b>Praxis changes</b>	<b>Number of changes</b>
3.2.2	<ul style="list-style-type: none"> <li>• Coach parents to help them develop their knowledge and skills in nurturing and developing their children (I12, I30, I31, P9)</li> <li>• Support care assistants employed in the setting to develop their knowledge and skills (I14)</li> <li>• Uses reflective journals help to identify areas of concern and improve professional practice (R3)</li> <li>• Assertively challenge the decisions and practices in the setting when they do not have a sound rationale (P5, P20)</li> </ul>	4
4.1.1	<ul style="list-style-type: none"> <li>• Developed training material about communicating with parents (I28)</li> </ul>	1
4.1.2	<ul style="list-style-type: none"> <li>• Delivered training about best practices communicating with parents (I29)</li> <li>• Share own knowledge and practices with childcare assistants relating to facilitating child development (I27)</li> </ul>	2
4.2.1	NONE	0
4.2.2	<ul style="list-style-type: none"> <li>• Planned and developed new indoor and outdoor area layout for Early Years setting (P27)</li> </ul>	1

**Table 35 Harriet's summary of praxis changes**

	1. Affective learning										2. Lifelong Learning						3. Professional Learning				4. Organisational Learning				Grand total					
	1.1 Self-awareness			1.2 Managing working relationships			1.3 Motivation		1.4 Openness to change		Total	2.1 Evaluate and improve learning		2.2 Career goals and ambitions		2.3 Using theory		Total	3.1 Decision making		3.2 Knowledge, skills & practices		Total	4.1 Knowledge capture & transfer		4.2 Change initiatives		Total		
	1.1.1	1.1.2	1.1.3	1.2.1	1.2.2	1.2.3	1.3.1	1.3.2	1.4.1	1.4.2		2.1.1	2.1.2	2.2.1	2.2.2	2.3.1	2.3.2	2.3.3		3.1.1	3.1.2	3.2.1	3.2.2			4.1.1	4.1.2	4.2.1	4.2.2	
Harriet	5	3	0	1	1	0	2	0	0	0	12	1	2	1	0	3	1	0	8	1	1	1	4	7	1	2	0	1	4	31

Table 36 Harriet's total praxis changes



Figure 10 Harriet's praxis map

#### **4.4.9 Harry**

Table 37 provides a summary of praxis changes for Harry. The total praxis changes are shown in Table 38 and a praxis learning map is shown in Figure 11.

##### ***Affective Learning***

Harry now feels confident and motivated to critically examine theoretical models that he feels might enable new and creative evidence based approaches to practice to be implemented. He also feels confident to make better decisions and has recognised and adapted to the demands of stakeholders. He has critically assessed his organisation in order to objectively understand the reason for changes better and supports his colleagues to understand and accept changes such as standardisation of procedures.

##### ***Lifelong Learning***

This is the most significant domain in which Harry has developed his praxis.

Harry has used learning theory to understand and develop his own learning. He has recognised that his learning style as a theorist/reflector enables him to effectively conduct research into theories and models that might benefit his practice. For example, he has researched how engaging with communities of practice might help him to collaborate with others who are passionate about learning and development to develop new and innovative practices. In addition to informal, collaborative learning he has become better able to identify relevant formal training opportunities to help him meet the future needs of his role. Harry has also developed a better understanding of the strategies organisations use for change and how change impacts on organisational culture.

##### ***Professional Learning***

Harry has developed and implemented several new practical ways of professional working based on his professional learning. He has applied critical thinking to provide a sound evidence base to training and development initiatives he has introduced into his department. Because these initiatives are evidence based, he can clearly articulate the rationale for them. He has challenged colleagues' ways of working to ensure that they have a clear rationale underpinning their practice and he has engaged in meaningful dialogue with colleagues to ensure that pragmatic, low-risk training and development initiatives are developed.

### ***Organisational Learning***

Harry has developed and implemented standardised procedures for the training and development department, such as procedures for conducting training needs analysis. He has implemented best practices relating to performance appraisal within the organisations performance management framework. Harry has actively engaged with communities of practice comprised of a diverse range of professionals such as police trainers, law experts and driver trainers.

<b>Theme</b>	<b>Praxis changes</b>	<b>Number of changes</b>
1.1.1	<ul style="list-style-type: none"> <li>• Feels confident to make better decisions (P2, P6)</li> <li>• Feels confident to critically examine theory and practice (P10)</li> <li>• Feels confident to assess strengths and weaknesses of the organisation (P23)</li> <li>• Feels confident to recognise and adapt to the demands of stakeholders (P41)</li> <li>• Feels confident to implement evidence based best practices (P48, P53, I1, I2)</li> </ul>	5
1.1.2	NONE	0
1.1.3	NONE	0
1.2.1	<ul style="list-style-type: none"> <li>• Supports colleagues to understand and accept changes e.g. standardisation of practices (P26, P29)</li> </ul>	1
1.2.2	NONE	0
1.2.3	NONE	0
1.3.1	<ul style="list-style-type: none"> <li>• Eagerly explores new theoretical concepts that have potential benefits to practice and ongoing professional development (P13, P18)</li> </ul>	1
1.3.2	NONE	0
1.4.1	NONE	0
1.4.2	<ul style="list-style-type: none"> <li>• More receptive to new creative approaches to changes to practices (P17, P49)</li> </ul>	1
2.1.1	<ul style="list-style-type: none"> <li>• Identifies future challenges and the skills and knowledge requirements required (I19)</li> </ul>	1

<b>Theme</b>	<b>Praxis changes</b>	<b>Number of changes</b>
2.1.2	<ul style="list-style-type: none"> <li>• Uses learning strategies (e.g. researching communities of practice) that are suited to his learning style e.g. (theorist/reflector) and can be applied to practice (P3, P8, P12, P14)</li> <li>• Engages in routine reflective practice relating to both formal and informal learning in the context of his role as a training and development specialist (P20)</li> <li>• Identifies relevant continuous professional development opportunities to meet future needs of his role (P33, P35)</li> </ul>	3
2.2.1	NONE	0
2.2.2	NONE	0
2.3.1	<ul style="list-style-type: none"> <li>• Analyses own learning style using learning theory (P4, P9, R1, I32)</li> <li>• Uses reflective models to examine practices in a holistic way (P22, P42, R2, R3, R4)</li> <li>• Assesses whether he is engaging in single or double loop learning when assessing working practices (P22)</li> </ul>	3
2.3.2	<ul style="list-style-type: none"> <li>• Uses learning theory to assess colleagues learning styles (P19, P45)</li> <li>• Uses reflective theory to assess how colleagues engage in reflective practice (R5, R7,R8)</li> </ul>	2
2.3.3	<ul style="list-style-type: none"> <li>• Examines organisation culture using organisational culture theory (R6, P40, I14, I24, I25)</li> <li>• Uses organisational change theory to gain insight into reasons for change strategies (P47, P52)</li> </ul>	2
3.1.1	<ul style="list-style-type: none"> <li>• Involves stakeholders with decisions by presenting and discussing decision options (I21, I22)</li> </ul>	1
3.1.2	<ul style="list-style-type: none"> <li>• Makes evidence based decisions informed by theoretical models rather than base them on intuition (I20, P1, P16, P38, P46, P51)</li> </ul>	1

<b>Theme</b>	<b>Praxis changes</b>	<b>Number of changes</b>
3.2.1	<ul style="list-style-type: none"> <li>Confirmation that his practices relating to training and development role match best practice guidelines (I3, I13, P36)</li> </ul>	1
3.2.2	<ul style="list-style-type: none"> <li>Synthesises new knowledge within working practices to change procedures (P5)</li> <li>Applies critical thinking utilising evidence and research to improve chance of success of work based projects (P7, P15, P34, I18, I26, I6)</li> <li>Challenges the rationale underpinning colleagues existing practices (P11)</li> <li>Engages in purposeful reflective practice (reflection-in-action and reflection-on-action) to improve practice (P21, P28, P39, I27)</li> <li>Collaborates with colleagues who have different learning styles and in a range of roles to develop pragmatic, low-risk solutions to developing training and education programmes (P44, I8, I15, I17, I28)</li> <li>More clearly articulates rationale for learning and development initiatives (P54)</li> <li>Improved performance management system (I11)</li> </ul>	7
4.1.1	<ul style="list-style-type: none"> <li>Produced standardised procedures for training and development department (P25, P31)</li> </ul>	1
4.1.2	<ul style="list-style-type: none"> <li>Disseminates best practices and standardised procedures to others in training and development department (I4, P27, P32)</li> <li>Facilitates communities of practice involving a variety of different professionals (e.g. CID trainers, law experts, driver trainers) to cross-fertilise ideas (I10, I29, I30)</li> <li>Facilitates knowledge sharing between Special Constables (P43)</li> </ul>	3
4.2.1	NONE	0
4.2.2	<ul style="list-style-type: none"> <li>Developed communities of practice to exchange knowledge and practice (I9)</li> <li>Implements good practice relating to appraisals, assessment and performance management (I12)</li> <li>Developed new standardised procedures and processes e.g. for training needs analysis (I23, P24, P30)</li> </ul>	3

**Table 37 Harry's summary of praxis changes**

	1. Affective learning										2. Lifelong Learning						3. Professional Learning				4. Organisational Learning				Grand total					
	1.1 Self-awareness			1.2 Managing working relationships			1.3 Motivation		1.4 Openness to change		Total	2.1 Evaluate and improve learning		2.2 Career goals and ambitions		2.3 Using theory		Total	3.1 Decision making		3.2 Knowledge, skills & practices		Total	4.1 Knowledge capture & transfer		4.2 Change initiatives		Total		
	1.1.1	1.1.2	1.1.3	1.2.1	1.2.2	1.2.3	1.3.1	1.3.2	1.4.1	1.4.2		2.1.1	2.1.2	2.2.1	2.2.2	2.3.1	2.3.2	2.3.3		3.1.1	3.1.2	3.2.1	3.2.2			4.1.1	4.1.2	4.2.1	4.2.2	
Harry	5	0	0	1	0	0	1	0	0	1	8	1	3	0	0	3	2	2	11	1	1	1	7	10	1	3	0	3	7	36

Table 38 Harry's total praxis changes

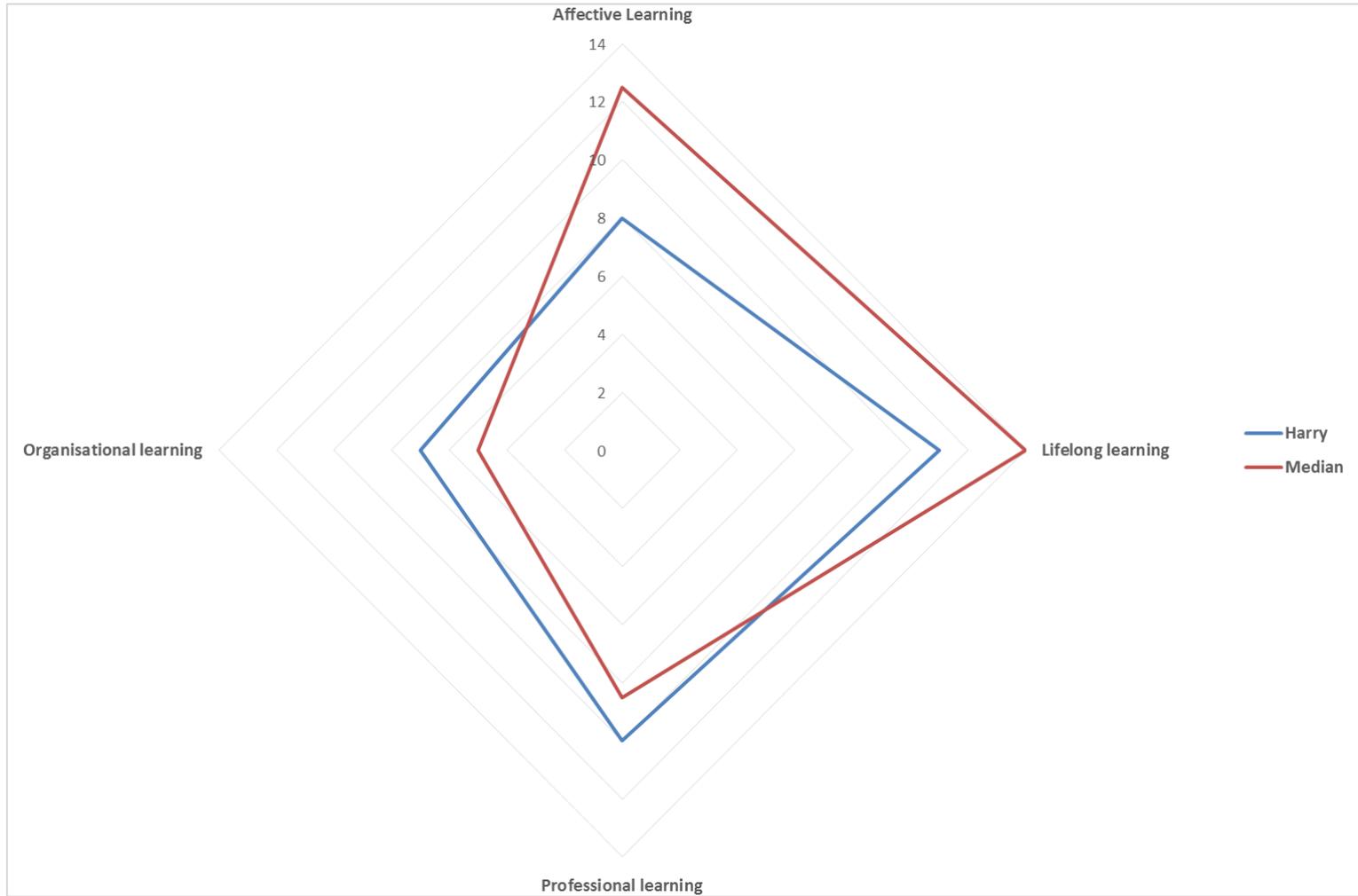


Figure 11 Harry's praxis map

#### **4.4.10 James**

Table 39 provides a summary of praxis changes for James. The total praxis changes are shown in Table 40 and a praxis learning map is shown in Figure 12.

##### ***Affective Learning***

This is the most significant domain in which James has developed his praxis.

James acknowledged that he previously became very frustrated with colleagues he managed, for example, because they resisted change (for example, introduction of new policing procedures), tended towards over impulsive behaviour and exhibited poor performance. These feelings of frustration have led to him to overreact in the past which caused conflict. James has now become less frustrated because he is confident that he can objectively assess reasons for supervisees' behaviours (for example, he realises that many of his colleagues have an activist learning style) and this has enabled him to be much less critical of them. He has come to understand that people react emotionally in different ways to situations and he has been able to step back and rationally consider courses of actions are open to him before providing constructive advice. He has become aware that the way in which he has communicated his feelings to his team, which in the past had detrimental impact on their performance and motivation; therefore he listens to them to try to understand their point of view.

##### ***Lifelong Learning***

James has recognised that he has no ambition for promotion. He feels that he enjoys his current role as an inspector and in this role he can best serve the public and become personally fulfilled. He is keen to improve in his current role and to this end he has enhanced his learning to learn skills in a number of ways. He has become better at assessing his own skills and knowledge and has developed action plans for his future development; he has sought ways of understanding individual and organisational behaviours (for example, through theoretical models to help him understand how people react to change) so he can better make sense of them. He has sought feedback from others and he has looked for opportunities to help him become a rounded learner who can learn from a wide variety of different experiences. James has become aware that he is a double-loop learner, hence he has questioned orthodox policing practices and behaviours, thus coming into conflict with senior colleagues.

### ***Professional Learning***

The way in which James has led his own team has changed. For example, he has carried out regular team debriefs and developed and communicated a clear rationale for new processes he has put in place (for example, new methods of monitoring performance). He has developed a new approach to dealing with senior colleagues. He has recognised that professionally it is sometimes right to challenge established orthodoxy; however when presenting his ideas he has developed a much clearer rationale to underpin them than previously.

### ***Organisational Learning***

James has created new ways of capturing and sharing information relating to performance against policing targets which has been used to promote continuous improvement. He has helped his team to understand the reasons for significant organisational changes taking place within the police force to reduce resistance to change.

<b>Theme</b>	<b>Praxis changes</b>	<b>Number of changes</b>
1.1.1	<ul style="list-style-type: none"> <li>• Feels confident to objectively assess behaviours, attitudes and practices within the organisation (I1, I31, P2, P8, P46, P61)</li> <li>• Feels confident to objectively assess own behaviours, attitudes and practices (P10, P34, P42)</li> <li>• Feels capable of being a competent supervisor (P11)</li> <li>• Feels more confident to engage in new learning experiences (P29)</li> </ul>	4
1.1.2	<ul style="list-style-type: none"> <li>• Aware that he becomes frustrated when members of the team he leads adopt an activist style which clashes with his own more reflective style, leading to him being over critical of them (R27)</li> <li>• Aware that he sometimes overreacts when people don't understand something that he has grasped quite quickly (P54)</li> <li>• Aware that as an inspector the way he verbalises his feelings (communication style) can have a huge impact on his teams motivation and productivity (I43)</li> </ul>	3
1.1.3	<ul style="list-style-type: none"> <li>• Aware he feels that senior officers views of what policing is conflict with his own but he does not feel these officers are open to challenge so often keeps his views to himself (I28)</li> <li>• Aware that he is much less frustrated when colleagues are negative about changes he puts forward (P14, P15)</li> </ul>	2
1.2.1	<ul style="list-style-type: none"> <li>• Feels like a better supervisor at a senior level because he steps back and considers his actions carefully before providing constructive advice about how colleagues can improve their performance (P13)</li> <li>• Helps his team to understand and accept organisational changes by discussing why changes are necessary, listening to his teams concerns and allowing those who find change difficult time to adapt to them (P20, P51, I9)</li> <li>• Supports his team to meet performance goals by promoting a non-blame culture, providing clarity about roles and responsibilities and by listening to and considering his teams concerns (I11, I16, I38, I45)</li> </ul>	3
1.2.2	<ul style="list-style-type: none"> <li>• Instead of overreacting when his team are negative towards changes to policing procedures he considers their viewpoints carefully and uses active listening and persuasion to help them accept change (P56, I23, I24, I34, I36)</li> </ul>	1

<b>Theme</b>	<b>Praxis changes</b>	<b>Number of changes</b>
1.2.3	<ul style="list-style-type: none"> <li>• Accepts that during periods of change people will react emotionally in different ways and it is important to try to understand their feelings and emotions and seek their views and opinions rather than try to suppress them (R11, R18, I6, P6, P16, P21)</li> <li>• Accepts that people work in different ways (e.g. the manner in which his team brief him about incidents) and that it is important to be patient and communicate with them rather than be frustrated and critical of them (R22, I21, P50, P55)</li> <li>• Accepts that even when he thinks his views are right it is still important to listen to contradictory views because tempering his own ideas may lead to more workable outcomes (I2, I3, I18, I39)</li> </ul>	3
1.3.1	NONE	0
1.3.2	NONE	0
1.4.1	<ul style="list-style-type: none"> <li>• Seeks to understand the political and economic drivers of organisational changes in the police force and how these changes will impact emotionally on his team (I4, P17)</li> <li>• Objectively evaluates how his own role will change as a consequence of organisational restructuring (P45, P48, P58)</li> </ul>	2
1.4.2	<ul style="list-style-type: none"> <li>• Despite having reservations about new organisational processes and procedures is willing to try them out to see how they work in practice and adapt them if necessary to make them work (I5, I33, P18, P23, P24, P36, P44, P47)</li> </ul>	1

<b>Theme</b>	<b>Praxis changes</b>	<b>Number of changes</b>
2.1.1	<ul style="list-style-type: none"> <li>• Maps own skills and knowledge against those required at current rank to determine any deficiencies (P40, P41)</li> </ul>	1
2.1.2	<ul style="list-style-type: none"> <li>• Seeks new learning to help him better understand behaviours and activities within the organisation so he can adapt his approach to help him achieve his goals (P9, P25, P32, I19, I25, I42, R4)</li> <li>• Uses colleagues as a learning resource during debriefs following spontaneous policing incidents (P26, P30)</li> <li>• Produces personal action plan to plan and monitor new learning to develop new knowledge and skills (R14)</li> <li>• Seeks feedback from a variety of sources within and external to the organisation to learn to examine policing activities, processes and procedures from different perspectives (R13)</li> <li>• Identify opportunities to strengthen weak learning styles to help him develop as a more rounded learner capable of learning from a wide variety of different experiences (R23, R28, R32)</li> </ul>	5
2.2.1	<ul style="list-style-type: none"> <li>• Recognises that he has no ambition to go further in the police force because he feels that he can serve the public better in his current position as an inspector and he enjoys his current role (I27, I29, I30, P37, P39)</li> </ul>	1
2.2.2	NONE	0

<b>Theme</b>	<b>Praxis changes</b>	<b>Number of changes</b>
2.3.1	<ul style="list-style-type: none"> <li>• Gained insight into the important role that reflection-in-action plays in his job as a police inspector and how reflection-in-action skills can be improved (R1, R2, R5)</li> <li>• Uses reflective models to reflect how he handled day to day policing incidents to identify learning points and to produce action plans for future development (R7)</li> <li>• Using learning theory he gained insight into what motivates him (e.g. feedback from others both inside and outside the police force) and the learning strategies that he tends to use and how these relate to his practice (R26, P1, P5, P28)</li> <li>• Recognises that he often questions established ways of doing things and that this is evidence that he tends to engage in double loop learning (P35)</li> </ul>	4
2.3.2	<ul style="list-style-type: none"> <li>• Uses reflective learning frameworks to help him gain insight into his teams feelings and thought processes (R10)</li> <li>• Uses theoretical models to understand colleagues feelings and emotions during periods of change (R15, R16, R21, I8, I36)</li> <li>• Uses learning theory to helped him to understand the different ways in which her colleagues learn and their strengths and weaknesses when learning new skills and knowledge (R25)</li> </ul>	3
2.3.3	<ul style="list-style-type: none"> <li>• Analyses organisational culture using organisational culture models (P7, P38, P49)</li> <li>• Gained insight into the reasons why people resist organisational change using organisational change models (P14, P22)</li> <li>• Uses organisational change models to gain insight into triggers for change and how change is managed in the police force (P60, I7, I32, R14)</li> </ul>	3
3.1.1	<ul style="list-style-type: none"> <li>• Discusses with colleagues their feelings and thought processes about policing issues before making decisions (R9)</li> </ul>	1
3.1.2	<ul style="list-style-type: none"> <li>• Uses reflective frameworks to review decisions made and what their outcomes were (P43, I26)</li> </ul>	1

<b>Theme</b>	<b>Praxis changes</b>	<b>Number of changes</b>
3.2.1	<ul style="list-style-type: none"> <li>Confirmation that it is sometimes the right thing to do to challenge established ways of doing things even if though it may be uncomfortable to do so (P3, P31, R3)</li> </ul>	1
3.2.2	<ul style="list-style-type: none"> <li>Reflects on actions as a senior level supervisor using a reflective framework to identify good and bad practice and lessons learned (P12, P33, P57, R6)</li> <li>Carries out regular team debriefs (P27)</li> <li>Clearer communication/presentation of his instructions and decisions with a sound rationale to his team (P53, I10, I20, I40, R20, R24)</li> <li>Developed new method of monitoring his team's performance (I15, I17, I46)</li> <li>Prepares for presenting ideas/cases to senior officers by developing a sound rationale (I22)</li> </ul>	5
4.1.1	<ul style="list-style-type: none"> <li>Created a document containing details about officers and policing districts performance against policing targets (I12)</li> </ul>	1
4.1.2	<ul style="list-style-type: none"> <li>Shared electronic document with his team containing details about officers and policing districts performance against policing targets (I13)</li> </ul>	1
4.2.1	<ul style="list-style-type: none"> <li>Supports his team to understand the reasons for organisational culture change (e.g. operation ORBIS which is major structural organisational change) (P19, P59, P62, R30)</li> <li>Supports his team understand the rationale for new policing practices and processes (e.g. dealing with domestic violence) by promoting discussion and allowing them to express their views in an open and honest manner (I35, I41, R19)</li> </ul>	2
4.2.2	<ul style="list-style-type: none"> <li>Developed and introduced a new method of tracking and monitoring team performance (I14, I44, P52, R33)</li> </ul>	1

**Table 39 James' summary of praxis changes**

	1. Affective learning										2. Lifelong Learning						3. Professional Learning				4. Organisational Learning				Grand total					
	1.1 Self-awareness			1.2 Managing working relationships			1.3 Motivation		1.4 Openness to change		Total	2.1 Evaluate and improve learning		2.2 Career goals and ambitions		2.3 Using theory		Total	3.1 Decision making		3.2 Knowledge, skills & practices		Total	4.1 Knowledge capture & transfer		4.2 Change initiatives		Total		
	1.1.1	1.1.2	1.1.3	1.2.1	1.2.2	1.2.3	1.3.1	1.3.2	1.4.1	1.4.2		2.1.1	2.1.2	2.2.1	2.2.2	2.3.1	2.3.2	2.3.3		3.1.1	3.1.2	3.2.1	3.2.2			4.1.1	4.1.2	4.2.1	4.2.2	
James	4	3	2	3	1	3	0	0	2	1	19	1	5	1	0	4	3	3	17	1	1	1	5	8	1	1	2	1	5	49

Table 40 James' total praxis changes

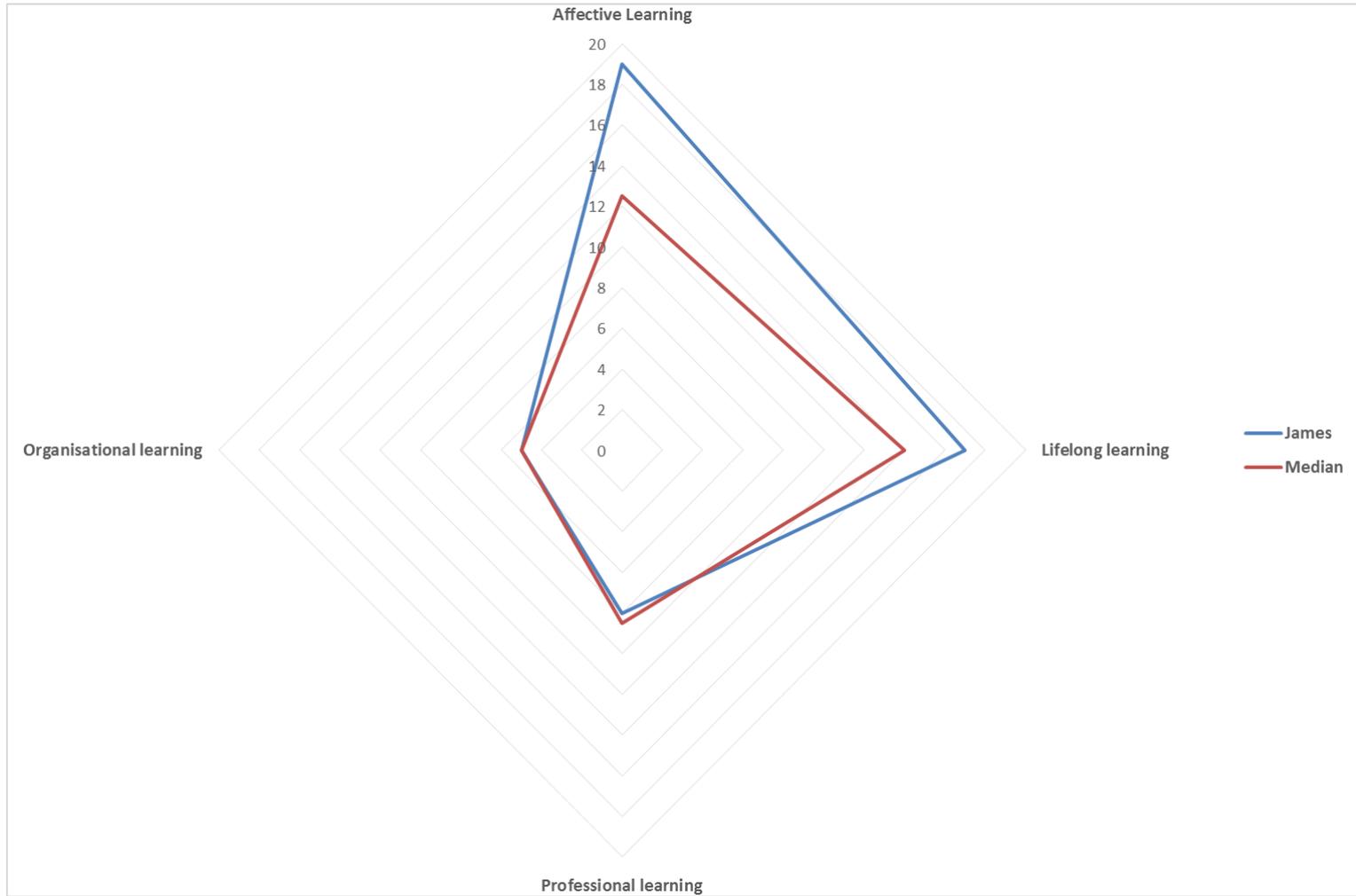


Figure 12 James praxis map

#### **4.4.11 Karl**

Table 40 provides a summary of praxis changes for Karl. The total praxis changes are shown in Table 41 and a praxis learning map is shown in Figure 13.

##### ***Affective Learning***

This is the most significant domain in which Karl has developed his praxis.

Karl feels that he now has confidence in his problem solving and decision making skills and that he can meet challenges such as dealing with public safety incidents competently. He is aware that he has acted less emotively in situations involving performance issues with his team and also in situations involving the public. He has developed an increased awareness of the types of behaviour in others that can trigger an emotive rather than a rationale response in him and consequently by recognising these triggers he has been able to control his emotions more easily. Karl has become motivated and has volunteered for a number of initiatives with which he feels unfamiliar but which offer learning opportunities. These initiatives have included getting involved in complex investigations such as child kidnapping crimes and critical incident simulations involving nuclear power station accidents. He has become less fearful of making mistakes. Instead of being overly critical of himself he sees mistakes as a useful way of learning something new. Despite always aspiring to be a police officer Karl has recognised that he has become frustrated with the role and is now open to the idea of a career change.

##### ***Lifelong Learning***

Karl has assessed his performance as a police officer in a number of contexts. These have included how well he has managed critical incidents and his involvement in dynamic and complex investigations such as child kidnapping. He has improved his learning by identifying and completing courses such as critical incident management and public auditing courses and informally by seeking out feedback from his mentor and through regular debriefs with his team. Karl has become mindful that any learning he engages in will enable him to enhance his curriculum vitae because he is considering a career change due to his frustration in his current role. Karl has used learning styles theory to help him understand the ways in which his activist learning style has affected how he has performed in certain situations. For example, he developed an understanding why he apprehended a victim instead of the perpetrator during a burglary. He has used conflict theory to help him gain insight into the reasons for the public's behaviour towards him during policing incidents.

### ***Professional Learning***

Karl has changed his practice in a number of ways. He has used a learning journal to help him assess his own behaviour during emotive situations that arise with the team he manages and with the general public. In a team management context this has included how he has dealt with performance issues. In dealing with a public context this relates to how he has handled sensitive situations such as domestic abuse victims, and families who have been bereaved. Karl has encouraged feedback from other departments regarding his team's performance in the context of dealing with volume crime and he has identified policy decisions which have impacted on his team such as issuing of weapons (Taser guns) which when fired at an individual cause temporary paralysis.

### ***Organisational Learning***

Based on his experience as a firearms officer, Karl has developed a new streamlined procedure for issuing Taser guns within the police force. He has helped to facilitate knowledge transfer amongst his team through reflection following critical incidents.

<b>Theme</b>	<b>Praxis changes</b>	<b>Number of changes</b>
1.1.1	<ul style="list-style-type: none"> <li>• Feels confident that he can meet challenges in a positive manner (P1)</li> <li>• Feels confident that he has good problem solving skills (P4)</li> <li>• Feels confident that he has Improved her decision making skills (P18)</li> <li>• Feels positive about his personal characteristics and professionalism (P23, I1, I5, I15)</li> <li>• Feels confident to volunteer for getting involved in complex investigations (P30, P42)</li> <li>• Feels confident to direct staff in his team in a more focussed manner (P37)</li> <li>• Feels more confident about dealing with critical incidents involving public safety (I9, I26)</li> </ul>	7
1.1.2	<ul style="list-style-type: none"> <li>• Aware that emotive response to performance issues amongst those he leads causes him to act in an aggressive manner which leads to conflict (R7, I20, I28)</li> <li>• Aware that a better understanding of the underpinning reasons for behaviours during policing incidents has led to the avoidance of repeating the same mistakes (I4)</li> <li>• Aware that he acts less emotively during situations when aggressive behaviour is directed towards him by members of the public because he attempts to understand the reasons for their behaviour (e.g. bereavement) (I11, I30)</li> </ul>	3
1.1.3	<ul style="list-style-type: none"> <li>• Aware of how the behaviours and attitudes of those he leads can trigger him to behave in an inappropriate, emotive and confrontational manner (I10, I11)</li> </ul>	1
1.2.1	<ul style="list-style-type: none"> <li>• Assists his team to reflect on their practice to improve their performance (I19, I41, I46, I48)</li> </ul>	1
1.2.2	<ul style="list-style-type: none"> <li>• Has adopted a less confrontational approach when dealing with performance issues of those he leads because he attempts to understands reasons for poor performance rather than judging them (R9, I21)</li> </ul>	1

<b>Theme</b>	<b>Praxis changes</b>	<b>Number of changes</b>
1.2.3	<ul style="list-style-type: none"> <li>• Considers reasons for poor performance amongst his team rather than concluding that it is the consequence of laziness and incompetence (I18)</li> </ul>	1
1.3.1	<ul style="list-style-type: none"> <li>• Volunteered for critical incident simulations (e.g. nuclear power station accidents) outside his comfortable and familiar experiences (I31)</li> <li>• Volunteered for getting involved in complex investigations (e.g. child kidnap incidents) (P32)</li> </ul>	2
1.3.2	<ul style="list-style-type: none"> <li>• Believes that even if something is outside his experience which might make him vulnerable to mistakes and criticism (e.g. doing a public audit course, complex investigations) he should make the effort to do it anyway because it will provide an opportunity to learn something new (I12, I14, I16, P33)</li> </ul>	1
1.4.1	<ul style="list-style-type: none"> <li>• Despite always wanting to be a police officer he has objectively examined the reasons why he has become frustrated with his role and is receptive to a career change (P9, P12)</li> </ul>	1
1.4.2	<ul style="list-style-type: none"> <li>• Willingness to undertake difficult new experiences which are unfamiliar to him relating to training (I24)</li> <li>• Receptive to career change (P10)</li> </ul>	2
2.1.1	<ul style="list-style-type: none"> <li>• Identifies performance issues and strengths relating to role (P2, P8, P25, P35, I3, R2)</li> <li>• Assesses effectiveness of decision making relating to critical incident management (P16, P22, I23)</li> <li>• Analyses performance relating to dynamic &amp; complex investigations e.g. child kidnapping (P31)</li> </ul>	3

<b>Theme</b>	<b>Praxis changes</b>	<b>Number of changes</b>
2.1.2	<ul style="list-style-type: none"> <li>Identifies and applies new learning gained from previous performance e.g. critical incident management, child kidnap/abuse incidents (P17, P39, P41)</li> <li>Utilises decision making model to learn how to avoid making mistakes (P21)</li> <li>Uses reflective circle with mentor as a learning tool to improve performance (P24)</li> <li>Uses reflection as a tool for debriefs (P34)</li> <li>Identified and attended suitable training courses to improve knowledge &amp; skills e.g. public audit course, critical incident management simulations (I7, I13, I17, I27, I35)</li> </ul>	5
2.2.1	<ul style="list-style-type: none"> <li>Despite always wanting to be a police officer he is has become frustrated in his current role and is now receptive to careers outside the police force (P5, P6, P7, P13, P20, I34)</li> </ul>	1
2.2.2	<ul style="list-style-type: none"> <li>Identified and attended courses which will improve his curriculum vitae (e.g. public audit course) to enable him to apply for jobs outside the police force (I8, I36)</li> </ul>	1
2.3.1	<ul style="list-style-type: none"> <li>Uses learning theory to understand disadvantages of activist learning style in particular contexts e.g. not distinguishing correctly between victim and criminal (R4, R5, I22)</li> <li>Uses reflective cycle to rediscover the importance of reflection in understanding own patterns of behaviour and policing ethically and competently (R6, R13)</li> </ul>	2

<b>Theme</b>	<b>Praxis changes</b>	<b>Number of changes</b>
2.3.2	<ul style="list-style-type: none"> <li>• Uses reflective models to understand reasons why members of his team have performance issues e.g. frustration with job/organisation (R8)</li> <li>• Uses conflict theory to understand and react appropriately to the public's behaviour during policing incidents (I29)</li> </ul>	2
2.3.3	NONE	0
3.1.1	NONE	0
3.1.2	<ul style="list-style-type: none"> <li>• Uses reflection to aid decision making in a range of contexts (e.g. understand reasons for poor decisions, to inform timely evidenced based decision making, to help make career decisions (P3, P15, P19, P27, P28, I38, I39)</li> </ul>	1
3.2.1	<ul style="list-style-type: none"> <li>• Using reflective cycle with supervisor to confirm good practices &amp; decision making e.g. dealing with grieving family (I37, P26, P27)</li> </ul>	1
3.2.2	<ul style="list-style-type: none"> <li>• Uses a learning journal to assess own behaviour in emotive situations e.g. sensitivity dealing with domestic abuse victims, critical incidents, dealing with staff performance issues, dealing with the public, family bereavement (R1, R3, R12, I2, I6, I10, I31, I40)</li> <li>• Seeks feedback from other departments relating to how his team performs in relation to dealing with volume crime (P36)</li> <li>• Uses reflection with his team to conduct debriefs following critical incidents (P38, I32, I47)</li> <li>• Identifies policy issues which impact on his team e.g. issuing of Tasers (P43, I44)</li> </ul>	4
4.1.1	<ul style="list-style-type: none"> <li>• Based on experience as a firearms officer he documented the most efficient way of issuing Tasers (P45, I43)</li> </ul>	1
4.1.2	<ul style="list-style-type: none"> <li>• Facilitates the development of new knowledge throughout his team in different contexts e.g. critical incidents, training of probationers (P40, I33, I42)</li> </ul>	1

<b>Theme</b>	<b>Praxis changes</b>	<b>Number of changes</b>
4.2.1	NONE	0
4.2.2	<ul style="list-style-type: none"> <li>Developed a new streamlined procedure for issuing Tasers used throughout the organisation(I45, P44)</li> </ul>	1

**Table 41 Karl's summary of praxis changes**

	1. Affective learning										2. Lifelong Learning						3. Professional Learning				4. Organisational Learning				Grand total					
	1.1 Self-awareness			1.2 Managing working relationships			1.3 Motivation		1.4 Openness to change		Total	2.1 Evaluate and improve learning		2.2 Career goals and ambitions		2.3 Using theory		Total	3.1 Decision making		3.2 Knowledge, skills & practices		Total	4.1 Knowledge capture & transfer		4.2 Change initiatives		Total		
	1.1.1	1.1.2	1.1.3	1.2.1	1.2.2	1.2.3	1.3.1	1.3.2	1.4.1	1.4.2		2.1.1	2.1.2	2.2.1	2.2.2	2.3.1	2.3.2	2.3.3		3.1.1	3.1.2	3.2.1	3.2.2			4.1.1	4.1.2	4.2.1	4.2.2	
Karl	7	3	1	1	1	1	2	1	1	2	20	3	5	1	1	2	2	0	14	0	1	1	4	6	1	1	0	1	3	43

Table 42 Karl's praxis changes

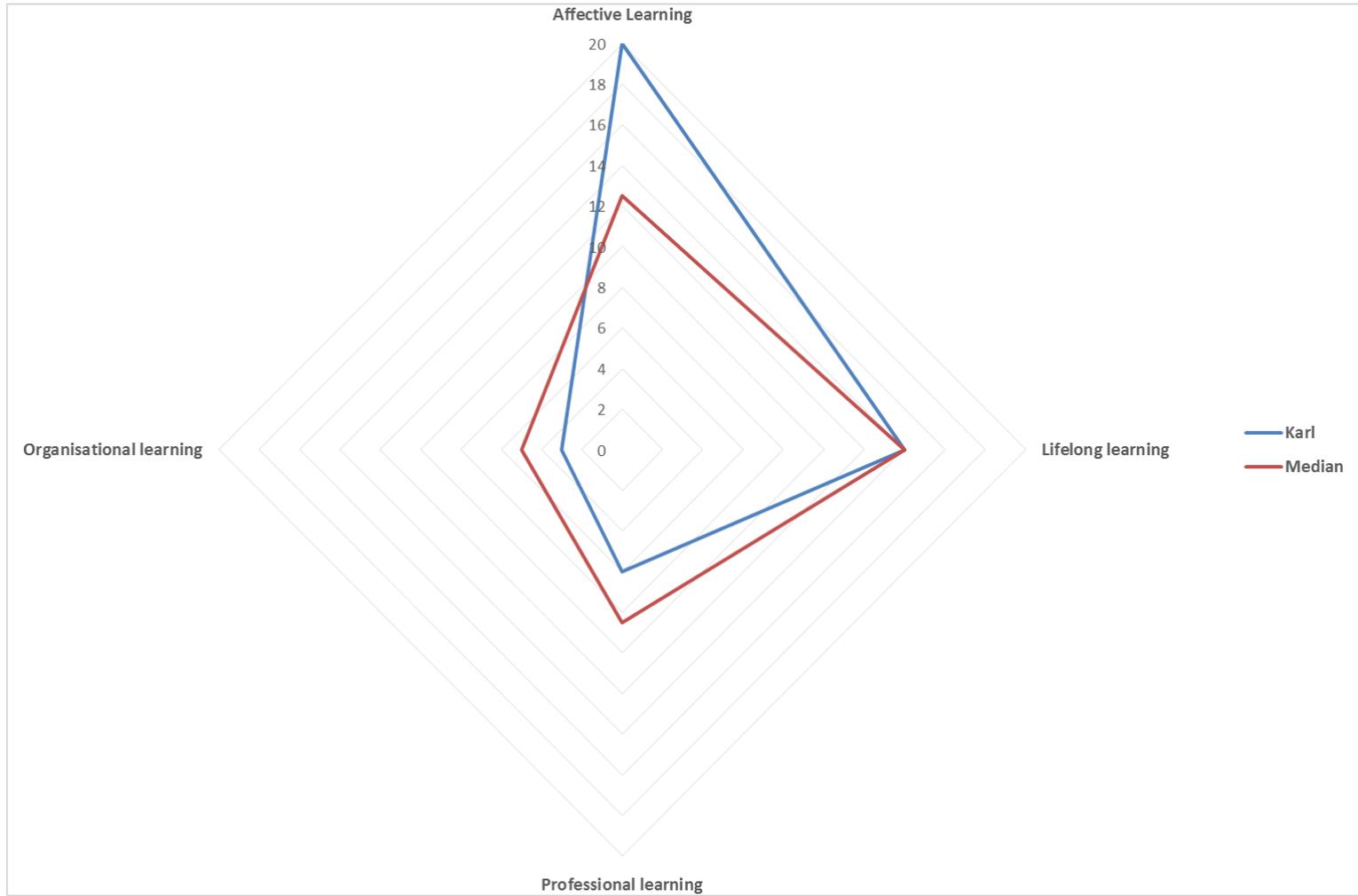


Figure 13 Karl's praxis map

#### **4.4.12 Olive**

Table 43 provides a summary of praxis changes for Olive. The total praxis changes are shown in Table 44 and a praxis learning map is shown in Figure 14.

##### ***Affective Learning***

This is the most significant domain in which Olive has developed her praxis.

Olive has become confident in making decisions, sharing good practice with her colleagues and expressing her opinions. She feels she has become able to work in a structured manner and be open minded about new ways of working. She has accepted that she must try to understand reasons for her colleagues' behaviour and has become passionate about helping them to improve their behaviour and practice. For example, she has helped colleagues to develop strategies for engaging with their students and to find meaning in their work. She has become open to trying different types of jobs which are outside her usual and familiar experiences.

##### ***Lifelong Learning***

Olive has changed her approach to learning in several ways. For example, she has set clear goals for learning, reflected thoroughly on her own practice so to identify action points for future practice and has become willing to critically consider the comments of those who have observed her practice. Olive has used theory to understand the value of her experiential learning and to provide insight into how she remains motivated to achieve personal goals. She used behaviour models to develop awareness of her feelings and to understand how colleagues are skilled at accentuating the positives despite negative feelings and issues in team situations.

##### ***Professional Learning***

Olive has made significant changes to her practice. These changes have included involving the students she teaches in critically reviewing their course and their own practice; and discussing innovative approaches to teaching and learning with colleagues, such as the use of e-learning. She has become better able to constructively utilise the feedback received from observers of her practice and has been able to structure and organise information efficiently.

### ***Organisational Learning***

Olive has developed a reflective learning resource on reflection which she has shared with her colleagues and she has developed new organisational procedures relating to programme management.

<b>Theme</b>	<b>Praxis changes</b>	<b>Number of changes</b>
1.1.1	<ul style="list-style-type: none"> <li>• Feels confident that she can reflect thoroughly on work related incidents (P1, P15, I1, I2)</li> <li>• Feels confident about handling change and consider new ways of working (P2, P6, P17)</li> <li>• Feels confident about decision making (P14)</li> <li>• Feels confident to share good practice with colleagues (P16)</li> <li>• Feels confident that she works in a more structured way (I3)</li> <li>• Feels confident to express her opinions to others (I11)</li> </ul>	6
1.1.2	NONE	0
1.1.3	NONE	0
1.2.1	<ul style="list-style-type: none"> <li>• Helps colleagues to engage more with students and find meaning in their work (P10)</li> </ul>	1
1.2.2	NONE	0
1.2.3	<ul style="list-style-type: none"> <li>• Accepts that she needs to be unbiased and open minded about others ideas and new ways of working (P4, P7)</li> <li>• Accepts that she needs to be open about the reasons why people behave in particular ways (I6)</li> </ul>	2
1.3.1	<ul style="list-style-type: none"> <li>• Passionate about helping colleagues to improve behaviours and practice (I6)</li> </ul>	1
1.3.2	NONE	0
1.4.1	NONE	0
1.4.2	<ul style="list-style-type: none"> <li>• Willingness to try new types of jobs (I8)</li> </ul>	1
2.1.1	NONE	0
2.1.2	<ul style="list-style-type: none"> <li>• Sets clear learning goals (I4)</li> <li>• More thorough reflection on own teaching practice to highlight actions for learning and improvement (I12)</li> <li>• Considers comments of observers of her practice to identify new learning and improvement (I13)</li> </ul>	3

<b>Theme</b>	<b>Praxis changes</b>	<b>Number of changes</b>
2.2.1	NONE	0
2.2.2	NONE	0
2.3.1	<ul style="list-style-type: none"> <li>• Uses reflective models to reflect on own teaching practice, particularly incidents that happen in the classroom (P3, P9, P13, R5)</li> <li>• Uses reflective models to analyse how she learns (R6, R3)</li> <li>• Used WBL theory to understand the value of own experiential learning (R1)</li> <li>• Used motivation theory to understand how she sets goals and remains motivated in achieving them (R2)</li> <li>• Uses behaviour models to become aware of own feelings e.g. ego and self-doubt (R4)</li> </ul>	5
2.3.2	<ul style="list-style-type: none"> <li>• Uses behaviour theory to understand how others accentuate positive aspects of situations despite negative feelings and behaviours within teams (I5, P5)</li> </ul>	1
2.3.3	NONE	0
3.1.1	NONE	0
3.1.2	<ul style="list-style-type: none"> <li>• Uses reflection to make complex decisions e.g. resourcing programme development (I17)</li> </ul>	1
3.2.1	<ul style="list-style-type: none"> <li>• Recognising that her approach to academic programme management is effective (I15)</li> </ul>	1
3.2.2	<ul style="list-style-type: none"> <li>• Uses feedback from observations of her practice constructively (P8)</li> <li>• Discusses practice critically with colleagues to develop more innovative approaches to teaching and learning e.g. use of e-learning (P11, I10, I14)</li> <li>• Involves students in critical reflection e.g. critical review of course and their own practice (P12, I8, I22)</li> <li>• Responds to challenges in a more structured and pragmatic way e.g. the way information is organised and structured (I7, I9)</li> </ul>	4
4.1.1	<ul style="list-style-type: none"> <li>• Created a reflective learning resource - reflection of significant event) (I20, P18)</li> </ul>	1

<i>Theme</i>	<i>Praxis changes</i>	<i>Number of changes</i>
4.1.2	<ul style="list-style-type: none"> <li>Shared reflective learning resource with colleagues (I21)</li> </ul>	1
4.2.1	NONE	0
4.2.2	<ul style="list-style-type: none"> <li>Developed new organisational procedures for programme management (I23)</li> </ul>	1

**Table 43 Olive's summary of praxis changes**

	1. Affective learning											2. Lifelong Learning						3. Professional Learning				4. Organisational Learning				Grand total				
	1.1 Self-awareness			1.2 Managing working relationships			1.3 Motivation		1.4 Openness to change		Total	2.1 Evaluate and improve learning		2.2 Career goals and ambitions		2.3 Using theory		Total	3.1 Decision making		3.2 Knowledge, skills & practices		Total	4.1 Knowledge capture & transfer			4.2 Change initiatives		Total	
	1.1.1	1.1.2	1.1.3	1.2.1	1.2.2	1.2.3	1.3.1	1.3.2	1.4.1	1.4.2		2.1.1	2.1.2	2.2.1	2.2.2	2.3.1	2.3.2	2.3.3		3.1.1	3.1.2	3.2.1	3.2.2		4.1.1		4.1.2	4.2.1	4.2.2	
Olive	6	0	0	1	0	2	1	0	0	1	11	0	3	0	0	5	1	0	9	0	1	1	4	6	1	1	0	1	3	29

Table 44 Olive's total praxis changes

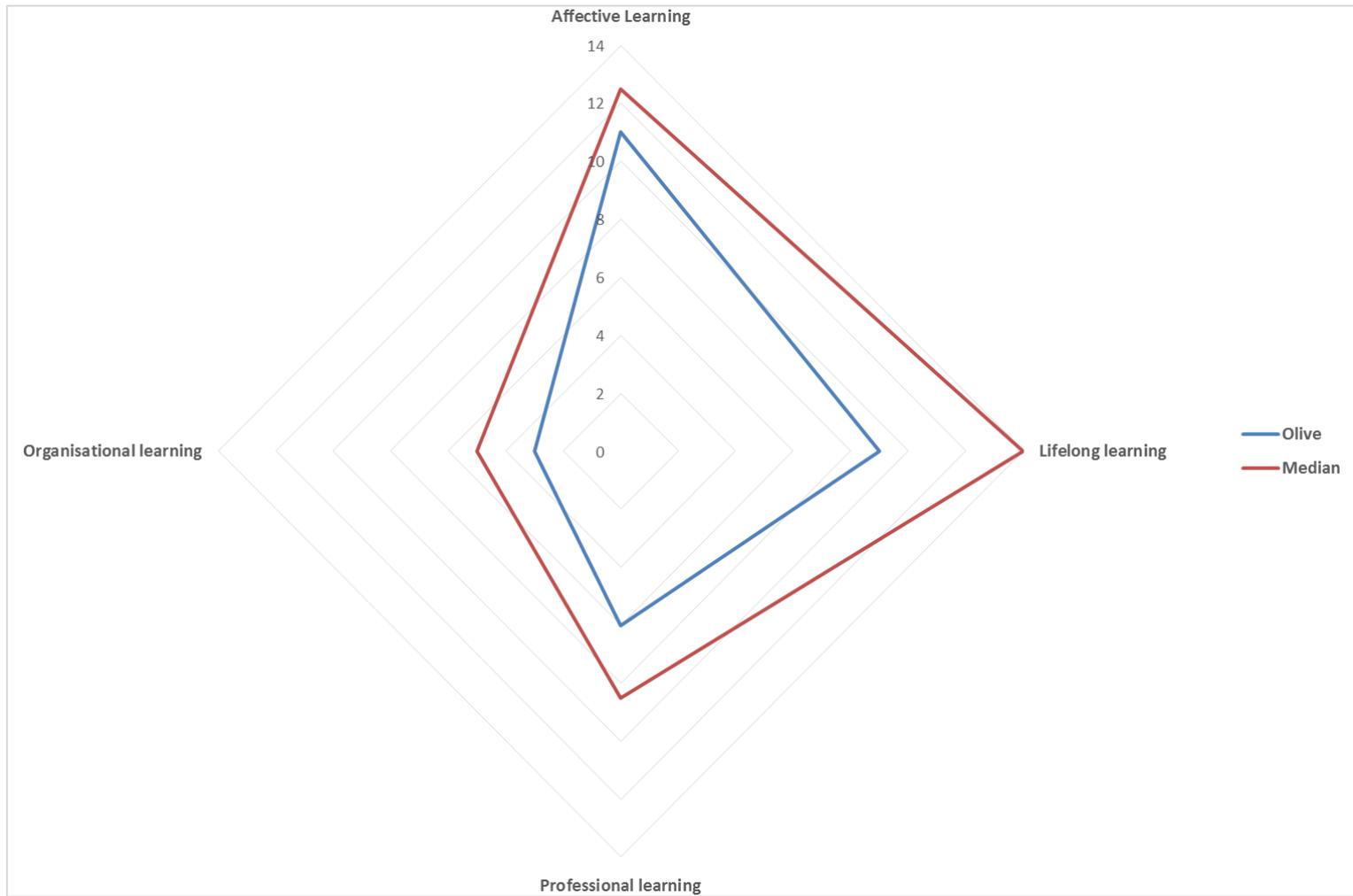


Figure 14 Olives praxis map

#### **4.4.13 Phillip**

Table 45 provides a summary of praxis changes for Phillip. The total praxis changes are shown in Table 46 and a praxis learning map is shown in Figure 15.

##### ***Affective Learning***

Phillip has recognised that his previous approach to managing his team was overly controlling and didactic and his emotions were sometimes a barrier to effective interpersonal relationships. He has now adopted a coaching style with his team. His personal approach to individual team members means that he has made efforts to establish reasons for performance issues and has adapted his approach to dealing with these accordingly. Phillip has become receptive about continuous improvement initiatives directed at improving manufacturing processes even though these have challenged long-held beliefs and assumptions.

##### ***Lifelong Learning***

This is the most significant domain in which Phillip has developed his praxis.

Phillip has used a range of strategies to help him learn, including performing a personal analysis to evaluate his Strengths, Weaknesses, Opportunities and Threats (a SWOT analysis). This analysis helped him to identify learning needs relating specifically to his role as a supervisor which prompted him to seek advice from technical experts to help learn how to solve problems relating to materials processing. A significant way Phillip has improved his learning is by using theory in a range of contexts. For example, he has used Kolb's reflective cycle to help him analyse his own personality traits and how they have impacted on his role as a supervisor. He used learning theory to help him understand his learning style and its impact on his performance and practice. He has distinguished between his use of single-loop and double loop learning and assessed whether this was appropriate to specific problems and contexts. Phillip has used team theory and leadership theory to help him understand the behaviours of his team, specifically their reaction to approaches he has used to supervise them.

##### ***Professional Learning***

Phillip's practice has changed significantly. He has used reflection in a wide range of contexts relating to his role as a supervisor, for example, facilitating reflection with his team to aid their development and as a self-development tool. In a practical context he has used reflection when

technical issues relating to the use of different materials on the production line arose, as well as to help him devise standard operating procedures for continuous improvement. Phillip has challenged others if problems have arisen (for example, when there have been missing parts needed for production) and has used SWOT analyses to help him assess the need for, and the effectiveness of, continuous improvement initiatives.

### ***Organisational Learning***

Phillip has developed new standard operating procedures for manufacturing based on his experiential learning which he has implemented and shared with his team of production operatives. Phillip has shared his understanding of reflective learning with others in the organisation to help them develop as better learners and professionals.

<b>Theme</b>	<b>Praxis changes</b>	<b>Number of changes</b>
1.1.1	<ul style="list-style-type: none"> <li>• Feels more confident to apply the knowledge and skills gained from experiential learning (P8, I8, I34)</li> <li>• Feels more confident about the continuous improvement process (P13)</li> </ul>	2
1.1.2	<ul style="list-style-type: none"> <li>• Aware that the style of supervision he used previously was overly controlling, didactic and distant and this contributed to his team feeling less able to openly discuss performance issues (P11, P32, I3, I17, I20)</li> <li>• Aware that his emotions can be a barrier to effective inter-personal communications</li> </ul>	2
1.1.3	NONE	0
1.2.1	<ul style="list-style-type: none"> <li>• Uses a reflective coaching approach to help his team identify good and bad workplace practices (P1, P4, I33, I9)</li> <li>• Adopted a more personal approach to managing his team based on his assessment of their individual needs and personality (P10)</li> </ul>	2
1.2.2	NONE	0
1.2.3	<ul style="list-style-type: none"> <li>• Accepts that being open to his teams perspectives is important in trying to understand the reasons for work issues (P9, I4, I18, I21)</li> </ul>	1
1.3.1	NONE	0
1.3.2	<ul style="list-style-type: none"> <li>• Believes that he can resolve performance issues with staff by making the effort to try different approaches (I1, I2)</li> </ul>	1
1.4.1	<ul style="list-style-type: none"> <li>• Analyses how to get the best out of his team (P6)</li> <li>• Objectively examines his own beliefs and values relating to continuous improvement processes (P14, P24, I5)</li> </ul>	2
1.4.2	<ul style="list-style-type: none"> <li>• Receptive to new approaches to continuous improvement despite the fact that they challenge previously held beliefs and values (P15, I5)</li> </ul>	1

<b>Theme</b>	<b>Praxis changes</b>	<b>Number of changes</b>
2.1.1	<ul style="list-style-type: none"> <li>• Evaluates strengths and weaknesses as a supervisor (P2, P18, P30)</li> <li>• Assesses effectiveness of decision making (P22)</li> </ul>	2
2.1.2	<ul style="list-style-type: none"> <li>• Uses SWOT analysis to identify learning needs relating to leadership (P19)</li> <li>• Uses reflective cycle as a learning tool to assist in problem solving (I13, I14)</li> <li>• Seeks advice from technical experts to help learn how to solve problems relating to materials processing (I16)</li> </ul>	3
2.2.1	NONE	0
2.2.2	NONE	0
2.3.1	<ul style="list-style-type: none"> <li>• Uses reflective models to analyse own problem solving (I11)</li> <li>• Uses reflective model to analyse personality traits (I19)</li> <li>• Uses theory to identify personality type and traits and how it impacts on relationships with others (I19)</li> <li>• Uses learning theory to assess learning style (R1)</li> <li>• Analyses whether he is engaging in single or double loop learning (R2, R3)</li> <li>• Analyses own experiential learning using learning theory (R4, R5)</li> <li>• Distinguishes between reflection-in-action and reflection-on-action in working environment (R6)</li> </ul>	7
2.3.2	<ul style="list-style-type: none"> <li>• Uses reflective cycle to understand team development issues (P5, I12)</li> <li>• Uses team theory to analyse team development and performance (P5, P17)</li> <li>• Uses leadership theory to understand teams behaviour resulting from different leadership approaches (P31)</li> </ul>	3
2.3.3	NONE	0

<b>Theme</b>	<b>Praxis changes</b>	<b>Number of changes</b>
3.1.1	<ul style="list-style-type: none"> <li>Involves team in decision making relating to shop floor practices (I26)</li> </ul>	1
3.1.2	<ul style="list-style-type: none"> <li>Uses SWOT analysis to help make decisions relating to shop floor practices (P21, I25)</li> </ul>	1
3.2.1	NONE	0
3.2.2	<ul style="list-style-type: none"> <li>Uses reflective cycle to develop team (P3, P7, P16, P23, P25)</li> <li>Uses reflective cycle as a self-development tool (R7)</li> <li>Uses reflective cycle as a tool for problem solving (I10)</li> <li>Uses reflective cycle to help address technical issues relating to materials use (I15)</li> <li>Uses reflective cycle to devise standard operating procedures for continuous improvement (P42, P29, I27)</li> <li>Uses SWOT analysis for assessing continuous improvement developments (P20)</li> <li>Challenges others when problems arise e.g. missing components for production (I22, I23)</li> <li>Use SWOT analysis to aid decision making (I24)</li> </ul>	8
4.1.1	<ul style="list-style-type: none"> <li>Develop new standard operating procedures based on experiential knowledge (P20, I29)</li> </ul>	1
4.1.2	<ul style="list-style-type: none"> <li>Shares reflective learning process with team as a means of improving their practice (P26)</li> <li>Shares new operating procedures with team (I28)</li> </ul>	2
4.2.1	NONE	0
4.2.2	<ul style="list-style-type: none"> <li>Initiated new practices relating to standard operating procedures on the shop floor (I30, I31, I32)</li> </ul>	1

**Table 45 Phillip's summary of praxis changes**

	1. Affective learning										2. Lifelong Learning						3. Professional Learning				4. Organisational Learning				Grand total					
	1.1 Self-awareness			1.2 Managing working relationships			1.3 Motivation		1.4 Openness to change		Total	2.1 Evaluate and improve learning		2.2 Career goals and ambitions		2.3 Using theory		Total	3.1 Decision making		3.2 Knowledge, skills & practices		Total	4.1 Knowledge capture & transfer		4.2 Change initiatives		Total		
	1.1.1	1.1.2	1.1.3	1.2.1	1.2.2	1.2.3	1.3.1	1.3.2	1.4.1	1.4.2		2.1.1	2.1.2	2.2.1	2.2.2	2.3.1	2.3.2	2.3.3		3.1.1	3.1.2	3.2.1	3.2.2			4.1.1	4.1.2	4.2.1	4.2.2	
Phillip	2	2	0	2	0	1	0	1	2	1	11	2	3	0	0	6	3	0	14	1	1	0	8	10	1	2	0	1	4	39

**Table 46 Phillip's total praxis changes**

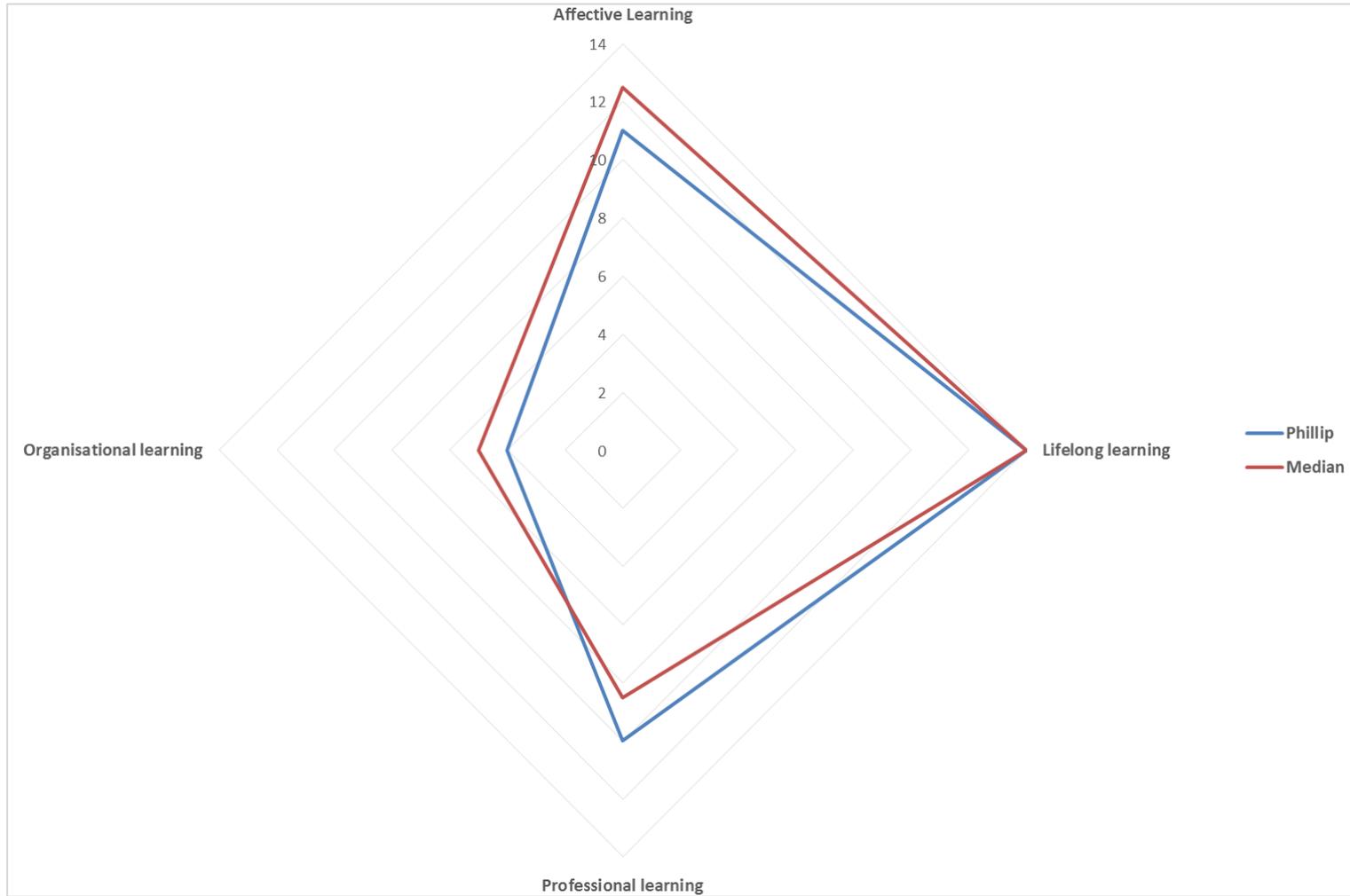


Figure 15 Phillip's praxis map

#### **4.4.14 Sarah**

Table 47 provides a summary of praxis changes for Sarah. The total praxis changes are shown in Table 48 and a praxis learning map is shown in Figure 16.

##### ***Affective Learning***

This is the most significant domain in which Sarah has developed her praxis.

Sarah has become aware that her confidence in her leadership skills and in her ability to expand her business has improved. She has recognised that she has improved self-esteem - she feels good about her own personality and the skills that she has acquired, focussing on her positive achievements. Her enhanced self-esteem and confidence has made her motivated and this has helped her to better motivate her team. She feels empowered in the knowledge that with sustained effort she can achieve anything she wants to. She has acknowledged that though her own efforts she has built up a viable business from scratch, employing others and developing a client base of 400 people. Sarah now feels less need to always be in control – she has recognised that sometimes there is no single ‘right answer’ and this has made her less prone to anxiety and stress. Because her tendency to be over-controlling has become less apparent she has been more able to delegate responsibility to her team.

##### ***Lifelong Learning***

Sarah has placed learning at the heart of her business recognising that this is a proactive and continuous process. She has carried out her learning needs analysis linked to the strategic direction she wishes her business to follow and has highlighted skills and knowledge gaps and strategies for addressing them. Sarah has identified several ways in which she can learn effectively, such as from team meetings, through her research, undertaking further formal qualifications, using theoretical models and on a personal level learning to control anxieties through therapies such as cognitive behaviour therapies. She has set aside one day a week to learn specifically by engaging with business related literature. Learning has become an integral and planned part of Sarah’s working and personal life.

##### ***Professional Learning***

The way that Sarah manages her business has altered, specifically in the way that she adopted a planned approach to a range of activities. This is apparent with her clients and her own team.

She has prepared for client presentations and meetings and has allocated roles to her own team based on a clear rationale rather than in an ad-hoc fashion. Sarah has become less likely to micro-manage her employees having adopted a delegating style of leadership and management. This empowers them creating professional autonomy, encouraging innovation and involving colleagues in decision making.

### ***Organisational Learning***

Sarah has formalised previously informal business procedures by documenting these into an operations manual shared amongst staff. She has restructured the business, developed and implemented a performance appraisal system and a system for recording and tracking consultancy provided to clients to ensure that staff time is costed effectively.

<b>Theme</b>	<b>Praxis changes</b>	<b>Number of changes</b>
1.1.1	<ul style="list-style-type: none"> <li>• Feels that she recognises and focusses more on the positive aspects of her personality and skills and consequently feels good about herself (P2, P4, I1, I3, I59)</li> <li>• Feels confident that she can achieve anything she puts her mind to (P5, P12)</li> <li>• Feels competent to interact with clients and colleagues more fluently and assertively (P7, I6)</li> <li>• Feels confident that the leadership and management practices she has developed through experiential learning are effective (P10, P18)</li> <li>• Feels confident to expand the business services offered by her company to include leadership and management training (P40)</li> <li>• Feels confident to engage in new learning experiences (P61, P66, P73)</li> <li>• Feels confident to develop and implement new organisational changes such as new processes and procedures into her company (P96, I19)</li> </ul>	7
1.1.2	<ul style="list-style-type: none"> <li>• Aware that when faced with pressure that she can lose perspective and has feelings of anxiety and helplessness which prevent her from achieving her goals (R1, R3)</li> <li>• Aware that she can sometimes take on too many projects/initiatives at once as a way of avoiding dealing with underlying issues relating to anxiety (R7, R8)</li> <li>• Aware that focussing on her positive achievements makes her more productive (P1, P9, P19, P34, P37)</li> <li>• Aware that there is not always a definitive right answer that she alone has to find and consequently doesn't feel the need to always be in control of situations and events making her feel less stressed and anxious (P22, P81)</li> <li>• Aware that when she is feeling/acting more motivated her employees also become more motivated (I13)</li> <li>• Aware that when she has had too strong opinions in the past these have sometimes damaged her relationships with others (I16)</li> </ul>	6

<b>Theme</b>	<b>Praxis changes</b>	<b>Number of changes</b>
1.1.3	<ul style="list-style-type: none"> <li>• Aware that in the past she moulded her views and practices to other people's way of thinking because she wanted to be accepted/liked but realised this constrained her thinking and actions so now she does not try to be what other people want her to be (I7, I21, P33)</li> </ul>	1
1.2.1	<ul style="list-style-type: none"> <li>• Considers team members learning styles when allocating tasks and responsibilities (I4, P72)</li> <li>• Delegating responsibilities more to empower her team and provide opportunities for their development to maximise their potential (I54, I57, P45, P55, P69, P77, P82)</li> <li>• Helps her team to understand and accept organisational changes by discussing why changes are necessary, listening to her teams concerns and allowing those who find change difficult time to adapt to them (P99)</li> </ul>	3
1.2.2	NONE	0
1.2.3	<ul style="list-style-type: none"> <li>• Accepts that it is important to seek to understand other peoples' perspectives rather than adhere rigidly to preconceived ideas (P20, P21, P24, P28, I15, I60)</li> <li>• Accepts that people work in different ways (I45)</li> </ul>	2
1.3.1	<ul style="list-style-type: none"> <li>• Successfully developed new income streams for her business e.g. coaching and leadership consultancy, management accounts (I10, P13, P16, P54)</li> <li>• Has become involved in activities she loves outside work such as amateur dramatics (I12)</li> <li>• Enjoys seeking out new entrepreneurial challenges (I18)</li> </ul>	3

<b>Theme</b>	<b>Praxis changes</b>	<b>Number of changes</b>
1.3.2	<ul style="list-style-type: none"> <li>Believes that her own entrepreneurial effort in exploring what clients want and developing the skills within her business to meet the identified needs is the key to further developing her business (P6, P15, P49, I20)</li> <li>Believes that the success she has achieved to-date in setting up her own business, employing five staff and developing a client base of 400 clients is the consequence of her own hard work and effort (I25)</li> </ul>	2
1.4.1	NONE	0
1.4.2	<ul style="list-style-type: none"> <li>Enthusiastic about trying out new working practices in her business (P27, P29, P30, P31, I23)</li> <li>Feels able to delegate responsibilities to others (P26)</li> </ul>	2
2.1.1	<ul style="list-style-type: none"> <li>Assessed her current skills and knowledge against those required for future development of her business to identify gaps (P59, P60, P63)</li> <li>Regularly assesses her performance against the goals and timescales she sets for new business initiatives/projects to determine whether she is on track to achieve objectives (I32, I35)</li> </ul>	2
2.1.2	<ul style="list-style-type: none"> <li>Uses team meetings as a key learning strategy to enable her and her team to 'think outside the box' and challenge each other's thinking, practices and attitudes (I26)</li> <li>Sees learning as a long term and continuous process that has to be worked at by devoting at least one day every week to learn something new which will improve her business knowledge and skills by for example conducting literature reviews, reading research papers and professional journals etc. (I22, P39, P44)</li> <li>Seeking opportunities to further develop her high level learning by considering undertaking a post-graduate qualification (P41)</li> <li>Engaging in Cognitive Behaviour Therapy to help learn how to overcome anxieties that are a barrier to reaching her potential (R4)</li> </ul>	4

<b>Theme</b>	<b>Praxis changes</b>	<b>Number of changes</b>
2.2.1	<ul style="list-style-type: none"> <li>Recognised that she would enjoy and could offer leadership and management training to leaders/managers in other businesses (P51, P53, I34)</li> </ul>	1
2.2.2	<ul style="list-style-type: none"> <li>Develops action plans with timescales, actions and milestones detailing how business ambitions will be achieved (I33, I36, P52)</li> </ul>	1
2.3.1	<ul style="list-style-type: none"> <li>Used reflective learning models to help her to challenge her own attitudes and beliefs, examine her personality and help redefine her identity (P36, R2, R5, R9)</li> <li>Uses reflective learning models to analyse her decision making skills in different business contexts (P68, R10)</li> <li>Used learning theory to help her understand her the advantages and disadvantages of her activist learning style in her role as a business owner/manager (R6)</li> </ul>	3
2.3.2	<ul style="list-style-type: none"> <li>Uses motivation theory to gain insight into the ways in which different members of her team can be motivated to perform effectively (I38, I40, I29, P65, P70)</li> </ul>	1
2.3.3	<ul style="list-style-type: none"> <li>Uses organisational learning theory to gain insight into the different types of organisational learning (e.g. single loop and double loop) occurring in her organisation (I28, I30)</li> <li>Uses organisational change models to gain insight into triggers for change and how change is managed in her business (P46, P48, P94, I52)</li> </ul>	2
3.1.1	<ul style="list-style-type: none"> <li>Involves her team in collective decision making about the future of the business during monthly staff meetings (I43, P98)</li> </ul>	1

<b>Theme</b>	<b>Praxis changes</b>	<b>Number of changes</b>
3.1.2	<ul style="list-style-type: none"> <li>• Uses reflective frameworks to review decisions and objectively weigh up pros and cons of different decision making options (P67, I41)</li> </ul>	1
3.2.1	<ul style="list-style-type: none"> <li>• Confirmation that the leadership knowledge and skills she applies are current according to contemporary business leaders and literature on leadership (P3, P11, P35, P43, P58, P64, I31, I39)</li> <li>• Confirmation of achievements in setting up setting up, managing, leading and developing a new Business Advisory and Accountancy Company (P17, P38, P62, I2, I4, I24, I58)</li> </ul>	2
3.2.2	<ul style="list-style-type: none"> <li>• Improved communication style – more fluent and assertive with clients (P8, P14, P23, I37)</li> <li>• More delegation of tasks to her team (P25, I11, I14, I47)</li> <li>• Develops a clear rationale for recruiting staff and allocating work roles and responsibilities (P71, I17, I46)</li> <li>• Devotes time to developing ideas to identify income streams for the business (P75, I51)</li> <li>• Assists her team in helping them to reflect on their performance, plan their workload and innovate (P83, I27)</li> <li>• More meticulous planning of activities such as client presentations (I5, I8)</li> <li>• Reflects daily in a structured way as a supervisor to learn from mistakes and actions to identify lessons learned and future actions (I42)</li> </ul>	7
4.1.1	<ul style="list-style-type: none"> <li>• Developed an operations manual formally documenting business and procedures (e.g. client management, dealing with tax issues etc.) (I55, P85)</li> </ul>	1

<b>Theme</b>	<b>Praxis changes</b>	<b>Number of changes</b>
4.1.2	<ul style="list-style-type: none"> <li>Facilitated the sharing of knowledge between colleagues relating to business processes and procedures e.g. client management resulting in new documented operational manual shared throughout the business (P79, P80, P84, P87, P90, P92, I56)</li> <li>Shared own knowledge and skills relating to interviewing clients (I53)</li> </ul>	2
4.2.1	NONE	0
4.2.2	<ul style="list-style-type: none"> <li>Introduced new regular staff meetings at which staff can openly share ideas and concerns and explore new business opportunities (P47, P50, P74)</li> <li>Developed new operations manual that details organisational operating procedures and best practices (P56, P57, P86, P91, P93, I49)</li> <li>Introduced new organisational structure which allows people to be empowered to make decisions and introduce changes (P76, P78, I9)</li> <li>Developed new staff appraisal system which includes key performance indicators (I48)</li> <li>Designed and introduced a new formal reporting process for completion by the team which details values of sales, work-in-progress and chargeable client time (I50)</li> </ul>	5

**Table 47 Sarah's summary of praxis changes**

	1. Affective learning										2. Lifelong Learning						3. Professional Learning				4. Organisational Learning				Grand total					
	1.1 Self-awareness			1.2 Managing working relationships			1.3 Motivation		1.4 Openness to change		Total	2.1 Evaluate and improve learning		2.2 Career goals and ambitions		2.3 Using theory		Total	3.1 Decision making		3.2 Knowledge, skills & practices		Total	4.1 Knowledge capture & transfer		4.2 Change initiatives		Total		
	1.1.1	1.1.2	1.1.3	1.2.1	1.2.2	1.2.3	1.3.1	1.3.2	1.4.1	1.4.2		2.1.1	2.1.2	2.2.1	2.2.2	2.3.1	2.3.2		2.3.3	3.1.1	3.1.2	3.2.1		3.2.2		4.1.1	4.1.2		4.2.1	4.2.2
Sarah	7	6	1	3	0	2	3	2	0	2	26	2	4	1	1	3	1	2	14	1	1	2	7	11	1	2	0	5	8	59

Table 48 Sarah's total praxis changes

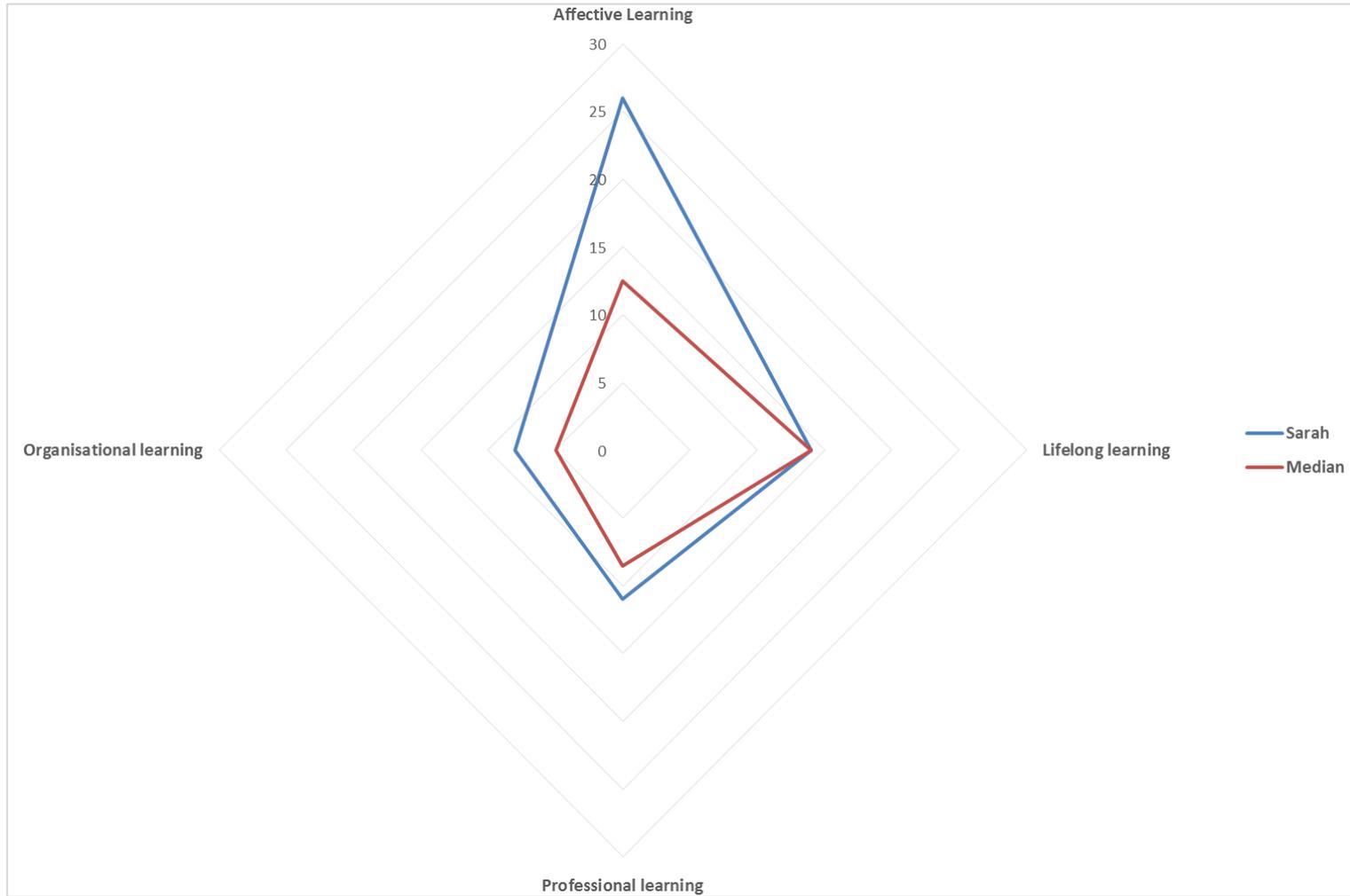


Figure 16 Sarah's praxis map

#### **4.4.15 Simon**

Table 49 provides a summary of praxis changes for Simon. The total praxis changes are shown in Table 50 and a praxis learning map is shown in Figure 17.

##### ***Affective Learning***

This is the most significant domain in which Simon has developed his praxis.

Simon has become aware that his autocratic leadership style had a negative impact on his team. As a consequence he adopted a participative style of leadership. Rather than blame his team for laziness or incompetence when they have experienced problems he has become approachable and has listened to them and explored possible causes (such as personal problems) and has supported them finding solutions. This new style of leadership has been reflected in the value Simon has attached to his team's opinions about production issues, recognising he can learn from their experiences. He has taken responsibility when events have not gone according to plan, rather than blame others. He has become accepting about the need for personal change based on a critical appraisal of his performance by his line manager. He has become accepting of organisational changes such as new organisational policies and procedures.

##### ***Lifelong Learning***

Simon has developed action plans to help him address his skills and knowledge deficiencies. He has embraced new opportunities for learning to help him become rounded learner. He has improved his learning by accepting and addressing issues raised by his line manager during his performance appraisals, and learning from failure to meet production targets. Simon has used theory to help him to understand his motivation, understand his colleagues learning styles and distinguish the ways in which learning occurs in the organisation (for example, single loop detection and correction of errors and double loop challenging established practices). He has recognised he has become ambitious and would like to move into a management position even if this means relocating himself and his family.

##### ***Professional Learning***

Simon consulted colleagues when he recognised their specialist knowledge would help inform adoption of new manufacturing methods to eliminate waste from the production process (lean

manufacturing). He held debriefing sessions regularly to assist production planning. He has based allocation of work on a rationale based on factors such as competence and learning style.

### ***Organisational Learning***

Simon has helped develop a participative culture of continuous improvement by facilitating sharing of knowledge amongst his team relating to production practices.

<b>Theme</b>	<b>Praxis changes</b>	<b>Number of changes</b>
1.1.1	<ul style="list-style-type: none"> <li>• Feels confident to deal effectively with frequently occurring production line problems (I3, P4)</li> <li>• Feels confident in ability to adapt to future organisational changes (P37)</li> </ul>	2
1.1.2	<ul style="list-style-type: none"> <li>• Aware that he is less likely to blame his supervisees when mistakes occur because he takes more responsibility for his own actions (I10)</li> <li>• Aware that an autocratic leadership style does not instil confidence amongst members of his team (I12, I19, I34, I51)</li> </ul>	2
1.1.3	NONE	0
1.2.1	<ul style="list-style-type: none"> <li>• Is approachable and shows empathy when members of his team have personal problems or illness that impacts on their performance (I36, I53, I54, R5)</li> <li>• Considers team members learning styles when allocating tasks and responsibilities (I25, I41, I45)</li> </ul>	2
1.2.2	NONE	0
1.2.3	<ul style="list-style-type: none"> <li>• Accepts that the team he leads may have knowledge and skills that he lacks and that he needs to listen to their opinions to come up with effective solutions to production problems (P45, I40, I56)</li> <li>• Accepts responsibility when there are quality issues relating to manufacturing processes rather than seek to blame members of the team he leads for their incompetency (I11)</li> <li>• Accepts that members of his team are not necessarily inherently lazy or incompetent when their performance is poor - they may be experiencing personal or other difficulties which is impacting on their performance and he needs to be approachable in order to find out what the issues are so that suitable support can be put in place (I14, I20, I37, I52)</li> </ul>	3
1.3.1	NONE	0

<b>Theme</b>	<b>Praxis changes</b>	<b>Number of changes</b>
1.3.2	<ul style="list-style-type: none"> <li>Believes that through his own continued and dedicated effort he can ensure that production schedule is met regardless of what problems arise (P5, I7)</li> </ul>	1
1.4.1	<ul style="list-style-type: none"> <li>Evaluates how previous work related changes had a positive impact on own learning (P1, P9, P30)</li> </ul>	1
1.4.2	<ul style="list-style-type: none"> <li>Willingness to try out new production line working practices (I22)</li> <li>Accepts that some of the Human Resource (HR) policies and procedures that he previously criticised have had a positive impact on the organisation (I32)</li> <li>Openly enthusiastic about organisational culture changes taking place as a consequence of a take-over by a large multi-national organisation (P10, P36, P40)</li> <li>Despite finding negative performance review comments difficult to accept he is willing to agree to and make the changes outlined by his reviewer to improve his performance (P32)</li> </ul>	4
2.1.1	<ul style="list-style-type: none"> <li>On a daily basis he analyses his performance against the manufacturing production schedule objectives to determine gaps in knowledge and skills (P2, P12, P18, P22, P25, I5, I8, I17, I30, R9)</li> <li>Uses supervisors annual appraisal feedback to help him reflect on his own skills and competencies (P28)</li> </ul>	2
2.1.2	<ul style="list-style-type: none"> <li>Uses previous failures to meet daily production schedule objectives as a means of learning to improve performance in a dynamic, fast changing production environment (I2, I6, I15, P15, P24)</li> <li>Plans out learning to meet knowledge and skills deficiencies identified in performance appraisal (P29)</li> <li>Identify opportunities to strengthen weak learning styles to help him develop as a more rounded learner capable of learning from a wide variety of different experiences (P42, P44, R6, R10)</li> </ul>	3

<b>Theme</b>	<b>Praxis changes</b>	<b>Number of changes</b>
2.2.1	<ul style="list-style-type: none"> <li>Recognises that he has become more ambitious and wants to move into a management position within the company he currently works for which may possibly be in a different geographical location (I26, I27, I28, I29, P19, P20)</li> </ul>	1
2.2.2	NONE	0
2.3.1	<ul style="list-style-type: none"> <li>Uses reflective learning models to reflect on experiences and issues which happen in the dynamic production facility he leads to gain a broad insight into work related problems and develop new knowledge to improve practice (P3, P7, P14, P17, P27, P39, P47, I1, I9)</li> <li>Gained insight into what motivates him to learn (e.g. improving bottom line performance in a manufacturing environment, getting involved in new initiatives) using learning theory (P6, P21, R2)</li> <li>Recognises that he often questions established ways of doing things and that this is evidence that he tends to engage in double loop learning (P34)</li> </ul>	3
2.3.2	<ul style="list-style-type: none"> <li>Uses learning theory to helped him to understand the different ways in which her colleagues learn and their strengths and weaknesses when learning new skills and knowledge (I43, I44)</li> </ul>	1
2.3.3	<ul style="list-style-type: none"> <li>Uses organisational learning theory to gain insight into the different types of organisational learning (e.g. single loop and double loop) occurring in his organisation (P50)</li> </ul>	1
3.1.1	<ul style="list-style-type: none"> <li>Consults work-centre leaders and production operators on decisions how to get production restarted when production problems occur (I21, I23, I38, I39)</li> </ul>	1

<i>Theme</i>	<i>Praxis changes</i>	<i>Number of changes</i>
3.1.2	<ul style="list-style-type: none"> <li>Consciously reflects-in-action when in-the moment decisions need to be made relating to production issues (P38)</li> </ul>	1
3.2.1	<ul style="list-style-type: none"> <li>Confirmation that specialist production knowledge acquired in a dynamic manufacturing environment (e.g. continuous improvement, lean manufacturing etc.) through experiential learning is current (P16, P33, R1, R3, R4, R7, R8)</li> </ul>	1
3.2.2	<ul style="list-style-type: none"> <li>Reflects daily in a structured way as a supervisor to learn from mistakes and actions to identify lessons learned and future actions (P13, P23, P26, P41, P43, P48, I4, I13, I16, I18, I35, I55)</li> <li>Listens to, reflects on and acts on feedback from supervisor who conducts performance reviews (P31)</li> <li>Assertively challenge the decisions and practices in the organisation when they do not have a sound rationale (P35, I33)</li> <li>Seeks and considers advice from a range of colleagues to decide most effective course of action (I24)</li> <li>Has a clearer rationale for the allocation of work and responsibilities (I3, I42, I47)</li> <li>Carries out regular team debriefs (I49)</li> </ul>	6
4.1.1	NONE	0
4.1.2	<ul style="list-style-type: none"> <li>Uses twice monthly team briefings as a forum to facilitate the transfer of knowledge relating to shop floor production issues between colleagues in different roles and with different responsibilities (P46, I46, I48)</li> </ul>	1
4.2.1	<ul style="list-style-type: none"> <li>Supports colleagues to understand the need for and accept organisational culture change (e.g. takeover by large multi-national company) (P11, P51)</li> </ul>	1
4.2.2	<ul style="list-style-type: none"> <li>Introduced a more open and participative continuous improvement culture (P49, I50, I57)</li> </ul>	1

**Table 49 Simon's summary of praxis changes**

	1. Affective learning										2. Lifelong Learning						3. Professional Learning				4. Organisational Learning				Grand total						
	1.1 Self-awareness			1.2 Managing working relationships			1.3 Motivation		1.4 Openness to change		Total	2.1 Evaluate and improve learning		2.2 Career goals and ambitions		2.3 Using theory		Total	3.1 Decision making		3.2 Knowledge, skills & practices		Total	4.1 Knowledge capture & transfer		4.2 Change initiatives		Total			
	1.1.1	1.1.2	1.1.3	1.2.1	1.2.2	1.2.3	1.3.1	1.3.2	1.4.1	1.4.2		2.1.1	2.1.2	2.2.1	2.2.2	2.3.1	2.3.2	2.3.3		3.1.1	3.1.2	3.2.1	3.2.2			4.1.1	4.1.2	4.2.1	4.2.2		
Simon	2	2	0	2	0	3	0	1	1	4	15	2	3	1	0	3	1	1	11	1	1	1	6	9	0	1	1	1	1	3	38

**Table 50 Simon's total praxis changes**

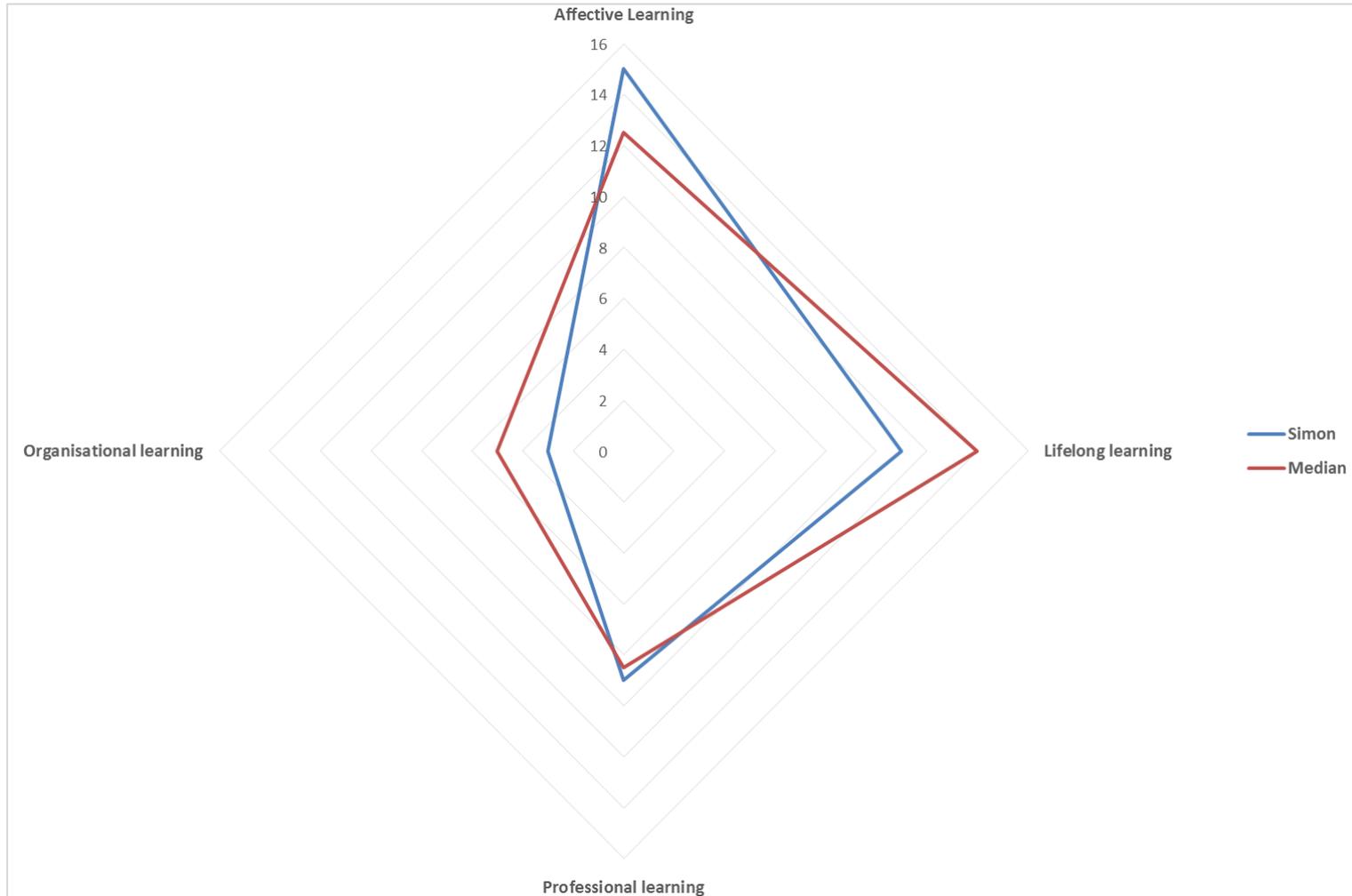


Figure 17 Simon's praxis map

#### **4.4.16 William**

Table 51 provides a summary of praxis changes for William. The total praxis changes are shown in Table 52 and a praxis learning map is shown in Figure 18.

##### ***Affective Learning***

William has become accepting of change. For example he has tried out new ways of dealing with situations rather than relying on accepted practices (for example, dealing people in custody who have mental health issues) and has become enthusiastic about embracing the considerable organisational changes occurring in the police force. He has also become supportive towards his colleagues, helping them to recognise behaviours and practices which are poor and considering their learning styles when allocating work.

##### ***Lifelong Learning***

This is the most significant domain in which William has developed his praxis.

To help him gain promotion, William has assessed his performance against the person specification for Inspector rank and has identified opportunities to help him address skills and knowledge deficiencies. For example, he volunteered to lead a new policing strategy initiative, got involved in investigative roles and reviewed key policing operations such as closing premises where drugs are used, produced or supplied. William has used theory to gain insight into single loop and double loop learning. He has distinguished between both types of learning and selected the most appropriate type for a given situation. For example, he recognised that double loop learning was required to challenge existing protocols for dealing with people in custody who had mental health problems. William has used learning style theory to understand that he has a predominantly activist learning style, which, as an inspector can have disadvantages. Therefore he is keen to develop as a rounded learner able to learn from a wide range of learning experiences.

##### ***Professional Learning***

William has developed new practices which he has applied in his professional policing role. Two are the development of a new process for dealing with people with mental health issues who are detained in custody, and the development of a new strategy for closing premises where drugs are used, produced or supplied. He has used force-field analysis as a decision making

technique to help objectively assess advantages and disadvantages of changing existing practices.

### ***Organisational Learning***

William has documented a new process for closing premises where drugs are used, produced or supplied which has been disseminated throughout the police force. He has developed and delivered training workshops relating to new practices on how to deal with people in custody who have mental health issues.

<b>Theme</b>	<b>Praxis changes</b>	<b>Number of changes</b>
1.1.1	<ul style="list-style-type: none"> <li>Felt pride in leading a policing operation to apply new legislation to closing premises where drug dealing occurs (I1, P1)</li> </ul>	1
1.1.2	NONE	0
1.1.3	NONE	0
1.2.1	<ul style="list-style-type: none"> <li>Helping members of his team who are performing poorly to reflect on their behaviour and practice to enable them to learn from their mistakes (I20, P22)</li> <li>Considers team members learning styles when allocating tasks and responsibilities (R6)</li> </ul>	2
1.2.2	NONE	0
1.2.3	NONE	0
1.3.1	NONE	0
1.3.2	<ul style="list-style-type: none"> <li>Believes that making a continued effort to further develop knowledge and skills will make promotion possible (P2, I2)</li> </ul>	1
1.4.1	NONE	0
1.4.2	<ul style="list-style-type: none"> <li>Enthusiastic about organisational structural changes taking place within the police force and the potential opportunities it brings for improving performance (I8, I9)</li> <li>Keen to try out new ways of dealing with individuals who have mental health issues who are in police custody (e.g. liaising closely with mental health professionals in the National Health Service) who are in police custody (P5, P6)</li> </ul>	2
2.1.1	<ul style="list-style-type: none"> <li>Assesses how his learning style impacts on his performance as an inspector (P6)</li> <li>Mapping own skills and knowledge against those required at a higher rank to determine gaps that need to be addressed (I16)</li> </ul>	2

<b>Theme</b>	<b>Praxis changes</b>	<b>Number of changes</b>
2.1.2	<ul style="list-style-type: none"> <li>• Critically reviews work experiences (e.g. closing drug dealing locations) to identify, evaluate, apply and build on new learning and plan new learning opportunities (I10, I11, I12, I17, P9, P11, P21)</li> <li>• Seek activities/roles and responsibilities that will provide new learning opportunities (e.g. leading police strategy, investigative roles) (I15)</li> <li>• Identify opportunities to strengthen learning styles to help him develop as a more rounded learner capable of learning from a wide variety of different experiences (P8)</li> </ul>	3
2.2.1	NONE	0
2.2.2	<ul style="list-style-type: none"> <li>• Identifies, plans and secures opportunities to improve promotion prospects (e.g. criminal investigation initiatives) (I13, I14, P12, P13, P15)</li> </ul>	1
2.3.1	<ul style="list-style-type: none"> <li>• Uses reflective learning models to reflect on work-related problems and issues (e.g. closing premises where drug dealing occurs) to develop new knowledge to improve practice (e.g. more structured hot debriefs following incidents) (P10, R1, R2, R3)</li> <li>• Used learning theory to help him understand how he learns best (e.g. carrying out a task rather than theorising) and the disadvantages of his activist style in his role as a police inspector (P14, R5, R8)</li> <li>• Recognised situations in which he has used double-loop learning effectively which had led to policy changes (e.g. dealing with people who are in custody with mental health issues) (I5, I7)</li> </ul>	3

<b>Theme</b>	<b>Praxis changes</b>	<b>Number of changes</b>
2.3.2	<ul style="list-style-type: none"> <li>• Uses learning theory to help him to understand the different ways in which his team learn and their strengths and weaknesses when learning new skills and knowledge (R7, R10)</li> <li>• Uses motivation theory to gain insight into the ways in which colleagues performance may be affected by personal issues (P23)</li> </ul>	2
2.3.3	<ul style="list-style-type: none"> <li>• Uses organisational learning theory to gain insight into the different types of organisational learning (e.g. using double loop learning to challenge protocols and policies for dealing with people with mental health issues) occurring in his organisation (P4, I6, R9)</li> <li>• Uses force-field analysis to assess barriers to change (e.g. barriers to changing shift times) (P17)</li> <li>• Uses organisational culture models to analyse organisational culture change resulting (P24, P25, P26, I23)</li> </ul>	3
3.1.1	NONE	0
3.1.2	<ul style="list-style-type: none"> <li>• Uses force-field analysis to help weigh up forces for and against change to help decide whether and how to implement it (P18, P19, I19)</li> </ul>	1
3.2.1	<ul style="list-style-type: none"> <li>• Confirmation that changing officers working patterns is effective (P16, I18)</li> </ul>	1
3.2.2	<ul style="list-style-type: none"> <li>• Developed a new procedure and training for dealing with people with mental health issues who are in custody (I3, I30, P3)</li> <li>• Supports junior level colleagues to develop and reflect on their knowledge, skills and practices (I21)</li> <li>• Considers the impact of organisational culture when putting in place strategies for improving performance of team (I22)</li> <li>• Developed and uses a new strategy for closing crack houses (I24, P27)</li> <li>• Reflects daily in a structured way to learn from mistakes and actions to identify lessons learned and future actions (I31, P20, R4)</li> </ul>	5

<b>Theme</b>	<b>Praxis changes</b>	<b>Number of changes</b>
4.1.1	<ul style="list-style-type: none"> <li>• Documented a new procedure for closing crack houses (P29, P30, I26)</li> <li>• Developed power-point presentations detailing best practice when dealing with people in custody who have mental health issues (I29)</li> </ul>	2
4.1.2	<ul style="list-style-type: none"> <li>• Disseminated new procedure for closing crack houses (P28, P32)</li> <li>• Delivered training outlining best practice when dealing with people in custody who have mental health issues (I27)</li> </ul>	2
4.2.1	NONE	0
4.2.2	<ul style="list-style-type: none"> <li>• Developed and introduced a new procedure and training for dealing with people with mental health issues who are in custody (I4, I28, P34)</li> <li>• Developed and introduced new procedures for dealing with closing premises where drug dealing occurs (I25, P33)</li> </ul>	2

**Table 51 William's summary of praxis change**

	1. Affective learning										2. Lifelong Learning						3. Professional Learning				4. Organisational Learning				Grand total					
	1.1 Self-awareness			1.2 Managing working relationships			1.3 Motivation		1.4 Openness to change		Total	2.1 Evaluate and improve learning		2.2 Career goals and ambitions		2.3 Using theory		Total	3.1 Decision making		3.2 Knowledge, skills & practices		Total	4.1 Knowledge capture & transfer		4.2 Change initiatives		Total		
	1.1.1	1.1.2	1.1.3	1.2.1	1.2.2	1.2.3	1.3.1	1.3.2	1.4.1	1.4.2		2.1.1	2.1.2	2.2.1	2.2.2	2.3.1	2.3.2	2.3.3		3.1.1	3.1.2	3.2.1	3.2.2			4.1.1	4.1.2	4.2.1	4.2.2	
William	1	0	0	2	0	0	0	1	0	2	6	2	3	0	1	3	2	3	14	0	1	1	5	7	2	2	0	2	6	33

Table 52 William's total praxis changes

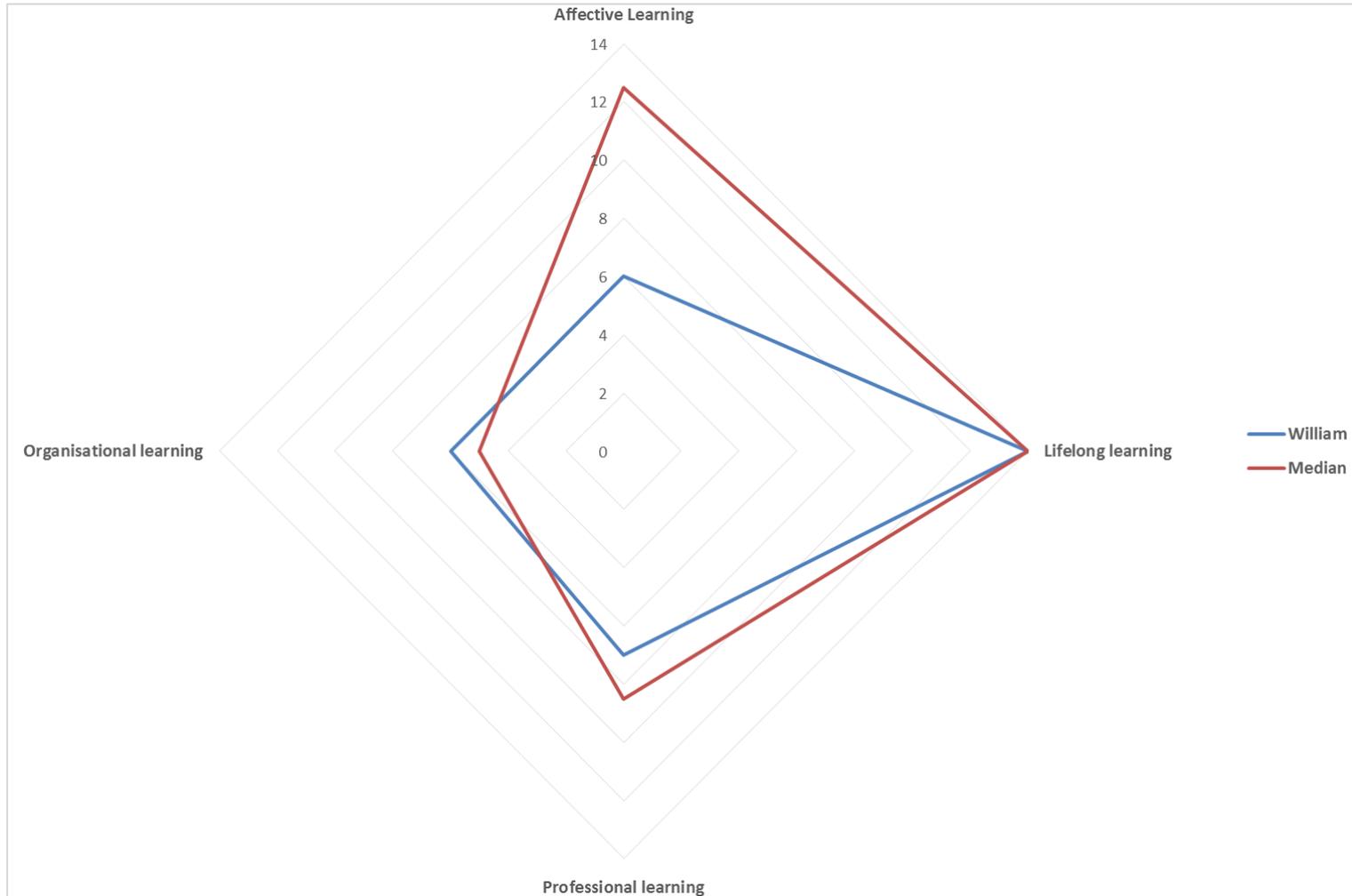


Figure 18 William's praxis map

## **4.5 Learner groups**

The data in section 4.4 illustrate that changes to participants' praxis occurred in all four praxis learning domains. However, changes in two domains are dominant, namely the affective and lifelong domains. Furthermore, based on analysis of the praxis learning maps, two distinct learner groups are identifiable; one comprises predominantly lifelong and the second predominantly affective learners.

### **4.5.1 Predominantly affective learners**

Figure 19 shows consolidated praxis learning maps for seven participants (Eve, James, Simon, Sarah, Harriet, Karl, Olive) for whom changes occurred predominantly in the affective learning domain. The development of praxis for these learners shows changes relating to affective learning.

All participants in this group are aware that their confidence has increased. This is apparent across a range of specific contexts involving particular professional roles and in general, work-related contexts. For example, Simon became confident in dealing with production line problems; Eve has improved her confidence in submitting case files and conducting prisoner handovers; Karl feels he is better able to deal with public safety incidents; Sarah has gained the confidence to expand her business consultancy services. In general contexts, participants are aware of improved confidence in decision making (Olive and Karl); feel confident in their ability to communicate assertively (Olive, Eve, Harriet and Sarah); feel more competent supervisors (Karl, Harriet, Sarah and James); have confidence to engage in new learning experiences (James and Sarah) and feel better able to deal with challenges and change (Simon, Olive, Karl and Sarah).

This group of learners have developed their emotional intelligence. They can recognise emotions, rationalise these and use them to guide actions. For example, Olive and Harriet have felt able to assertively express their opinions and Karl found improved awareness of behaviour in others that previously caused him to react emotively and irrationally. Sarah became of feeling less stressed and anxious because she does not need to retain control. Simon, James and Eve improved their working relationships with their colleagues. They recognised that they have previously adopted aggressive communication styles which damaged working relationships. Their awareness of how their behaviour impacted on performance and motivation has led them to adopt a supportive leadership style.

With the exception of James, the group felt their motivation had improved. This enhanced motivation is apparent from Eve’s passion for developing community based policing initiatives; Olive’s assistance of colleagues in improving their behaviour and practice; and Karl’s enthusiasm in volunteering to be involved in critical incident simulations. Sarah continuously strived to pursue new entrepreneurial challenges. Harriet showed enthusiasm for seeking out new training opportunities and ways of working in an Early Years education setting. Simon, Eve, Karl and Sarah gained insight into the relationship between effort and success. For example, Eve developed a strong belief that her promotion prospects, emotional intelligence and problematic aspects of community policing can be improved through her persistence in striving to overcome barriers and setbacks.

All participants except Harriet reported they had become positively oriented to change. This openness included being open to career changes (Olive and Karl), new working practices (Simon, Sarah and James), organisational change (Simon, Eve and James) and embracing new learning opportunities (Karl). Table 53 summarises changes for predominantly affective learners.

<b>Main changes</b>
<ul style="list-style-type: none"> <li>• Greater emotional intelligence/emotional freedom – can recognise and express feelings and emotions more easily and respond constructively to them</li> <li>• Move from autocratic to participative style (consultative, inclusive, mentoring)</li> <li>• Empowerment rather than control of others</li> <li>• Intrinsically rather than extrinsically motivated</li> <li>• Accepting of responsibility for own actions</li> <li>• Reduced aggression and enhanced assertive communication style</li> <li>• Feeling competent in own role in a range of specific and general contexts</li> <li>• Focussed on positive aspects of change</li> <li>• Better able to cope with pressure of change</li> <li>• Accepting that people work in different ways</li> <li>• Less frustrated with colleagues</li> <li>• Less blame oriented</li> <li>• Seeking opportunities for growth</li> </ul>

**Table 53 Summary of praxis changes for affective learners**

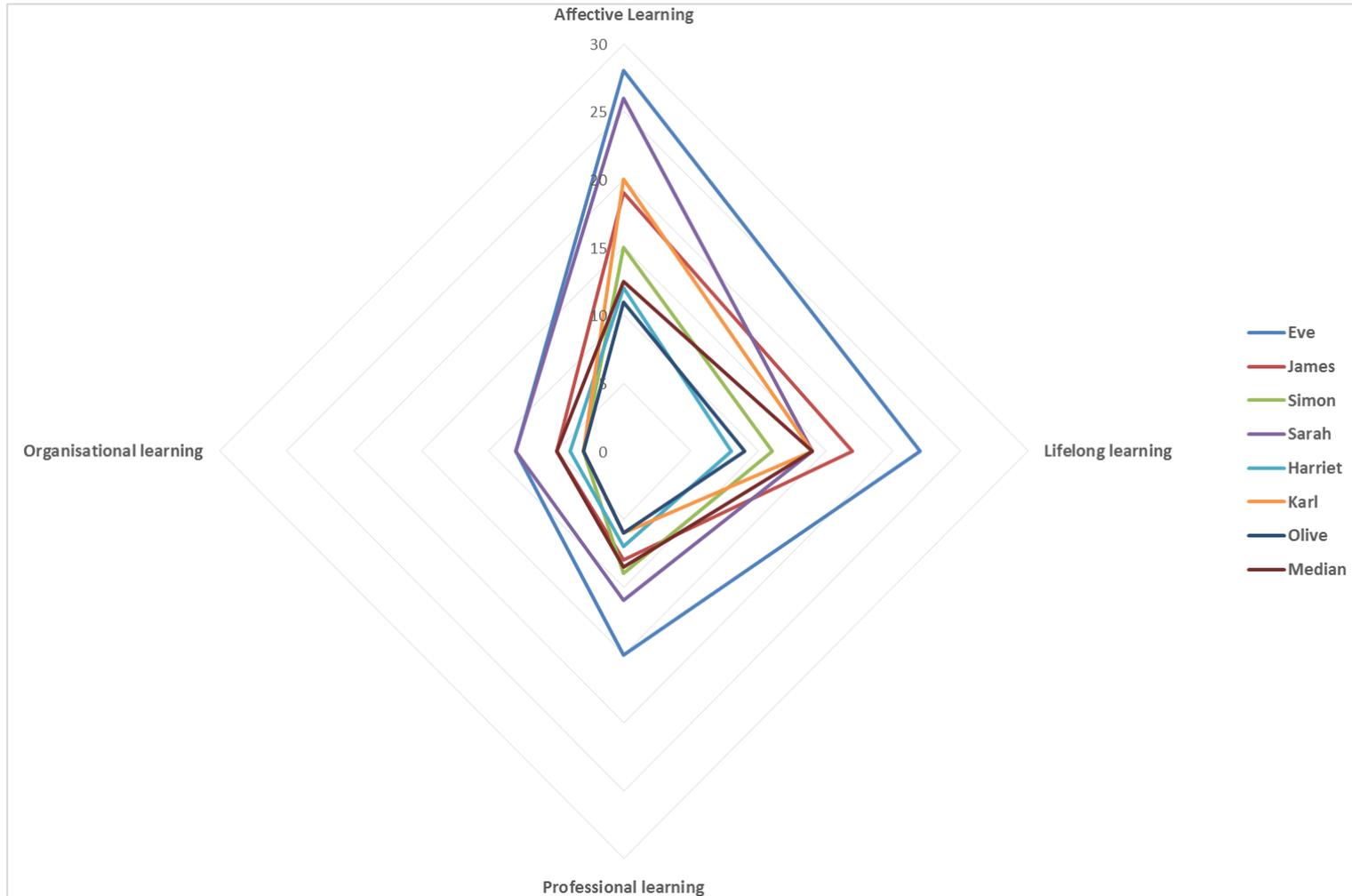


Figure 19 Consolidated praxis maps for predominantly affective learners

#### 4.5.2 Predominantly lifelong learners

Figure 20 shows consolidated praxis maps for nine participants (Haley, Anna, Adam, Daniel, Edward, William, Phillip, Gareth, Harry) for whom changes occurred predominantly in the lifelong learning domain. The development of praxis for these learners show changes relating to lifelong learning.

All participants in this group except Harry reported becoming better at assessing their skills and knowledge against specific criteria for their current roles. Haley used feedback from colleagues to help her assess her performance as a manager and identify areas for development. Edward assessed his performance as a facilities leader against best practices to determine his development needs. Haley, Adam, William and Gareth analysed how their performance was affected by their preferred learning style. Haley, Adam, Daniel, William and Harry analysed their skills and knowledge against future roles that they identified. For Haley this involved assessing her competency as a future commissioner for the council; Adam and William examined their skills and knowledge in the context of becoming a Chief Inspector in the police force; Daniel assessed his skills against those required for achieving offshore certification.

This group of participants used several strategies to develop new knowledge and skills. These included identifying strategies for developing and/or strengthening particular learning styles they feel useful to their current roles; using colleagues as a learning resource; developing learning plans; using tools such as SWOT analysis; engaging in formal training/continuous professional development opportunities; taking on new roles and responsibilities and carrying out research. Specific illustrative examples include Anna, who recognised that whilst her activist learning style was useful in her role as a Detective Inspector, she looks for learning opportunities to strengthen her theorist learning style so that decisions and actions can be underpinned by theory; Haley purposely liaised with a wide range of professionals (for example from the youth offending team) who she felt were a source of new learning to help her role supporting education of young people; Edward used the company reference library to help solve work related problems; William took on a new role leading police strategy.

In the context of career development, Haley, Daniel and Edward identified new career goals and/or ambitions. Haley recognised that she wants to move into a diverse and creative role managing projects. Daniel became career focussed and keen to experience diverse roles rather than stagnate in jobs which offer little personal or professional development. Edward

recognised that he doesn't have any ambition to be promoted or to move to another job, but is ambitious within his current role.

Six participants in this group (excepting Haley, Phillip and Gareth) identified strategies for achieving career goals and ambitions. Daniel achieved offshore certification to enable him to secure offshore working contracts; Edward took a lead role in environmental and sustainable issues within his organisation. Gareth became involved in communities of practice that provided learning and networking opportunities to help him achieve promotion to Chief Inspector. William improved his promotion prospects by becoming involved in complex criminal investigation cases. Anna used a reflective journal to plan and develop skills to help achieve a challenging new career outside the police force.

The group used theory to analyse their behaviours and practices. They all integrated reflective models into their working lives. Specific examples include Haley's reflection on how she managed complex multi-partnership educational provision for young people; William's reflection on practice relating to closure of premises used for drug dealing. Haley, Adam, Daniel, Edward and Gareth used theory to understand what motivates them. Haley, Anna, Adam, Phillip and Gareth used theory to understand their personality traits, beliefs and attitudes.

Seven members of the group (except Adam and Daniel) used theory to critically examine the behaviour and practices of others. For example, to analyse ways in which their colleagues learn (Haley, Anna, William and Harry); how they perform in teams (Haley and Phillip); and how others are motivated (Edward, William and Gareth).

Six members (excluding Haley, Adam and Phillip) used theory to critically analyse their organisations. Anna used social learning theory to gain an insight into the role of communities of practice in employee-led change. Daniel, William, Gareth and Harry used organisational learning theories to develop understandings of learning and organisational change. For example, Daniel, William and Gareth distinguished between examples of single-loop learning (simple error detection and correction) and double-loop learning (examining causes of problems). Table 54 provides a summary of changes for predominantly lifelong learners.

<b>Main changes</b>
<ul style="list-style-type: none"> <li>• Greater focus on measurement of own performance</li> <li>• Enhanced career freedom</li> <li>• Engage in strategies for strengthening learning styles to become a more rounded learner</li> <li>• Development of learning plans to address gaps in knowledge and skills</li> <li>• Enthusiasm for experiencing diverse working environments and taking on different roles and responsibilities that offer learning opportunities</li> <li>• Peer learning</li> <li>• Understanding of personal motivators to learn</li> <li>• Enhanced understanding of own career goals and ambitions and how to achieve them</li> <li>• Identifies work with 'career' rather than 'job'</li> <li>• Recognition of workplace as a place of learning</li> <li>• Critical understanding of self, others and organisations using theory</li> </ul>

**Table 54 Summary of praxis changes for lifelong learners**

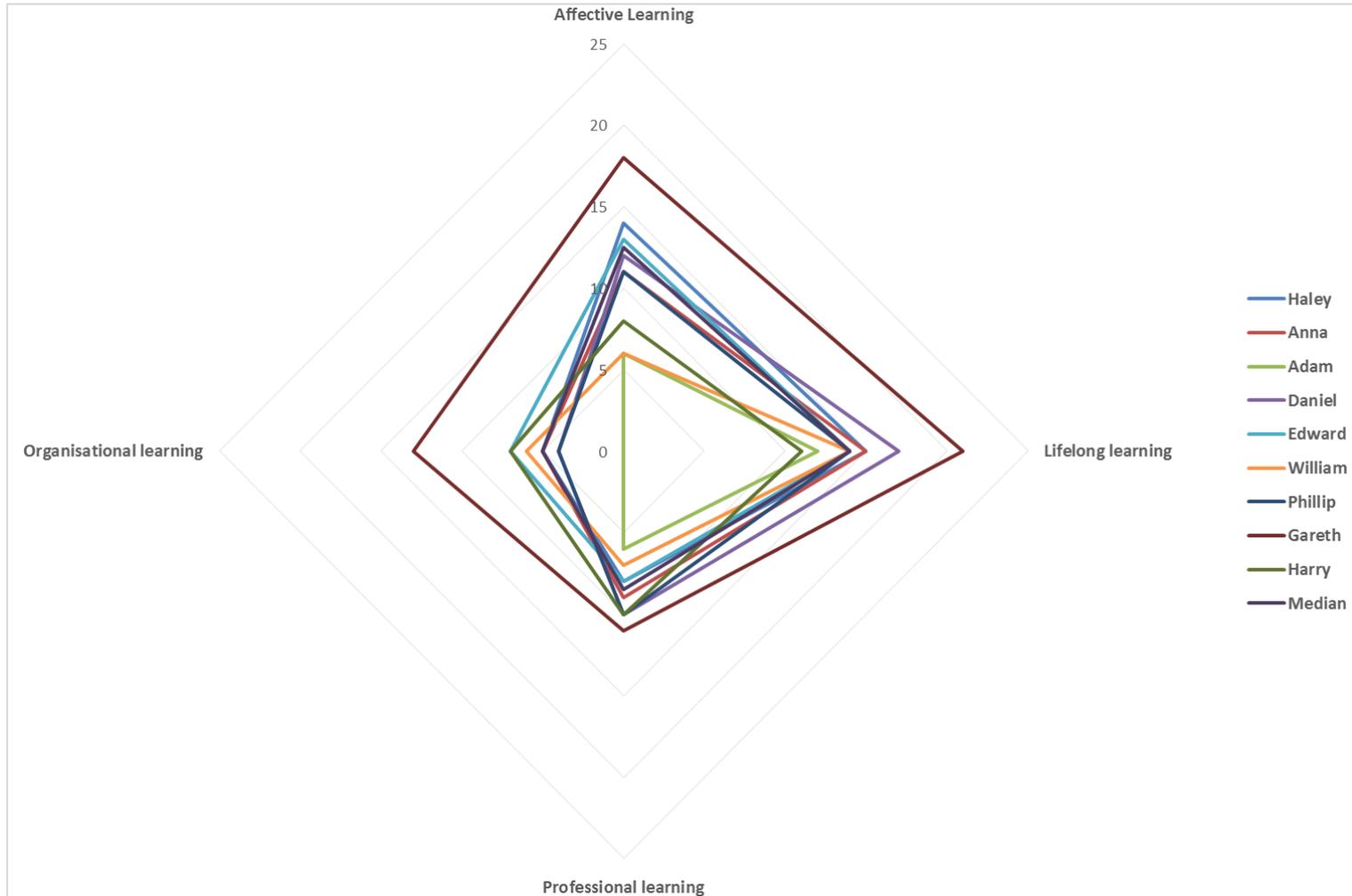


Figure 20 Consolidated praxis maps for predominantly lifelong learners

### **4.5.3 Distinguishing characteristics of affective and lifelong learners**

Whilst many participants developed strengths in affective and lifelong learning domains, there are characteristics that distinguish predominantly lifelong from predominantly affective learners. The extent to which these differences apply to individual participants depends on the strength of their praxis development in each domain. Therefore the narratives explaining the characteristics of each group must be treated with caution and with reference to data presented for each participant in section 4.4 (p. 98).

Lifelong learners are characterised by a tendency to focus on career development. Development of professional praxis for this group of learners is focussed on helping them to achieve career freedom. Lifelong learners do not like to feel constrained by a job role and seek to take charge of their own careers by continuously seeking new opportunities to learn, developing an enhanced portfolio of skills and knowledge. They see their career development as something that is an active and purposeful pursuit that they control, rather than something managed by their employers. They enjoy working with others, perhaps outside their organisation, if this enables them to learn something new. Lifelong learners may seek new roles, responsibilities or projects that allow them to work outside their own departments. They are energised by new learning experiences and situations. They set aside time to learn, seeing this as a means of helping plot their career path and achieve life goals. The pursuit of knowledge is perceived as something they are ultimately responsible for and as such, they enthusiastically look for and engage in formal and informal learning opportunities. Whilst they are focussed on themselves, they see the pursuit of truth as an important purpose for learning. This is evident from use of theoretical models with which they critically analyse and challenge behaviours and practices. This enables them to become critically conscious by engaging in deep learning, making judgements and taking action based on enhanced understanding of situations.

In contrast to lifelong learners, affective learners are characterised by a tendency to focus on their emotional development. Development of professional praxis for this group is focussed on achieving emotional freedom. Affective learners do not like to feel their actions are constrained by negativity of others or that they are led by their irrational own emotions. They seek to understand and rationalise emotions through reflection and see enhancing self-awareness as a way of gaining confidence, being open to change, improving motivation and building mutually supportive working relationships built on empathy, understanding, trust and cooperation. They believe that improved self-awareness supports them in developing their working relationships by controlling their emotions so that they do not engage in impulsive behaviours. This continuous engagement with their emotions and development of self-awareness is an active

and purposeful pursuit they believe is their responsibility. Whilst they are focussed on self-improvement, affective learners are concerned with self-improvement of others. They seek ways of helping them to reach their potential. Affective learners seek to understand colleagues' performance issues and behaviours by examining underlying reasons, rather than being judgemental. They tend to be passionate about engaging in initiatives and behaviours that empower and develop others. They achieve this through mentoring or supporting others. Affective learners may be interested in their career development but they believe that developing their emotional intelligence is fundamental to achieving career success.

#### **4.6 Chapter conclusion**

This chapter has provided an outline description of each participant involved in the study, along with data illustrating their praxis development in four praxis learning domains. The data are presented through narrative accounts of praxis development derived from a tabulated summary of praxis changes which includes the scoring of 'strength' of evidence for each change. This scoring allowed generation and presentation of maps for each learner that enabled identification of two distinct learner groups: one comprising predominantly lifelong and the second predominantly affective learners. The data show that for lifelong learners, developing professional praxis means achieving career freedom. Affective learners focus on achieving emotional freedom. Implications for planning HEWBL programmes are explored in Chapter Seven. The next chapter provides a detailed illustration of praxis development of one predominantly affective learner and one predominantly lifelong learner to provide further evidence for, and in depth illustration of, the contrasting outcomes for learners engaged in HEWBL programmes.

## **Chapter Five: In-Depth Case Studies**

### **5.1 Introduction**

This chapter presents illustrative in-depth descriptive case studies of a predominantly affective and a predominantly lifelong learner. It begins with a short rationale for case selection followed by narrative accounts of praxis development in the affective and lifelong learning domains. Both narratives include selected quotes from the three data sources used in the study to allow participants to tell their own stories. The final part of the chapter summarises the contrasting characteristics of the participants to illustrate the differences between two learner types.

### **5.2 Case selection**

Two participants were selected to contrast the characteristics of predominantly affective and predominantly lifelong learners. Eve, a predominantly affective learner was selected for two main reasons. Firstly, the strength of her praxis development in the affective learning domain was greater than that of all of the other participants and secondly her 'story' provided an interesting and compelling account of emotional development. Daniel, a predominantly lifelong learner, was selected because the strength of his praxis development in the lifelong learning domain was greater than any other participant employed in the private sector. Furthermore, he had recently moved jobs after fourteen years in the same post and was considering a further job change. He therefore provided a good example of someone who had become very career focussed after a long time of job stability.

Quotes are verbatim, with colloquialisms and dialectical terms altered. Quotes were selected from all three data sources used in the study – PRep (P), interview (I) and reflective essay (R). The information provided, including direct quotes does not allow participants to be identified. Care was taken not to take quotes out of context.

### 5.3 Case one: Eve, a predominantly affective learner

Eve is 41 years old and employed as a Police Constable by a local police force. She works as part of a small Neighbourhood Police Team whose role is to make the police more visible to reduce fear, aid interaction with the public and solve local problems. Eve has been in the Police for seventeen years. She achieved the rank of Sergeant seven years ago but was demoted after two years for what she describes as an “emotionally led mistake” which she found difficult to come to terms with:

*I always was ambitious. I was a sergeant and then I made a mistake that was emotionally led, and obviously it's a disciplined organisation so the discipline at the time was I lost my stripes which was a real hard thing to deal with (I)*

She felt that her demotion had been overly severe:

*And speaking to people now they've said, if that happened now, you would never have lost your stripes, you would probably have just got a smack on the wrists. But with the new Assistant Chief Constable, he was a stickler, it was like black and white to him and that was it. And I was really, really treated quite harshly (I)*

Although she felt that she was unfairly treated she remained positive:

*And I could have been quite bitter and twisted, just ignored it and not faced it and thought right well - stuff you! I'll take my money and that's it. But I haven't. I've come out fighting. I've come out trying to prove myself. And I do feel like I'm constantly trying to prove myself - I don't want people to think of me as: 'Eve the officer who was demoted' (I)*

Eve expressed a desire to regain her former rank as a Sergeant and now feels confident enough to actively seek promotion:

*I want to go for promotion but with all of the cutbacks it's going to be an absolute nightmare. There will be vacancies, but it will be like one per cent [of applicants] is going to be successful so I want to be focusing on how can I make myself part of that one per cent (I)*

She put her new found confidence down to becoming equipped with the tools to become a reflective learner:

*And I think again about reflection, when I think about what happened to me and the choices I made back then, it helps me help others, and to not make the same mistakes again. (I)*

Eve has responsibility for supervising probationary police officers, special constables and Police Community Support Officers (PCSOs). Prior to studying for a WBS degree she had not engaged in academic study since completing a Higher National Certificate as a part-time student aged 20.

Whilst Eve is interested in her career development, the following narrative shows that she believes this can only be achieved and sustained by developing her emotional competencies. Evidence of the ways in which she has developed such competencies is presented using four themes, namely, self-awareness, managing working relationships, motivation and openness to change.

***Self-awareness:***

Reflection provided Eve with a process that allowed her to gain confidence and improve her self-esteem:

*My confidence is improving and my self-esteem because I'm thinking before I act – reflection in action. I'm more confident about putting more things in place and being confident that it'll work. But if it doesn't work, I'm ready for that as well. Before I would just do something and I would have no idea what the end goal was going to whereas now I think ahead – I think of the consequences of what I'm doing. (I)*

Because she consciously reflected before acting she felt better able to act rationally than previously. This led to her feeling increasingly positive about herself and her abilities:

*It's better for my self-esteem because I'm not then regretting what I've done (I)*

*Good to feel more rounded as an individual and to be confident in knowing that you can pretty much deal with any situation proactively and effectively. (P)*

This confidence is evidenced in two work related contexts: submitting case files and transfer of prisoners to hospital, prison or court:

*By identifying my own strengths and weaknesses of case file content, I sourced guidance and generated my own 'checklist sheet' which identified what forms were required for various files, e.g. remands/advice/guilty and not guilty plea. Because of this, I am able to submit case files with confidence (P)*

*It [reflection] has improved my confidence, thus making me feel happier about volunteering for prisoner handovers that need dealing with, as I have the increased knowledge and confidence to put myself forward now. (P)*

Eve had reflected on the way that her colleagues treated her, concluding they became positive towards her and were seeking her advice and guidance. This improved her confidence and feeling of self-worth:

*By knowing what I'm actually doing this time round, it improved my confidence because people are then coming to me and saying 'how do I do this? How do I do that?' And I know how to do it now, whereas before I might have waffled through and not prepared properly. (I)*

*So I think looking back at my abilities and people coming and asking me for advice and the fact I know what I'm doing (most of the time), that builds my confidence. (I)*

Eve reflected on how her emotions and behaviour had impacted on herself and her colleagues for example:

*Things that have happened throughout my career (without going into it too much) I've kind of reacted to situations and I've made really terrible choices. (I)*

*I would react to something without thinking of the consequences of what I was saying. (I)*

*I have previously reacted and spoken aggressively in tone before when I have been frustrated, not thinking about the bigger picture. (P)*

She felt that this awareness enabled her to act rationally and she was aware this has had a positive impact on herself and her colleagues:

*Whereas now, I'm more conscious because I have reflected on previous scenarios and experiences and I kind of address them a bit more differently. (I)*

*I am happier in myself, as I feel I am more grounded and knowledgeable due to what I have learnt and how my actions can impact upon others. (P)*

An example of how she felt and the insight gained into how her behaviour impacted on others related to her role as a supervisor:

*In order to understand if faced with a similar situation how it can be resolved quickly and how reflective practice can have an impact upon me as a supervisor by understanding how my behaviour can affect others and thus ensuring motivation and productivity. (R)*

Eve developed awareness of how her peers had in the past influenced her own attitudes and behaviours. She had reflected on how a strong discriminatory organisational culture in the police force encouraged her to adopt a rather arrogant and narrow minded persona. She felt that this insight into how her peers behaviours and attitudes affected her had been a catalyst for change, enabling her to become independent minded:

*To be open-minded, to reflect, and to learn and to be deep thinking, and to understand why things are happening. And I'm quite pleased that I am more into this kind of individual because for me, whether other people think it or not, I think for me personally, I'm a better officer. I'd be a better supervisor than somebody who is quite narrow-minded, that has [been influenced by] narrow attitudes, and doesn't think past what they can see. (I)*

As a consequence of this change she felt that she had been able to develop greater emotional intelligence, particularly an ability to empathise with others.

**Managing working relationships:**

Eve believed that she had become better able to build effective mentoring type relationships with her colleagues. She frequently expressed empathy, patience and understanding in attempting to understand personal and professional issues that impacted on her colleagues' performance and helped to guide them in their professional and personal development:

*Because of my work ethic and belief I am often approached by others for guidance in difficult situations both work and personally related. They understand that I won't patronise [them] and that I am honest in my approach but in a caring constructive manner. I feel that I have grown in emotional intelligence and think/listen before reacting. (P)*

Evident in her new approach are better listening skills and a less judgemental approach:

*I am able to act and react in a more impartial and understanding manner (P)*

*I don't just dismiss or neglect those who appear to lack motivation, I try and understand why they have no motivation and what I can do to help them improve and develop (P)*

*When dealing with staff personnel issues such as lateness or sickness, I have learnt from previous meetings held with staff to listen first for any reasons as to the change in their behaviour, which could be as a result of issues at home or purely lack of motivation because they are not happy in their role. (P)*

Two examples provide evidence of how Eve had supported colleagues. The first example related to her supervision of a male PCSO who had failed to support a victim of crime:

*Through my own experiences of how I have adapted to change, or dealt with delicate situations, allows me to offer guidance to others, in particular younger members of service who may be naïve to the possible implications of their actions. For example, a PCSO failed to support a victim of crime - a shop theft. This caused disharmony within partnership working relationships within the town centre. The officer was moved to another ward area as a result, resulting in the officer taking time off work through stress, then upon return consistently complained at the unfairness of being moved. As the police are a disciplined organisation, moves can occur without reason. The officer was making the situation worse and causing ill feeling with work colleagues. I was*

*able to point out the reasons for the moves, the implications if he continued in his negative manner and helped to instil motivation. (P)*

The second example related to a female PCSO who was viewed by colleagues as someone who did not think before speaking and made them feel uncomfortable through talking excessively about personal issues at work:

*There's a particular girl on my team and she's quite, how can I describe her - effervescent. It's like, [she goes at] a million miles an hour. She's a PCSO and a lot of people just have no time for her and I have been a little bit short with her in the past. But then when I've actually sat down with her and got to know her, she just needs a bit of extra guidance and a bit more support. I've kind of said to her, by doing this, what do you think the implications are? What do you think people are going to think? So she's kind of reflected on what's happened when she's done that and she doesn't do it half as much as she did. She's not perfect but she's now much better. And sometimes I like have to have a quiet little chat and say "you said this" and she's says "Oh yeah." I think she's a lot better, although she's having a lot of personal problems. Without her realising it, without me realising it, she's reflecting now. I'm reflecting on what happened to her myself and trying to guide her from my experience and from [helping her to understand] how we perceive her. (I)*

Eve recognised that she was better able to deal with conflict arising in the workplace. She minimised the negative potential of conflict by her calmer and structured approach by being aware of her emotions and communication style and trying to build a rapport to find common ground with those she disagreed with:

*So I pause, see what they want to say before then addressing any issues - but if I'm a lot calmer, it's a bit more structured. (I)*

*I try to digest what's been said, look at the bigger picture and just decide whether my behaviour is appropriate when I'm speaking to somebody. It's just about taking a breath - pausing - which is the reflective side - [thinking about] where I want this to go? What am I hoping to achieve? If I do this, will this happen? (I)*

Eve felt that her improved conflict management skills had enabled her to assertively challenge racist and sexist attitudes and behaviours of some of her colleagues. She provided one specific example of how her improved skills had been used to address conflict with a colleague:

*Through reflection when having to confront an officer whose attitude was rather upsetting and rude, I was able to reflect upon previously similar scenarios in order to ensure the challenge of the officer's behaviour was addressed appropriately in a manner in which the officer understood and were able to reflect upon their actions/behaviour. It resulted in the officer understanding, apologising and reflecting upon the consequences of how his behaviour affects others. (P)*

Eve recognised that she had become willing to consider new and different ideas about and from colleagues, which were contradictory to her attitudes and beliefs. For example she reflected on how her colleagues might learn in different ways and consequently she had developed a greater degree of tolerance towards them if they had difficulties:

*Whereas before, I'd have no patience, no tolerance, whereas now, I think their learning style could be different (I)*

As a consequence of this insight she adapted the way she communicated with colleagues to better suit their learning style:

*How others learn, and what may be simple for some to learn and understand may not be for others due to their learning style. Because of this [realisation] I am able to have more patience, as I realise that how I am explaining something to one person may need to be delivered in a different manner to someone else and thus I have learnt to adapt my communication style to meet the needs of the audience. (P)*

*Some people learn well from being thrown in at the deep end, with minimal supervision, whereas others prefer to be fully briefed and guided. This knowledge can help me recognise these differences in staff, thus ensuring when I need to address certain issues they understand and learn. (R)*

Eve is now open to the idea that issues such as poor punctuality or performance may not be down to laziness or incompetence:

*If a staff member was regularly failing to achieve at work or coming in late, previously I have seen the reasons for this as one sided and labelled them in my own head as lazy and have*

*spoken with them in a manner that would suggest they need to improve or else. Whereas by reflecting on the outcomes of how tackling performance issues in simple terms as either right or wrong can cause extra stress and conflict, I have learnt and recognised that by approaching staff with an open mind, more often than not the outcomes have proven to be more productive and resolved happier all round. (P)*

**Motivation:**

Eve had reflected on her role as a neighbourhood police officer and had developed a new passion for developing and driving forward new initiatives relating to community based policing:

*I feel happy that I am able to provide a better quality of life for others, which isn't merely reactive but proactive and also which isn't the 'norm' for a police officer, it is more community based led policing. (P)*

One of the initiatives she developed was regular 'beat surgeries' on her policing ward to allow the public to discuss crime prevention or other issues. She developed information days for the elderly which involved working with multiple agencies/organisations (e.g. shop mobility) and seeking funding and project management. She recognised that she didn't possess many of the skills and knowledge required to develop such an initiative, so there was a risk of failure. However, she felt that it was important to experience things she was unfamiliar with:

*I want not to take risks, but to do more in my role which isn't the norm. As a police officer you expect us just to be out locking people up. Often support and advice and that's it. But this project that I've just engaged in with the elderly senior citizens - for me it's a massive project for a police officer because we're not trained to do that - we don't know how to do it. But you're just learning as you go on really. So that's been nice to see, that I've grown a bit more sideways in my role, and that I can evidence that I've done this and if it's successful, I'll be quite pleased.*

**(I)**

Eve gained an insight into the link between effort and success, that is, the importance of persisting to overcome obstacles. This was apparent from her determination to continue to pursue her goal of promotion to sergeant despite being previously demoted. It was also evident from her new understanding of facing stressful situations head on and learning from past mistakes:

*By understanding that when faced with difficult and stressful situations, not to shy away but to reflect honestly about them, think about options, learn from the decisions and subsequent outcomes, then when faced with similar, through increased understanding will make a more confident improved decision. (R)*

One example she provided showed how she believed she could solve problems through her efforts related to the logistics of policing some areas of the community. She had come to believe that such issues could be solved by police constables themselves by putting forward proposals to senior officers based on their knowledge and experience:

*It's down to us as individuals to change it. I said nobody else is going to change it because it's in the 'too hard' box so I said we'll see if we can change it. (I)*

***Openness to change:***

Eve dispassionately reflected on the reasons for change and their likely impact. The foremost example she provided was her assessment of the considerable organisational changes that were occurring in the police force:

*The force is currently going through major financial changes resulting in structural changes. I have found myself supporting colleagues through these changes more readily, due to a deeper understanding of why change occurs and why we have to support the changes from within, and the consequences if we don't. Whereas previously, I allowed myself to follow the crowd and agree that it was doom and gloom and 'unfair' for such changes to impact upon on so much and didn't understand why. (P)*

Eve also felt willing and better equipped to try out new ideas and experiences seeing change as a positive catalyst for her own development:

*I feel this attitude and readiness to accept change is already ingrained into my subconscious through reflective learning and as change is inevitable in a modern society, this ability will allow me to grow and to support others. (P)*

This was particularly evident with regards to organisational changes which she felt offered substantial opportunities for professional development:

*The changes of the organisation - I'm more understanding of why we're doing that and how that will work. We've just moved our office and we're sharing a big office with the Criminal Investigation Department who deal with offences that have been identified as priority crimes. At first we said, "We're going to be their lackeys. They're going to ask us to go and do this and that, and they think they're better than us". But actually, being in there, hearing and seeing what work they're doing, it is an advantage. And by chatting with my colleagues, some of them are actually a bit more "Oh well actually it's not too bad." And being able to see that opportunity is by looking at the bigger picture. So yes, initially, day one, week one, it's not going to make any difference to us. But as time progresses and you build that rapport and you're in that environment, and there are detective sergeants there who've got different experiences you can learn from - that's where I think I look a little bit deeper. (I)*

#### **5.4 Case two: Daniel, a predominantly lifelong learner**

Daniel is 47 years old and employed as an Operations Supervisor having overall responsibility for supervising a team engaged in testing wave and tidal power equipment. He is also responsible for maintaining and enhancing customer relationships. Daniel has only been in his current role for three months. He held his previous role as a Production Supervisor in an Oil and Gas pipe manufacturing organisation for fourteen years. Reflecting on his previous role he felt that he was stagnating in terms of his learning and development:

*When I was working in a factory working shifts, I never, ever thought it was a career. It was never an aspiration of "I want to do this!" The job was just to make money, to provide for the family, that's all it is. And then once I've started to have a bit more ambition and self-belief that I could get out and do another job then I started thinking about my career. Now I do feel career-minded rather than job-minded, definitely. (I)*

This insight provided him with the motivation to change jobs:

*I wanted to move out of the position I was in, to more of a position of authority. A position where I was higher up the ladder. And I knew I wasn't going to manage that at my previous company. I had tried a couple of times but I was kind of taken for granted and viewed by colleagues as someone who did a particular type of job. Partly because I was quite good at it and admitting that to myself is quite a good step as well to think, I am very good at this job. I can do it. Then it became apparent to me that if I wanted to change and do something else then I'd have to leave. And once you've made that decision, you know where you're going. You leave. So I came here and now I've kind of changed. (I)*

Daniel left full-time education when he was 18. Prior to studying for a WBS degree at RU, he had engaged in part-time, HE study, successfully completing management related modules totalling 80 credits at level 4 at a local University. Daniel is focussed on his career development. It is evident from the following narrative that he believes career freedom can be achieved through a continuous process of learning to help him develop a portfolio of knowledge and skills which will enable him to fulfil his goals and ambitions. The evidence of the ways in which he has developed these knowledge and skills is structured using three themes, namely, evaluate and improve learning; career goals and ambitions; and using theory to deepen knowledge.

***Evaluating and improving learning:***

Daniel recognised that reflection helped him to assess his skills and knowledge relating to his work role in a number of contexts. His assessment of his performance allowed him to identify gaps impacting on his performance. For example, he was responsible for managing a number of projects for which project management skills were crucial:

*By reflecting on the learning I have gained I have been able to identify areas which I feel my learning is lacking and which it needs to be directed at. Project Management tools and techniques are areas which I have identified as requiring attention. Having identified these areas I have now actively started to increase my knowledge of them through further training. Having the ability to target specific learning needs I feel enables me to cut out wasted effort. (P)*

In his new role Daniel delivers training workshops to his colleagues – something which was new to him and which he felt he needed to continue to improve therefore he had regularly reflected on his performance following training sessions:

*Say you have given a training session to somebody, you can sit down and critically analyse it and say, “Well I could have done better here” or “This point should have been probably a bit more forcibly made” or “This bit might not have been relevant”. Reflection helps you document things in a more structured way. It helps you to understand. (I)*

Looking to the future, Daniel was mindful of skills and knowledge needed to develop in future roles such as working offshore. He therefore assessed his own skills and knowledge against such roles to enable him to identify any gaps.

Daniel expressed his belief that reflection was crucial in helping him to evaluate and improve his learning in different professional contexts so he could continuously develop and improve his own knowledge skills and knowledge. He believed that the ability to review an experience through reflection and then introduce new or improved ideas which could be monitored and evaluated in an ongoing cycle was a simple and effective method of learning.

*The reflective process is well defined. It’s not just about remembering something that happened - it’s an actual tool – a defined process. You can sit down and you can think “Right, I need to do, whatever, I need to in order to do this job [properly]”. “Where have I done something like this before?” “What information is there that could help us?” And then putting that down in some helpful format and using it is useful. (I)*

One example he provided of how he had deepened his skills and knowledge through reflection related to health and safety legislation and employment law:

*Reflection has helped me to reinforce the learning I have gained in health and safety and employment law which requires an in depth understanding of the subject matter. While undertaking training in these areas I actively employed reflection as a learning tool in order to understand what I had learned. I realise that I know more about certain subjects than I had previously thought. This has boosted my confidence in these areas. The obvious result of this will be that I will continue to learn through reflection and increase my skills as an employee. (P)*

**Career goals and ambitions:**

Daniel recognised the career goals he wished to achieve to enable him to have a rewarding working life. He had already changed jobs once as a consequence of reflecting on his goals and ambitions and gained an insight into the value of the knowledge and skills acquired through his working life through experiential learning:

*My understanding and use of reflective learning allowed me to realise that I had the experience and capability to successfully apply for a more technical position. This has helped me to understand what I want out of my employment and just as importantly what I don't. Hopefully I will continue to pursue a career path which I enjoy. (P)*

Whilst he was happy in his new role as an Operations Supervisor employed in a dynamic organisation that provided opportunities for learning and development, he had changed his mind-set about work, believing it to be not just about earning a living but a means of personal fulfilment and a way of achieving a better work/life balance:

*By reflecting on aspects of my career which I have enjoyed and been successful at and those which I have not, I have been able to more accurately evaluate the direction I wish to take regarding my career. My long-term goal is to go into semi-retirement and do contracting work when I want to. You know, you get some quite lucrative contracts over short spaces of time. Maybe doing three months and then not work for another three months. Do a bit of travelling. (I)*

Daniel had recognised the value of using reflection as a tool to identify, and to make value judgements about the skills and knowledge he had gained throughout his working life in order to further his career:

*This ability to identify and understand my strengths will enable me to demonstrate my key skills with a view to furthering my career. (P)*

Daniel's ultimate career goal was to be a self-employed, offshore contractor and to this end he had looked strategically at the positions he needed to secure to enable him to develop the knowledge and skills he needed to achieve this goal. He was already looking for new opportunities:

*I've come here, I've done this and will be going on to do something else after this so it has definitely given a boost to my motivation. I'm going to embark on another career change and that is a direct result of doing the course (I)*

Reflecting on his career goals and how to achieve them had enabled him to ultimately plot a clear path to achieve them:

*I'm thinking right, what do I need to learn and what areas do I need to develop to meet my end goals that I'm looking at now such as [achieving] offshore certification. I'm looking ahead which is something I would never have done in the past. I'm thinking right, to get where I want to be in five years' time, I need this and this and this and this. How do I get them? I've got to follow these pathways - so I'm planning the pathways to get there. (I)*

***Using theory to deepen knowledge:***

Daniel had used theory in a range of contexts to gain a critical understanding of his own behaviours and practices. He had incorporated the use of reflective learning models into his daily working life to continuously reflect on his learning and practice:

*You might be doing a task or talking to somebody then something will pop up into your mind and you think "oh, that relates to Gibb's reflective model" [taught in the Learning Recognition and Development module] then you are aware of the cycle and know what to do next. (I)*

*This cyclical approach to learning is found again and again and has been refined and altered over many years. Having learned of these various cyclical approaches, I now use them almost without thought. The ability to review an experience, reflect on it and then introduce new or improved ideas which can be monitored and evaluated in an ongoing cycle is a simple and effective method of learning. (R)*

Daniel had reflected on motivation theory to help him gain an insight into what motivated him to learn new skills and knowledge, which he felt was a significant change for him – doing

something unfamiliar and challenging as he had done very little academic work since leaving full-time education at the age of 18:

*Thinking about this now it was change itself that I was trying to avoid rather than my perceived inability to complete the work. This is a natural reaction and one that does become more difficult to accept as you get older. It is much easier to stay within your comfort zone, but if you do you will never find out what you are capable of achieving. Maslow (1943) said that if you deliberately plan on being less than you are capable of being, then you'll be unhappy for the rest of your life (R)*

Daniel had also gained insight into his motivation to learn something new by reflecting on models of learning that he had become familiar with:

*I am in total agreement with Race and his 'Ripples on a Pond' model (2010) [motivation to learn theory taught in Learning Recognition and Development module]. In order to actively seek feedback and want to examine findings you must want to undertake the task in the first place. I have reflected on some of the projects and tasks I have completed over the last few years and the ones in which I have excelled have all been ones that I was genuinely interested in or felt a sense of ownership with. (R)*

Daniel examined his own practice as an engineer working in a fast-paced, dynamic manufacturing environment using reflective models. This had enabled him to distinguish between two different types of reflection which he used in the workplace – reflection which occurs during an activity or event and reflection that occurs after an event:

*Reflection in action is thinking on our feet or a response to a surprise, which we can then evaluate and make changes to on the spot. This is something I am very familiar with in my employment role as an engineer. Reflection on action happens after the event and explores why we acted as we did. This made perfect sense to me and is again an almost obvious statement but it still needed to be explained in this way in order for me to visualise the process. I think that the ability of the various models and methods I have learned during this course to enable this visualisation is their most important characteristic. (R)*

Daniel also reflected on the organisations he worked for to gain an insight into their organisational cultures and how such cultures shaped roles, learning and behaviours. For example, he was able to reflect on and relate to how single-loop learning had been used to

meet goals through trial and error and when double-loop learning had been used to develop more creative solutions.

*By understanding more about the reasons and meanings of some of the practices which are used within the working environment I have been able to make improvements to my work role, such as employee management. Various models and theories such as learning loops have helped make this happen. Understanding and using these models helps to visualize and explain actions. Although these theories and models are often updated or superseded, they have helped me to understand and explain [organisational] actions (P)*

### **5.5 Contrasting Eve and Daniel's experiences**

Section 4.5 (p. 233) identified differences between predominantly affective and predominantly lifelong learners. The cases presented in 5.3 and 5.4 draws out these characteristics through the use of a narrative, providing a contextualised and deeper understanding of praxis development in participants' words.

Praxis development for Daniel is characterised by taking responsibility for his own career development. His goal is ultimately to become self-employed so that he can achieve a better work/life balance and to this end he has plotted a career path to achieve this goal. He has an entrepreneurial approach to his career – he does not feel constrained by the stability that his current employment offers but continuously assesses his own performance, plans new learning and looks to his next career move to provide him with new and exciting opportunities for professional development.

In contrast, praxis development for Eve is characterised by taking responsibility for her emotional development. She has learnt from her own experience of being demoted that irrational emotive responses to situations can be damaging. She has actively sought to improve her emotional intelligence by continuously engaging with her emotions and focussing on her self-improvement. She has developed a passion for community policing and has developed benevolent attitudes to her colleagues which have resulted in supportive and trusting working relationships.

### **5.6 Chapter conclusion**

This chapter has presented illustrative in-depth descriptive case studies of two learners – one predominantly affective, and one predominantly lifelong learner. The narrative accounts

provide evidence of the contrasting characteristics of affective and lifelong learners through the use of specific examples using participants own words. For Eve, who is a predominantly affective learner, evidence was presented showing that praxis development was focussed on her emotional development, whilst for Daniel who is a predominantly lifelong learner praxis development was focussed on his career development. In the next chapter, the factors that may contribute to these different outcomes are explored along with a broader discussion of praxis development with reference to the theories underpinning HEWBL.

## Chapter Six: Discussion

### 6.1 Introduction

The purpose of this study is to explore how professional praxis develops through a reflective learning approach. The study explores the impact reflective learning has on learners' professional development and on organisations in which they learn and work. The study addresses one broad research question:

***In what ways do Higher Education work-based learners develop their praxis?***

This chapter provides the answer to this research question. The chapter discusses implications of findings presented in chapters four and five, illustrating how they answer this question through an in-depth, critical discussion of the findings with reference to theories discussed in the literature review. Limitations of the study are discussed in detail.

### 6.2 Developing professional praxis through HEWBL

#### 6.2.1 Focussing on real-world problems

To develop praxis, learning should focus on real-world problems situated within the context of learners' lived experiences (Freire, 1995; Burbules and Berk, 1999). Data show that all participants reflected on practical problems relating to their professional roles. Those in policing roles focussed on dealing with firearms incidents (Anna), community policing (Eve) and disability hate crime (Gareth). Those working in manufacturing focussed on practical issues relating to quality assurance (Daniel and Edward) and continuous improvement (Phillip and Simon). In her Early Years Education practice, Haley was concerned with coaching parents of children in her setting. As a business owner/manager Sarah was concerned with how to manage performance of her staff. In education, Haley focused on development of educational pathways for young people, while Olive was concerned with effective management of Further Education programmes. Whilst this is not a comprehensive list, these are illustrative examples underlining that participants' praxis focussed on real-world problems. Moreover, participants chose to concentrate on these issues because these prompted concern – they were not prescribed or influenced by their HEWBL programme.

Evidence shows participants were engaged in Gibbons et al. (1994) "mode two learning" (see section 1.3 which arises from context specific, real-world problems produced outside a

university in the context in which the learning is used. Although work-based learners may draw upon disciplinary knowledge, work is the primary source of this type of contextualised learning (Boud and Garrick, 1999; Solomon, 2005). Learners acquire such learning to solve real-world problems (Argyris and Schon, 1978; Dewey, 1938; Kolb, 1984; Marsick and Watkins, 1990; Schon, 1983).

### **6.2.2 Emotional praxis**

The role emotion plays in reflection and action is contentious. Experiential learning theorists such as Dewey (1933), Kolb (1984) and Schon (1983) see emotion as having a crucial but limited role in reflection and action. They suggest emotions that arise from uncomfortable personal situations are triggers for reflection. In contrast, Boud et al. (1985), Felten et al. (2006) and Rogers and Freiberg (1994) view the role of emotions as inherent to the whole reflective process.

In this study, all participants provided examples of the crucial role emotion plays in reflection and action. The study provides evidence to suggest that emotions can trigger reflection and guide action. Examples of uncomfortable personal situations that triggered reflection include Eve's demotion from sergeant; Anna's poor working relationships with her team; Daniel's feelings of inferiority during interactions with more qualified colleagues; Harriet's impulsiveness whilst delivering parenting classes; James' frustration with his team's impulsive behaviour; and Sarah's need to always feel in control. In all these, whilst emotions triggered the reflective process, they also seemed integral to reflection and action. The role emotions played in guiding action appeared to help learners to become aware during the reflective process of the emotional consequences that actions have on themselves and on others. Emotions helped learners evaluate situations and consequently influenced actions taken.

Two examples illustrate the role emotions play in reflection and action. Firstly, James' frustration with his team's impulsive behaviour led to him being overly critical of them causing demotivation. Through reflection he became aware that his feelings of frustration during interactions with his team were possibly the consequence of a conflict between his reflective learning style and his team's more activist learning style. This awareness of his own feelings helped him understand that his communication style had a damaging impact on his team's motivation and performance. This insight helped him become aware of, and rationalise his feelings during interactions with his team. Consequently he did not overreact as previously but listened to them, tried to understand their viewpoints and provided constructive feedback. James' awareness of his emotions therefore enabled him to understand possible outcomes of

taking alternative courses of action. The second example relates to Sarah's need to always be in control, which resulted in her micro-managing and taking on too many projects and initiatives simultaneously. Reflecting on this she realised that when under pressure she experienced anxiety which caused her to lose perspective and feel helpless. As a consequence of insight, she changed her behavior to involve her team in decision making and delegated responsibility to them.

These two examples are congruent with Boud et al. (1985) and Mezirow (1991) view that reflecting on emotions and with emotion is beneficial in informing rational action. The examples provide evidence that the notion emotions act as a catalyst for reflection is oversimplistic. This ignores their value as a means of enabling people to make better choices and be adaptive to challenge by engaging with their feelings. However, the potential risk to individuals' mental health of reflecting deeply on emotions should not be ignored (Brookfield, 1990; Ghaye, 2007). The participants in this study reflected on uncomfortable feelings including anxiety, anger, frustration, aggression, powerlessness and vulnerability. Although outcomes reported were positive and none reported long-term emotional harm, outcomes may not be as positive for individuals with deep emotional issues. A further point, is the question of the efficacy of reflecting on emotions in isolation as participants predominantly did in this study. Collective reflection on emotions can be a vital component of gaining critical perspective on feelings, behaviours and actions (Antonacopoulou, 2004).

### **6.2.3 Emancipatory praxis**

The data show all participants except Adam developed their praxis across the four praxis learning domains identified. If, as Freire (1996) suggests, praxis enables emancipation through reflection and action, then these domains could be considered domains in which emancipatory learning occurs. In the affective learning domain this means trying to achieve emotional freedom. Examples include Adam who felt free to become open to other's views having recognised that he did not need to act in an autocratic, aggressive and unemotional way; and Eve who felt free to resist negative aspects of organisational culture and had confidence to challenge racist and misogynistic behaviours in an assertive manner. In the lifelong learning domain, emancipation means achieving career freedom. Daniel felt emancipated from work in the sense that he changed his view of it as something that was a routine chore to make money to viewing work as a source of learning which would enable him to pursue his ultimate career goal of being self-employed. Sarah recognised that a continuous process of learning placed at the centre of her role as a business owner/manager would enable her to develop and expand her business. In the professional learning domain emancipation could be considered as the

professional freedom to exercise personal judgement and make changes to practice. Illustrations include Harry's development of training initiatives based on a rationale to underpin his team's practice; and Gareth who challenged accepted orthodox working practices when he felt there was no rationale. In the organisational learning domain, emancipation is related to freedom to contribute to organisational development through, for example, creation and dissemination of knowledge. Edward, for example developed a factory compliance framework used for organisational equipment audits; and Gareth developed a strategic action plan for dealing with disability hate crime.

However, these examples relating to personal freedoms and emancipation also contribute to an obligation to enable freedoms of others through ethical action. Praxis is grounded in the idea that all action must consider and commit to, improving human welfare (Carr and Kemmis, 1986). In this study, the ethical dimension of praxis was explored from the perspective of leadership since all participants were in leadership roles. The ethical dimension of leadership was strongly portrayed in participants' personal accounts of experiences of reflecting on their roles as leaders in various contexts. Such contexts are apparent in some participants' job titles, for example, "Facilities Manager" (Edward) , "Education Manager" (Haley), "Detective Chief Inspector" (Gareth) and "Production Supervisor" (Simon); and/or their leadership responsibilities, for example, Olive leads curriculum developments, Harriet leads parenting classes and Eve is responsible for providing leadership in the context of community policing and supervision of PCSOs.

The ethical dimension of praxis relating to leadership can be explored through a number of examples. For example, Anna showed respect for others when she gained insight into her behaviour when leading a spontaneous firearms response team. She recognised that she had not considered the feelings and views of her team about the risks putting them in potential physical danger. She became aware of considering undertaking a rigorous risk assessment which included listening to, and valuing views. In another context, addressing the performance issues of staff, Edward, James, Phillip, Simon and Eve became less judgemental about their supervisees. Rather than blaming poor performance on laziness and/or incompetence they became inclined to identify and treat underlying causes of performance issues with serious concern. Others show examples of service. For example, Olive acted altruistically in helping her colleagues improve their practice; and Eve became proactive in implementing community initiatives and mentoring. In the context of engendering a sense of community, Sarah tried to build a community of autonomous professionals to help meet team goals. Attention to justice and fairness was a particular concern of William's in relation to dealing with people who had

mental health issues. This led him to develop a new process for dealing with people with mental health problems to avoid unnecessarily taking them into custody. He also led the training of fellow officers in the new procedures he had developed.

The actions discussed in this study cannot be considered to be emancipatory in the transformative sense conveyed by Freire (1982). Freire (1982) asserts the purpose of praxis should be to transform oppressive structures to facilitate liberation. There is little evidence that participants developed praxis in this transformative sense. For example, evidence of wholesale organisational culture change or signs that such a change had been initiated would be required. Freire (1996) believed transformation was possible by developing understanding of social reality through dialogue with others, and, based on this understanding acting collectively. Edwards (2001) and Bredo (1999) acknowledge the importance of social learning. Participants' examples of reflection and action were conducted in isolation rather than collectively, which may be one reason why significant organisational culture change is not evident. The study may have taken place too soon after completion of the reflective learning programme for any real transformative changes to occur. Furthermore, many of the participants were not in positions of power within their organisations to enable transformative change. Emancipation is evidenced through increased awareness of freedoms available to participants and the ways in which they exercise these for the benefit of themselves and others rather than transformative change. These freedoms relate to the four praxis learning domains, that is, emotional freedom (affective domain), career freedom (lifelong domain), professional freedom (professional domain) and freedom to create and disseminate organisational knowledge (organisational learning).

#### **6.2.4 Variations in the extent of praxis development**

This study showed significant variations in the extent to which participants developed their praxis. For example, comparing the praxis learning maps for Adam and Eve (Figure 3, p. 105 and Figure 7, p. 142) show that changes to Adam's praxis was significantly less than median in each of the four domains, whilst Eve's was significantly greater. Whilst these are two extremes, variation across the sample was observed. An explanation is that those who developed their praxis moderately were simply less skilled reflective learners. Learning to reflect critically is complex (Finlay, 2008). Reflection is a skill people acquire through their lives to varying degrees (Honey and Mumford, 1986; Kolb (1984). However, as a consequence of the sampling strategy for this study (see section 3.5, p. 58) all participants were skilled reflective learners. Second, variation may occur because some job roles and/or organisations provided better opportunities

for reflective learning. The participants had diverse roles at varying levels of seniority within mainly public sector organisations. However, a pattern of differences based on employer factors does not emerge from the data, suggesting further research is required to clarify this.

### **6.2.5 Prioritising praxis**

The study found participants could be divided into two distinct groups, that is, predominantly affective or lifelong learners. Whilst there are characteristics that distinguish affective from lifelong learners, many participants were strong in both domains. For example, Eve and James identified as predominantly affective learners also provided evidence of considerable development in the lifelong learning domain. Conversely, Daniel and Gareth, who developed praxis predominantly in the lifelong domain, were strong affective learners. There is no evidence to suggest the programme itself influenced whether participants became oriented to development of praxis in one domain over any other. This is consistent with the design of the programme (see section 1.5, p. 23) which is underpinned partly by Knowles (1984) andragogy which encourages learners to engage in learning they prioritise.

What influences learning priorities remains unclear. Factors such as an individual's personality, contextual issues arising from job roles and responsibilities may contribute. There is evidence that emotions arising from participants' roles and responsibilities and their relationships with their colleagues play a crucial, probably under-estimated, role in learning (see 6.2.2, p. 261). This is consistent with Rogers and Freiberg's (1994) view that emotions are fundamental to learning and individuals differ in their predisposition to certain emotions depending on their personality. Hence, personality differences and workplace contexts may elicit contrasting emotions in individuals, leading to focus on various areas of development. Learners may become predominantly affective or lifelong learners as a consequence of interplay between contextual factors in the workplace and their personalities; this interplay triggers and guides reflection and action.

The affective and lifelong learning domains can be considered as domains of *personal growth*. Personal growth is a continuous process of understanding, developing and enhancing feelings, knowledge and skills for self-fulfilment (Dewey 1938; Freire, 1996; Rogers and Freiberg, 1994). The notion that personal growth is about self-fulfilment is congruent with the affective learning domain focusing on emotional fulfilment and the lifelong learning domain which focusses on career fulfilment.

### 6.2.6 Professional and organisational praxis

The study showed that none of the participants developed their praxis most significantly in either the professional or organisational learning domains. Given that HEWBL programmes aim to help learners develop in both these, examining possible reasons for less development in these areas in terms of quantity and impact is helpful.

There are three potential explanations why praxis development was less significant in the professional and organisational domains. Firstly, the emotions that are crucial to learning do not arise as much in these two domains as in domains of personal growth. Therefore learners do not instinctively prioritise learning in these domains. Secondly, professional and organisational norms may operate to suppress reflection and action in these domains. Organisational cultures can subdue reflective processes that enable professional and organisational learning (Senge, 1990). Thirdly, personal growth may be a prerequisite to professional and organisational learning. This suggests development of praxis in professional and organisational learning domains would always trail behind learning relating to personal growth.

Some evidence suggests personal growth is a pre-requisite for developing praxis in the professional and organisational learning domains. For example, Adam became open to other's perspectives (affective learning) and became co-operative with professionals in different organisations (professional learning). Anna became self-aware of considering feelings of colleagues in high-risk situations (affective learning). This self-awareness changed the way she dealt with such incidents by ensuring that debriefs included an opportunity for sharing feelings, thus changing practice (professional learning). She developed training materials based on case studies which she shared with colleagues (organisational learning). William conducted his research relating to police practices when dealing with mentally-ill people (lifelong learning). Based on his research he helped change policy to include ethical practices and delivered training workshops relating to this new policy (organisational learning domain). These examples are congruent with Argyris and Schon (1978) and Senge (1990) who propose that becoming aware of, and questioning deeply ingrained assumptions (mental models) enables personal growth which supports professional and organisational innovation.

The study shows that professional and organisational innovations can be evidenced at two levels, as both single-loop and double-loop learning are apparent. Single-loop learning involves changing ways of working to meet recognised and accepted objectives (Argyris and Schon, 1978). Evidence for this includes Anna changing the way she dealt with firearms situations

illustrating simple error detection and correction process to meet established objectives. The changes she made created a cycle of continuous improvement. Double-loop learning requires deeper and critical evaluation of why problems occur by re-evaluating accepted assumptions and values and looking consequences of actions from a wider perspective (Argyris and Schon, 1978). William's policy changes are evidence of this type of learning. He challenged accepted orthodoxy, introduced a new policy, and shared this with others. However, examples of double-loop learning relating to professional and organisational learning are few. Innovations arising from single-loop learning are most evident. This is congruent with Denhardt and Denhardt (2009) who found single-loop learning is most common in organisations because employees are frequently faced with routine problems where objectives are clear, so single-loop learning is appropriate.

### **6.2.7 Theory and praxis**

Theory in praxis informs and is informed by action (Mezirow, 1990). In praxis, theory refers to informal contextual theory developed by individuals from their practice and published, peer-reviewed theories based on empirical research. In this study there is evidence of the role that published and practice based theories play in praxis. For example, Haley used published team theory to help match individuals to particular roles and Gareth used change management theory to identify individuals who acted as change agents during a period of organisational change. Other examples in section 4.4 (p. 98) illustrate how participants used published theories in different contexts.

According to Rolfe (1993), theories derived from observations about practice in specific, work-related contexts are the most crucial to praxis development. Two examples illustrate the importance of theorising from practice. Adam developed a theory about his communication style and how this influenced his behaviour. He observed that he used an aggressive style of communication which was often resented by colleagues. He theorised that he used this style because he believed others expected him as a senior manager to act in an autocratic and unemotional manner. As a consequence, he changed his behaviour to become consultative, listening to and considering the perspectives of others. A second example relates to James observation of his lack of ambition to be promoted. He theorised this was because he joined the police force to serve the public, which he could do better in his current role than from a senior position. James took action to further develop his knowledge and skills in his current role by producing a professional development plan. These examples relate closely to experiential learning cycles such as Kolb's (1984) in which learners reflect on experiences to develop new

theories used to prompt future action. However, there is little evidence that learners explicitly recognise informal theories derived from practice. Therefore, the potential for testing and developing these theories further may be limited.

### **6.3 Limitations of the study**

As in all research studies this study has limitations. A main limitation was the small sample size. The small scale means that findings cannot be generalised to a wider population of HE work-based learners. To achieve generalisability a large-scale, quantitative survey of a representative sample of learners could have been used. However, whilst the results are not generalisable, the information-rich cases and contextual information presented enable readers to transfer results to other, similar cases. Transferability is a relevant concept when considering impact and outcomes of qualitative research (Shenton, 2004).

A further limitation was the use of self-reporting data collection methods which threatened the internal validity (see section 3.11, p. 91). Although three data collection methods were used, participants' responses were based solely on their memory of events. The data are records of participants' memories that may have been influenced by their mental state, beliefs, emotions and social context. The methods used therefore may not have captured the facts comprehensively or correctly. Independent validation to mitigate against recall bias and provide a greater understanding of the context in which feelings, actions and behaviours reported by participants occurred could have been achieved by observing participants in their workplaces. Additionally, once participants had been identified as either affective or lifelong learners they could have been interviewed further to determine the extent to which they exhibited the characteristics of the identified learner group. Due to the small scale nature of the study and time constraints neither observations of participants in the workplace or carrying out further interviews were feasible.

The researcher had a dual role as lecturer and researcher (see section 3.7, p. 63). The researcher delivered a reflective learning module to all participants and was the programme leader for the WBS HEWBL programme. Recognising there is a possibility of researcher bias in such complex relationships is necessary. Bias can arise during participant interviews when the role of 'lecturer' rather than 'researcher' may have been unconsciously adopted by the interviewer. This could have resulted in an interview approach suited to a teacher-student interaction than a researcher-participant. To mitigate bias methodological triangulation was applied and a pilot study undertaken to refine the interview process (see section 3.8, p. 65).

There are two limitations relating to the sampling strategy. Firstly, only participants with good reflective skills were selected. Whilst this was intentional (see section 3.5. p. 58) it meant that gaining insight into potential difficulties that work-based learners' face in developing their praxis without good reflective skills was not possible. Secondly, most participants were public sector workers. Thus, it is impossible to know if the same themes would have emerged had a more diverse group of participants been included.

Whilst template analysis is a useful tool for analysing qualitative data, development of the template was a subjective process. The *a priori* level 1 themes were derived deductively from the literature review. The template was refined with complex versions developed inductively from data. Data were coded and analysed by the researcher and the resulting template discussed. However, development of the template did not allow for multiple-perspectives, potentially leading to researcher-bias.

The process for constructing praxis learning maps was time-consuming because this relied on detailed, manual analysis of three qualitative documents. This may limit use in tracking learning through an HEWBL programme. The development of an accessible tool for producing praxis learning maps is an area for future research discussed in section 7.5.

This study was limited in scope with regards to its focus on examining a single strategy (reflection) used in delivery of HEWBL programmes. Whilst reflection is a foundation pillar of work-based learning and integral to praxis, other strategies such as insider-research and work-based projects are commonly used, but were not included due to time constraints and to retain appropriate scale for this type of project. The findings are therefore constrained to illustrating ways in which HEWBL learners developed their praxis solely with respect to the role of reflection.

A final limitation is the lack of attention paid to the role of emotion in development of praxis. Whilst the study found that emotion was critical to reflection and action, in-depth examples exploring how emotion guides action were lacking. Insufficient focus was given to the role of emotion in designing the PRep templates, or interview schedule. Furthermore, no exploration of participants' emotional dissonance arising from reflection in classroom situations or in the workplace occurred. Given concerns about the potential risk to mental health of reflection this was a weakness.

#### **6.4 Chapter conclusions**

The empirical findings confirm that participants engaged in HEWBL programmes focus on using reflection to solve real-world problems that they select. The areas of development they prioritise tend to be related to the affective or lifelong learning domains. Prioritisation of these areas of praxis development may result from interplay between contextual factors in the workplace and personality differences. This interplay elicits emotional responses in learners resulting in selection of priorities and consequently a diversity of outcomes. These outcomes are congruent with the notion of personal growth. The study provides evidence to suggest that personal growth is a necessary foundation for praxis development in the professional and organisational domains.

In this study, no evidence emerges of the emancipatory aspect of praxis in promoting transformative change. However, there is evidence that learners developed better understanding of the freedoms they have in each domain and how they can best exercise these ethically for the benefit of themselves and others. There is also evidence of learners' ability to theorise about their practice using reflection as a tool.

The chapter outlined limitations. These included the small size sample, the potential threat to internal validity arising from the use of self-reporting data collection methods and a lack of focus on collecting data relating to the role of emotion in praxis development.

The next chapter discusses implications for practice arising from the findings, outlines the contribution of the study to the field of WBL and areas for future research.

## **Chapter Seven: Conclusion**

### **7.1 Introduction**

This chapter begins with a discussion of key findings before discussing implications for practice, outlining several recommendations. The overall significance of the study and its contribution to the body of knowledge in HEWBL professional praxis is discussed. This is followed by recommendations for further research. A reflection on my own personal development resulting from undertaking the study is then given and finally, concluding remarks about the findings of the study are provided.

### **7.2 Key findings**

The thesis proposes that reflective learning is an effective strategy for helping learners to develop their professional praxis. It supports views held by experiential learning theorists (Arygris and Schon, 1978; Dewey, 1938; Kolb, 1984; Marsick and Watkins, 1990; Schon, 1983) that professional learners acquire learning through reflection to solve real-world problems. Moreover, the knowledge produced by learners through reflection is new, transdisciplinary, contextualised knowledge produced outside the university setting. This is consistent with Gibbons et al. (1994) notion of “mode two” learning: learners select the real-world problems they want to focus on, supporting Knowles’ (1984) view that adult learners set their goals based on their personal interests.

The study showed no evidence of the transformative aspect of praxis, but indicated that participants better understood the freedoms held within each learning domain, and exercised these freedoms for their own and for other’s benefit.

The study found that emotion played a crucial role in development of learners’ professional praxis. This role was not limited to triggering reflection, as proposed by Dewey (1933), Kolb (1984) and Schon (1983), but played out holistically in reflection and action as suggested by Boud et al. (1985), Felten et al. (2006) and Rogers and Freiberg (1994). Reflective models that recognise the centrality of emotion in the reflective process are therefore likely to be more effective in developing praxis than those seeing emotion as a catalyst for reflection. Given the crucial role that emotion played in this study, and concerns highlighted by Brookfield (1990) and Ghaye (2007) relating to dangers of emotional dissonance arising from reflection, serious consideration should be given to the learner support required to mitigate psychological harm.

The study outlined the role that theory plays in praxis. The research supports Mezirow's (1990) view that theory in praxis informs and is informed by action. The role of published, peer reviewed theory and informal theories derived from practice are important. However, there is little evidence that learners explicitly recognise informal theories derived from practice. Therefore, the potential for testing and developing these theories further may be limited.

This thesis proposes that learners develop their professional praxis in four learning domains, namely, affective, lifelong, professional and organisational. The conceptualisation of professional praxis across four domains of learning is novel, as is the mapping of praxis across these domains to make it explicit. Through the mapping process variations in the extent to which learners developed their praxis were identified. However, no clear reason was identified why these variations occurred. The mapping process enabled identification of two distinct learner groups: one comprising predominantly lifelong and the second predominantly affective learners. Based on Rogers and Freiberg's (1994) assertion that individuals differ in their predisposition to experiencing certain emotions depending on their personality, this thesis postulates that as a consequence of personality differences, workplace contexts elicited emotions in people who consequently focussed on different areas of their development. Learners therefore became predominantly affective or predominantly lifelong learners as a consequence of interplay between contextual factors in the workplace and their personality. The study found that learners in each group can be characterised differently - affective learners focus their praxis development on emotional fulfilment and lifelong learners on their career fulfilment. However, an outcome of the study is that continuous focus on self-fulfilment is that a characteristic of learners in both groups is congruent with the notion of personal growth as proposed by Dewey (1938), Freire (1996) and Rogers and Freiberg (1994). The study provided evidence to suggest that personal growth underpins praxis development in professional and organisational domains suggesting that HEWBL programmes focusing on professional and organisational development whilst ignoring personal growth may not be successful.

The project provided evidence of Argris and Schon's (1978) single-loop (simple problem solving) and double-loop learning (challenging accepted orthodoxy) relating to professional and organisational innovation. However, congruent with Denhardt and Denhardt's (2009) findings, single-loop rather than double-loop learning was dominant.

### 7.3 Implications for practice

The study found that none of the participants developed their praxis most predominantly in the professional and organisational domains. It is postulated that this is because learners prioritise affective and lifelong learning; that strong organisational cultures suppress reflection and action in the professional and organisational domains and that personal growth is a prerequisite to professional and organisational growth. The implications for practice are threefold. Firstly, learners should be helped to develop critical insight into the emotions that trigger and guide their learning. This insight will enable them to consciously direct their learning so that they have more choice about its impact across each of the four domains. This could be achieved through the use of reflective models that assist learners to engage with and understand the role of their emotions in learning. Secondly, HEWBL programmes should be designed to enable organisational cultural barriers that suppress reflection and action to be identified. This could be achieved through a reflective, risk assessment approach that enables learners to highlight potential cultural barriers to praxis development in the professional and organisational domains and identify actions which they can take to mitigate against them. Finally, because personal growth underpins professional and organisational innovation, HEWBL programmes should not focus too narrowly on the development of practice based innovations because to do so reduces their potential for enabling professional and organisational change. This is particularly significant in the light of successive UK governments' commitment to expanding HEWBL provision as a means of improving economic growth and wealth through the enhancement of organisational performance (see section 1.2.2, p. 14). Policy initiatives such as HAPs should not focus purely on professional and organisational performance but promote emotional and career development.

The study outlined the role that theory played in praxis, providing evidence that published, peer reviewed theory and informal theories derived from practice are important in praxis development. However, practice based theories based on observations of their behaviours, feelings and practices may not be explicitly recognised by learners. HEWBL programmes should be designed to help learners articulate these theories-in-use in structured and meaningful ways to make them testable and subject to further modification, enabling gain of increased critical insights into feelings, behaviour and practices.

The study found that emotion plays a crucial role in the development of professional praxis both triggering reflection and guiding action. The centrality of emotion in development of praxis has implications for work-based learning pedagogy. Whilst there are reflective learning models in use, only those that view emotions as a holistic part of the reflective process should

be encouraged. Furthermore, potential dangers of emotional dissonance arising from reflection needs serious consideration. Attention should be given to ensuring that those who deliver reflective learning workshops have the right skill set to enable them to facilitate and support learners to mitigate the potential for psychological harm. There should be appropriate support for learners who undertake reflection in their work-place, often in isolation. An approach which may be useful is the use of a person-centred approach advocated by Rogers and Freiberg (1994) and Wong (2001). This allows a skilled facilitator to structure critical reflection in which feelings and thoughts are shared and actions explored in a “safe” environment.

The study identified two distinct learner groups: one comprising predominantly lifelong and the second predominantly affective learners. This finding implies that HEWBL generates contrasting outcomes for learners, and, in turn, suggests planning may be improved by taking these into consideration. For example, outcomes of reflective learning specified for HEWBL programmes should be specific rather than generic to enable learners to develop praxis in each of the four praxis learning domains identified. These outcomes could be organised into a taxonomy of praxis to reflect both single-loop learning and double-loop learning.

The study found that none of the participants’ praxis could be considered to be transformative in that there was no evidence of the transformation of oppressive organisational structures to facilitate liberation which is the primary purpose of praxis as proposed by Freire (1982). This was the consequence of reflection and action taking place in isolation rather than on an organisational scale. Furthermore, the participants were not employed in strategic leadership roles therefore lacked the power necessary to implement transformative organisational change. The implication of this is that to enable transformative change HEWBL programmes must involve a critical mass of employees within an organisation who engage in collective reflection and action to understand their social reality. Moreover, at least some of these employees must be in strategic leadership roles within the organisation.

## **7.4 Contribution**

### **7.4.1 Theoretical contribution**

This thesis proposes that learners develop their professional praxis in four learning domains, namely affective, lifelong, professional and organisational. Whilst empirical research has been conducted into the process and outcomes of reflective learning the conceptualisation of professional praxis across four domains of learning is a novel contribution. Furthermore, this thesis contributes to knowledge by identifying two distinct learner groups: one comprising

lifelong and the second predominantly affective learners. Lifelong learners are characterised by a tendency to focus on their career development whilst affective learners are characterised by a tendency to focus on their emotional development. The thesis proposes that the reasons why work-based learners become dominantly affective learners or dominant lifelong learners is the consequence of the interplay between contextual factors in the workplace and personality.

#### **7.4.2 Methodological contribution**

This study makes a methodological contribution to analysing HE work-based learners' praxis by establishing a way of mapping praxis across four different learning domains to make this explicit. To enable praxis maps to be produced Kings' (2012) template analysis technique was extended to allow the scoring of strength of evidence for each learning domain. As far as the author is aware, there are no prior attempts of mapping praxis in this way. Praxis learning maps offer a quantifiable and visual representation of learners' praxis making them a useful tool to track the development through stages of a work-based learning programme. This may be useful in helping learners to reflect on their learning, identifying strengths and weaknesses in relation to praxis development each domain and consequently to assist in planning learning opportunities in the work-place to address deficiencies. They are useful tool to enable work-based learning tutors to support and facilitate further learning. For employers for whom work-based learning is used as a workforce development strategy, praxis maps make the organisational benefits of work-based learning programmes visible. Furthermore, mapping learners' praxis across work-based learning programmes might make them useful for evaluating programme effectiveness within and across HEIs, so could be used to inform future programme design.

#### **7.5 Recommendations for future research**

The study raises possible fruitful areas for further research. Firstly, the study proposes that the interplay between contextual factors in the workplace and personality may influence whether HE work-based learners become dominant affective learners or dominant lifelong learners. Further research could determine whether it is possible to predict if a learner has a particular orientation to development in one or other domain. A diagnostic tool that can assess this on entry to a HE work-based learning programme would provide useful information which could be used to individualise learning programmes and support learners.

A second area for research relates to the role emotion plays in reflection and action. Whilst this study found that emotion was critical to reflection and action, this could be explored further.

This could involve examining critical reflection in helping develop emotional competencies of HE work-based learners such as empathy, and might involve examining the emotional dissonance occurring as a consequence of reflection, and the role and impact of collective reflection on emotions.

A third area for research relates to potential for praxis to enable transformative changes as proposed by Freire (1982). This study did not provide evidence of such change. However, the participants were employed in various organisations, therefore reflection was undertaken in isolation rather than through dialogue. A case study of a single organisation in which a large number of employees at all levels is engaged in HEWBL might be useful in establishing the extent to which such programmes can be transformative.

A final area for future research relates to development of the methodology for developing praxis maps. The process for constructing praxis maps is extremely time-consuming because it relies on detailed analysis of three qualitative documents which limits value for continuously tracking learning. Further research would allow refinement to make the mapping process efficient. This could be achieved by constructing groups of statements characterising each praxis learning domain. These statements, produced from summaries of praxis changes relating to each of the praxis learning domains could allow a diagnostic questionnaire to be produced, enabling praxis maps to be generated much more readily. This type of tool could be used with different groups of HE work-based learners at different stages of their programme to track their learning. The development of praxis maps in this way would offer a valuable way of answering research questions about work-based learners' praxis that remain unresolved.

## **7.6 Reflection on personal development**

Prior to conducting this doctoral study my research experience was limited to conducting very small scale, practically relevant research projects specifically focussed on understanding and improving organisational learning through HEWBL. My teaching experience however, was more significant in that I have been an adult educator in both the Further Education and HE sectors for over twenty years. I feel that through this research study I have developed significantly as both a researcher and an educator.

As a researcher, I have previous to this study, largely avoided risk. This risk avoidance has been most apparent in my use of data collection methods and methods of analysis. I have tended to stick with tried and tested methods that I was familiar with because I felt that these would lead

to success. However, for this study my supervisor challenged me to experiment with new methods that I was unfamiliar with. When presented with these challenges I felt very uncomfortable. When I reflected on my discomfort I realised that I was operating from a place of fear – a fear of failure that was quite debilitating. I realised that rather than being sensible and prudent in not experimenting with new methods I was hampering my own development as a researcher. As a consequence of this insight, I made a conscious decision to challenge myself to be innovative. This resulted in two innovations - the development of a novel data collection template and the extension of Kings (2012) template analysis technique to enable praxis learning maps to be produced. I have learnt that by taking calculated risks, research innovation can be achieved. In future research projects I feel that I will have greater self-awareness of the potential role that fear can play in hindering my learning and development and this will empower me to make objective decisions and take calculated risks to achieve innovation.

I found early attempts at using template analysis – a technique that I had never used before - very challenging. After spending a long time attempting to use the technique with a single participant's data I discussed my resulting efforts with my supervisor. We both agreed that my efforts resulted in a rather superficial analysis of the data. This was a particularly low point for me – a point at which I questioned whether I wanted to continue with my research. However, I took comfort in reflecting on my belief that failure is necessary in order to ultimately achieve any worthwhile objective. I decided that if I really believed this then not to learn from my own failure in order to ultimately achieve my objective would be hypocritical. To give up would mean that in all good conscience I could never advocate the idea to my own students that failure is success in progress. During this particular period, my supervisor provided me with considerable reassurance, and I persisted in my efforts to master the template analysis technique, making very small steps to develop a robust coding template. I feel that this whole process made me a much more resilient researcher. I believe that feeling overwhelmed by the sheer complexity of collecting, analysing, assimilating and synthesising qualitative research data is for me a painful but ultimately productive process. If in future I feel confused and out of my depth during a research project I believe that I will be able to maintain my motivation and commitment.

During the data collection phase of the project, I found that I particularly enjoyed the process of interviewing participants. I became increasingly fascinated by my participants 'stories' especially the emotional components that they felt comfortable to express. For example, I found the personal accounts of Eve's demotion and Daniel's ongoing search for career fulfilment in middle age particularly engaging. I became aware that during the interview

process I developed real empathy with my participants. I recognised that establishing empathy is an important and valuable component of emotional intelligence and provides an opportunity to build rapport and trust with research participants so that they respond openly and honestly to questions. However, I felt challenged by the feelings that the interviews evoked. I often felt emotionally drained following interviews. I feel that to develop further I need to become more self-aware of my empathy triggers in future research interviews to help me to train myself to consciously control my emotions during and after the interview process.

Following discussions with my supervisor I developed a new writing strategy. Whilst my supervisor was complimentary about my academic writing style I was concerned that I spent far too long striving for perfection. I would agonise over relatively short sentences in order to create error-free paragraphs. I realised that over-focussing on editing and re-editing short paragraphs in order to create a flawless piece of work restricted my thought process and led to a kind of writers block. The best piece of advice I received from my supervisor to overcome this was to write freely without trying to achieve immediate perfection. I tried this strategy and it helped to free up my thinking process. Once I had written a few pages I would then go back and revise what I had written and shape it into a more meaningful research narrative. I found that not only did the quality of my writing improve but I was less frustrated by the whole writing process. The speed at which I wrote improved and I feel that my writing style is now more concise and engaging. This writing strategy is one I will continue to adopt and develop in the future.

As an educator I feel that I have gained a deeper insight into my own teaching practice. I have a new enthusiasm for engaging learners in reflective learning as I believe that it offers an effective means of combining vocational and academic learning to provide them with a robust platform on which to build their careers. I have developed a new HE module called Work-Based Learning Skills which adopts many of the recommendations outlined in section 7.3. The module helps learners to develop their professional praxis – to become critically conscious through a process of reflection, critical thinking and action. The module explicitly examines the role of emotions in reflection and promotes reflection as a means of engaging in emotional and lifelong learning. Furthermore, it helps learners to develop, articulate and modify their practice based theories.

## **7.7 Concluding remarks**

This study explored the ways in which sixteen mature learners developed their professional praxis through participation in a HEWBL programme. Specifically, it examined the role that

reflective learning which is central to many HEWBL programmes played in developing professional praxis. It examined the theoretical underpinnings of HEWBL with specific emphasis on the role that reflection plays in developing learners' professional praxis.

The findings of the empirical research illustrated that HE work-based learners developed professional praxis in four domains. The study established a method for mapping praxis across each of these domains to make it observable. This mapping process allowed two distinct learner groups to be identified. A set of characteristics to distinguish learners in each group were identified suggesting that HEWBL generates contrasting outcomes for learners. The findings of the study have several implications for planning HEWBL programmes. These include ensuring that emotional and career development are encouraged throughout a programme of study and the inclusion of learning outcomes relating to each of the learning domains identified by the study.

# Appendix A – Redacted Extracts from Work-Based Studies Approval Document

## WORK-BASED STUDIES UNDERGRADUATE FRAMEWORK

### Background to Work-Based Studies (WBS) Framework

The WBS Undergraduate Framework is one example of [REDACTED] University's engagement with Work Based Learning (WBL) over a number of years and has developed from earlier programmes that have contributed to its proposed format.

The WBS programme was originally called the Negotiated Learning Scheme (NLS) and located in the Centre for Lifelong Learning (CLL). As part of the restructure and ultimate closure of CLL, the programme transferred to [REDACTED] Business School (XXX) in September 2007. In January 2008 the programme was re-titled Work-Based Studies (WBS).

The programme was last reviewed in June 2003 and was scheduled for re-approval in 2008. In order for the programme to become established in XXX the Review was rescheduled for 2009 in agreement with CLQE.

The NLS was originally part of the University's widening access initiative and participants were initially enrolled on their first module as Associate Students. NLS was also part of the University's response to the development of WBL and the increasing utilisation of Accreditation of Prior Learning (APL) by Higher Education Institutions (HEIs). It offered opportunities for flexible, learner-centred study and inter-school cooperation.

NLS had both undergraduate and postgraduate programmes available; however only the undergraduate programme actively recruited and functioned. This undergraduate programme had been highly successful and on transfer to XXX the programme was well supported by the external examiner with students producing work comparable with other HEIs working in the same field.

### **WBS Development in XXX**

On transfer to XXX the programme was located in Corporate Programmes in order to maximise its potential in support of the School's increasing provision of accredited learning for external bodies in both the public and private sectors. It has continued its provision for individual learners. Corporate Programmes is now part of XXX Partnerships division reporting to the Assistant Dean (Partnerships).

The undergraduate programme has maintained its development and now includes a small number of individual learners working from a distance.

There are currently 125 students on the undergraduate programme. Forecast numbers for 2010/11 are 150 undergraduates.

The programme is currently resourced as follows:

- Programme Leader (f/t)
- Programme Administrator (0.33 f/t)
- Programme Support -academic related- (temporary f/t)
- Module Tutor (temporary p/t)

The programme's origin as NLS identifies it within the wider examples of Work Based Learning (WBL) as a scenario focused on individual professional development. Currently WBS is a hybrid mode of study, predominantly campus based with some element of work-place activity and learning. As a flexible programme it has proved a popular and successful mode of study for individual learners that has enabled them to benefit from APL processes, study core programme modules and appropriate subject modules to gain their specific award.

WBL research has increased our understanding of learning at, for and through work. (Naish:2007) Feedback from current WBS learners has indicated increasing interest in the availability of flexible workplace modules for learning in addition to campus based subject modules. These two points have influenced the development of WBS over the past year and are reflected in the rationale and proposals contained in this Framework Proposal Document. Discussions with a range of external organisations (eg [REDACTED]) provide growing evidence for the potential for significant corporate take up of WBS programmes. Experience elsewhere ([REDACTED]) strongly supports the attraction of WBS for corporate cohorts, especially with regionally based organisations.

The programme has demonstrated its success in providing a flexible route for the individual work based learner. It now needs to be sufficiently flexible to offer a route for cohorts of learners from organisations across public, private and voluntary sectors. Historically WBS core modules have only been delivered on campus. The Framework's structure enables delivery in a variety of modes and locations, including increasingly at a distance and off-campus, in order to maximise its market potential.

The proposed WBS Undergraduate Framework has developed from its historical origins and via an extensive review of the WBS programme during the academic year 2008/09.

## **Programme Rationale and Philosophy**

### **WBS and WBL**

The WBS Framework is one mode of study within the field of WBL and therefore draws upon debates within this field for its own ontological and epistemological identity.

Any definition of WBL is predicated on the basis that '...the source and sphere of its epistemology and thereby its identity, lie in the engagement of the university in the purposes and practices of the workplace' (Portwood 2007:9) Different frameworks of WBL are distinguished by the nature of their relationship between the university and the workplace.

WBL is a contextual praxis that articulates theoretical ideas and practical activities into a collaborative process of prior learning recognition and new learning development. As such it recognises that learning takes place through diverse processes and in a variety of locations and contexts. It aims to support the work based learner to synthesise learning opportunities within the world of work and the space of the university into new higher learning, knowledge creation and enhanced professional practice.

Walsh (2008) cites this new learning as 'Mode 2 knowledge' produced, '...outside the university in the context in which it will be used' and contrasts this with Mode 1 knowledge, defined as '...academic knowledge production...where the discipline is a fundamental aspect in maintaining academic standards'. Mode 2 knowledge therefore articulates with 'learning at, for and through work' (Naish: 2007).

WBL's epistemology is distinguished by its emphasis on learning from and for experience and professional practice; seen primarily as experience *for* learning rather than an audited account of past learning already achieved.

Drawing upon theories of knowledge and learning, particularly active reflection, it facilitates analysis and assessment of reflective practice in support of new learning for personal and organisational development.

Therefore, drawing from its roots in WBL as a field of study, the proposed framework for WBS is forward looking in its approach to learning within a flexible structure that enables it to be responsive to the needs of both the individual learner and work-place organisation.

### **WBS Rationale**

The WBS Framework provides a significant contribution to [REDACTED] University's corporate objectives: to both develop models of WBL that are engaged with the knowledge-based economy in a real world setting and to widening access to HE. It recognises the important contribution to learning made by the growth of WBL as a field of study and builds from this to provide flexible modes of study based on the requirements of individual learners; cohorts of learners from particular employment sectors and the needs of specific employment organisations and businesses. It complements [REDACTED] University Workforce Development (WFD) and Strategic Development Fund (SDF) aims and objectives as a vehicle for increasing employer engagement. As such its underlying rationale is based on a partnership between

learners, employers, Schools and Departments within the University, in support of learning recognition and development recognised through the achievement of awards from Foundation Degrees, Honours, Masters and eventually through to Doctorate level. The Framework supports learners irrespective of their location: it facilitates campus and/or WBL activities and seeks to increasingly utilise all modes of teaching and learning models to widen its learner base and clientele.

### **Purpose of framework**

The WBS Framework supports the overall aim of ██████████ University to become an increasingly outward looking university working in partnership with both employers and employees in recognition and development of the higher learning and skills needs required for successful professional and organisational achievement, innovation and enterprise. As such it is committed to strengthening the links between Higher Education and the workplace; the University's agenda for widening participation where WBL can be seen as the means by which widening participation is achieved (Helyer 2008), and ensuring all learners are supported in their aspirations for rewarding and satisfying careers.

### **The WBS Undergraduate Framework**

- Offers flexible routes towards gaining academic qualifications by building on existing skills and knowledge, offering accreditation for evidenced previous learning and experience acquired in a range of professional contexts
- Enables learners to reflect upon their previous learning and experience, take responsibility for their own learning and continuing professional development and undertake further opportunities for learning within their professional contexts
- Facilitates the development of a range of personal and professional qualities and attitudes essential for successful performance in working life
- Allows learners to demonstrate the acquisition of an appropriate level of breadth and depth of study in professional knowledge
- Negotiates partnerships with Schools to maximise further possibilities of WBL opportunities

### **Accreditation of Prior Learning (APL)**

WBS Undergraduate Framework procedures in respect to APL will follow Quality Assurance Agency Guidelines and ██████████ University Quality Handbook (Section D3).

The APL process is a significant feature of WBL in general and the WBS Framework in particular. APL has two distinctly different aspects: Accreditation of Prior Certificated Learning (APCL) and Accreditation of Prior Experiential Learning (APEL).

APCL is the process by which prior certificated learning that carries higher education equivalence is recognised and awarded appropriate levels of either general or specific credit towards the learner's WBS award.

APEL 'is a process by which appropriate experiential and uncertificated learning is given recognition and an academic value.' (Garnett et al.: 2004, p.4) The APEL process is a central feature of the WBS Undergraduate Framework contributing both to its marketing potential for ██████████ University and to enabling learners to maximise on their prior learning, especially where that learning has been gained in the context of their professional practice.

The recognition, assessment and validation of both APCL and APEL are critical aspects of the first core compulsory modules in the Undergraduate Framework: *Learning Recognition and Development*. Typically, prior certificated learning may normally include a range of professional and vocational awards that are already credited rated, but may also be generated through university accreditation of in-house company training and learning designed and delivered by independent learning providers.

The assessment criteria for APCL and APEL are:

- Validity – relating to the match between the evidence presented and the learning outcomes claimed.
- Sufficiency – relating to sufficient breadth of evidence, including reflection, to demonstrate the achievement of all outcomes claimed.
- Currency – demonstrating that what is being assessed is current learning.

- Quality – relating to the evidence demonstrating the required level of learning achievement. (Wailey: 2002, p.35)

Within the Undergraduate Framework APEL is not only an audit of prior learning but also the achievement of new learning through being embedded within a process of learning recognition and development that leads to the construction of each student’s bespoke Learning Agreement that forms the discrete and individual structure of their WBS award.

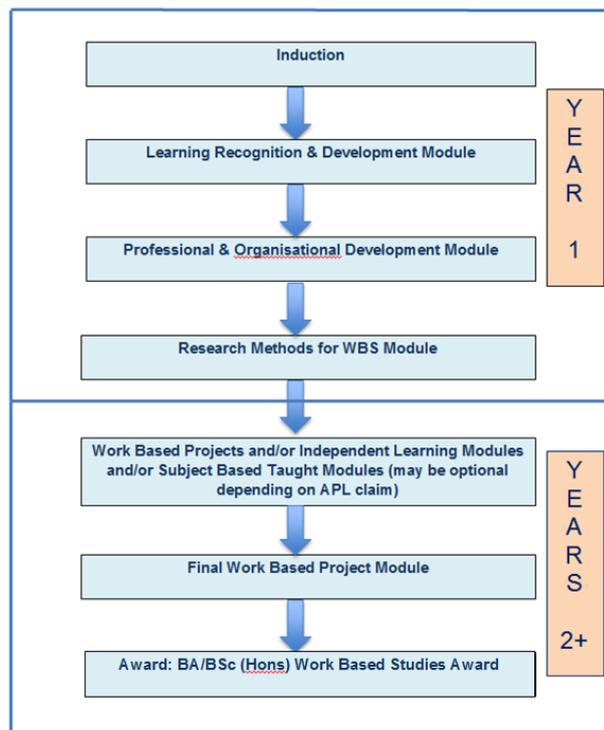
Thus APL (APCL & APEL) is a mechanism for credit accumulation within a forward looking learning process to ensure accurate assessment of what the candidate already knows so as not to duplicate learning and to identify appropriate learning development. The module *Learning Recognition and Development* will be the vehicle for APEL.

APEL Assessors for WBS submissions will make awards in blocks of 10 only e.g. 10, 20, 30, 40 etc within the guidance offered by CLQE and according to ██████████ University regulations. (See Quality Handbook Section D3).

The APEL process must be complete prior to submission of the Learning Agreement. Claims for APEL credit, including multiple claims will be made once only unless exceptional circumstances can demonstrate new experiential learning has been achieved.

### Student Progression

(See WBS Undergraduate Framework Route Diagram)



Two critical factors determine an individual student’s progression and the structure of their Learning Agreement:

1. The level and volume of APL credit verified and awarded
2. Future learning content and methodology identified through the learning recognition and development process

### **Award Progression: Levels & Credit**

WBS students will submit the Learning Agreement for their planned award according to University regulations and utilising modules appropriate to the requirements of their learning development: i.e. 120 credits @ level 6 and a further 240 credits from Levels 4-6 as appropriate.

Students shall not be required to duplicate learning and/or complete modules at a level inappropriate to already demonstrated levels of achievement.

The core compulsory module *Professional & Organisational Development* will be the vehicle through which learners will be advised and supported in the construction of their Learning Agreement.

Learning Agreements must be submitted to and approved by the Programme Leader and changes to a Learning Agreement must be approved by the WBS Programme Leader.

### **WBS Undergraduate Framework Options**

The process of learning recognition and development leading to the submission of a student's Learning Agreement requires the learner to identify, as far as is possible, both the subject content and methodology of future learning requirements within the context of their professional practice and produce a coherent programme of study for their named award.

The Learning Agreement will demonstrate a coherent programme of study, fit for purpose within the context of the chosen named award.

WBL's epistemology emphasises the highly advantageous benefits to both the learner and the workplace where learning is in context and articulated through professional practice.

In order to facilitate and maximise opportunities for contextual learning through professional practice the WBS Undergraduate Framework offers two option module choices with varying amounts of credit at each level:

### **WBS Work Based Projects**

The WBS Work Based Project module articulates the relationship between the learner, the University and the workplace in a collaborative process of knowledge generation and use: it is a defining feature of WBL as a field and mode of study. Through negotiation between the University and the workplace, the learner will design and carry out an inquiry-led activity (project) demonstrating research and development approaches to their own learning, knowledge creation, professional and workplace practices and requirements, as appropriate to WBL and their planned award.

Work Based Project modules are one of the key distinguishing features of WBS as they offer the student contextual learning opportunities that articulate the relationship between the Learner, HE and the Workplace. These modules situate learning at, for and through work and are critical means by which the WBS student develops and enhances their ability to effectively combine theoretical ideas and practical action into higher learning praxis. Accepted perspectives and beliefs can be critiqued, commonly held paradigms challenged and deep, meaningful learning achieved. Work Based Projects enable students to engage with the needs of the work-place, enhance their own praxis and meet HE requirements through reflexive dialogue and critical analysis 'at level' and assessed against the appropriate University Level Descriptors.

The composition, content and context of each Work Based Project will be unique to the individual learner or group of learners. It is anticipated that the project will therefore have useful outcomes for workplace activity and professional practice; however the module's aims and assessment strategy will focus on fitness of purpose in the Work Based Project as an independent learning activity rather than the utilitarian results of the project within the workplace.

Students will be supported by one workshop on Work Based Projects, written guidance, Blackboard and tutorial supervision as appropriate. A WBS Work Based Project would normally be supervised and assessed by two people, one of whom will be a WBS specialist and/or have demonstrated expertise in WBL methodology.

## **Independent Learning Modules**

The purpose of this module is to enable the learner(s) to identify, construct and pursue a self-designed unit of independent study. The exact nature of this unit will have been identified through a learning audit as part of their learning recognition and development and will support the needs and requirements of their WBL and professional practices as appropriate to their WBS award. Each instance of this module is therefore unique to the requirements of the individual learner or cohort of learners.

The content, aims, learning outcomes and assessment strategy will therefore be unique for each instance of the module and will be negotiated and agreed between the learner(s) and relevant tutor(s). An Independent Learning Agreement must be submitted and approved on commencement in order for the learner(s) to further proceed.

## **School Based Subject Modules**

Two factors govern the place of School Based Subject modules within the Framework:

1. Agreement with Schools with reference to specific awards offered
2. Identification of subject based taught module requirements by the student through the process of learning recognition and development and articulated in the Learning Agreement.

## **Entry Requirements**

WBS will normally recruit students who have a minimum of 3 years work experience unless exceptional circumstances apply.

## **Educational Aims of the Programme**

The Work-Based Studies Undergraduate Framework aims to:

- Support key University strategies and processes to enable University-wide pro-active and responsive workforce development activity.
- Support, build and sustain employer-facing education opportunities and partnerships.
- Widen access to Higher Education through offering programmes which recognise and accredit the learning achieved by students through work and other life and professional experiences.
- Provide opportunities for learners, cohorts of learners and/or employers to negotiate bespoke programmes of study which are focused upon topics and issues relevant to their professional practice and workplace development.
- Enable students to become autonomous learners through a process of learning recognition and development embedded within a research – led teaching and learning strategy.
- Promote knowledge and understanding, skills, attributes and professional practices through WBL as a field and mode of study.

## Programme Learning Outcomes

<b>Knowledge and Understanding</b>	
<b>K1</b>	<ul style="list-style-type: none"> <li>• Demonstrate a comprehensive and detailed knowledge of WBL and/or their specific professional context.</li> </ul>
<b>K2</b>	<ul style="list-style-type: none"> <li>• Plan, undertake and evaluate a negotiated, self-managed major project that is relevant to professional practice and/or their own place of work.</li> </ul>
<b>K3</b>	<ul style="list-style-type: none"> <li>• Analyse and evaluate the impact of ethical and legal issues relevant to the generation of and application of knowledge and skills in the workplace.</li> </ul>
<b>K4</b>	<ul style="list-style-type: none"> <li>• Synthesise, appraise and evaluate their prior learning experiences in relation to appropriate learning theory and WBL.</li> </ul>
<b>K5</b>	<ul style="list-style-type: none"> <li>• Reflect upon their own learning and practice, developing significant insights that will impact on their personal and professional development as part of their lifelong learning strategy.</li> </ul>
<b>Cognitive/Intellectual Skills</b>	
<b>C1</b>	<ul style="list-style-type: none"> <li>• Synthesise, appraise and evaluate data/evidence from appropriate sources to make independent judgements.</li> </ul>
<b>C2</b>	<ul style="list-style-type: none"> <li>• Demonstrate intellectual flexibility and openness to new ideas.</li> </ul>
<b>C3</b>	<ul style="list-style-type: none"> <li>• Reflect upon their own practice and develop significant insights that will impact upon their personal and professional development.</li> </ul>
<b>C4</b>	<ul style="list-style-type: none"> <li>• Reflect upon their own and others' practice and develop significant insights that will impact upon the work of others.</li> </ul>
<b>C5</b>	<ul style="list-style-type: none"> <li>• Synthesise, appraise and evaluate their prior learning experiences in relation to appropriate learning theory and WBL.</li> </ul>
<b>C6</b>	<ul style="list-style-type: none"> <li>• Demonstrate increasing intellectual flexibility and comprehensive understanding of new ideas within their analysis of prior learning.</li> </ul>
<b>Practical/Professional Skills</b>	
<b>P1</b>	<ul style="list-style-type: none"> <li>• Analyse professional development as a continuous process that applies throughout a practitioner's working life.</li> </ul>
<b>P2</b>	<ul style="list-style-type: none"> <li>• Provide a clear articulation of goals which addresses and meets the needs of self, employers and identified stakeholders.</li> </ul>
<b>P3</b>	<ul style="list-style-type: none"> <li>• Demonstrate a wide range of personal and professional skills in order to further career aspirations or to enable access to more advanced professional or academic study such as:             <ul style="list-style-type: none"> <li>○ self-reliance</li> <li>○ decision making</li> <li>○ reflection</li> <li>○ adaptability</li> <li>○ creativity</li> <li>○ flexibility</li> <li>○ interpersonal communication</li> <li>○ leadership qualities</li> <li>○ team work in a supported learning environment</li> </ul> </li> </ul>

<b>P4</b>	<ul style="list-style-type: none"> <li>Operate ethically and autonomously in the analysis and evaluation of their own learning and experiences in relation to the world of work.</li> </ul>
<b>P5</b>	<ul style="list-style-type: none"> <li>Utilise the knowledge and intellectual and conceptual frameworks of WBL autonomously and in a range of contexts.</li> </ul>
<b>P6</b>	<ul style="list-style-type: none"> <li>Undertake work based projects and/or significant units of independent study which meet their own needs and those of their employers/sponsors/organisations where applicable.</li> </ul>
<b>Key Transferable Skills</b>	
<b>T1</b>	<ul style="list-style-type: none"> <li>Plan, manage and evaluate the acquisition of new knowledge and skills as part of a lifelong learning strategy.</li> </ul>
<b>T2</b>	<ul style="list-style-type: none"> <li>Deploy a wide range of skills in both academic and working contexts, including oral/written communication, general/work-related IT competence and relevant analytical, numerical and statistical interpretation skills.</li> </ul>
<b>T3</b>	<ul style="list-style-type: none"> <li>Deploy a wide range of skills in group activities and collaborative approaches to enhance learning and working practices within a range of contexts and with comprehensive, sophisticated understanding.</li> </ul>
<b>T4</b>	<ul style="list-style-type: none"> <li>Plan, manage and evaluate inquiry-led approaches to problem solving in the context of personal and professional practice and in wider contexts.</li> </ul>
<b>T5</b>	<ul style="list-style-type: none"> <li>Autonomously plan, manage and evaluate resources and sources of knowledge requirements for a wide range tasks and contexts.</li> </ul>

## Appendix B – Redacted Extracts from Learning Recognition and Development Module

### Learning Recognition & Development Module

#### Module Descriptor

The module supports learners to develop their understanding of Accreditation of Prior Learning (APL), specifically the processes involved in evidencing the HE level knowledge, skills and analytical abilities that they have gained through their life and work experiences.

Using relevant theories of learning, the module equips learners with the reflective skills necessary to improve their professional practice and to develop evidential, reflective portfolios which will form the basis for Accreditation of Prior Experiential Learning (APEL) claims. Reflecting on their previous experiential learning throughout this module will provide learners with a personal perspective on their own learning and will enable them to examine further professional development opportunities.

Learners will also complete claims for Accreditation of Prior Certificated Learning (APCL) for any previous relevant HE level credits they have achieved.

#### Pre-requisites

Although there are no pre-requisites for this module it is advisable that learners should normally have a minimum of 3 years working experience unless exceptional circumstances apply.

#### Module Aims

- To introduce learners to the concept of APL, specifically the knowledge, understanding and skills required to construct a portfolio of evidence in support of an APEL claim for general credit.
- To provide learners with a perspective on their own learning to enable them to consider further opportunities for professional development.

#### Indicative Content

- Developing the concept of a learning audit as part of a learning recognition and development process
- The concept of experiential learning
- The learner-worker
- Understanding Learning Outcomes and mapping learning against Template for Learning Outcomes
- Evidencing experiential learning
- Writing an APEL Learning Report or Area of Learning (AoL) to support APEL credit claim(s)
- Construction and submission of an APEL portfolio
- Theories and frameworks for reflective learning

#### Learning Strategy

This module will be delivered via a range of flexible and / or bespoke learning strategies to maximise the adaptability of this core compulsory module within the Work-Based Studies Framework to match the needs of individuals and cohorts of learners; workplace organisations and corporate partners.

Teaching and learning strategies will include presentations, workshops, group work, collaborative activities, online activities and master classes as appropriate.

The module will reflect the University [REDACTED] Learning, Teaching and Assessment Strategies and will maximise opportunities for inquiry based learning.

## **Learning Outcomes**

### ***Knowledge & Understanding***

On completion, the student will be able to:

1. Demonstrate a comprehensive and detailed knowledge of key concepts of Learning Theory in the context of their own learning and working practice
2. Demonstrate a comprehensive and detailed knowledge of the key concepts of Work-Based Learning in the context of their own learning and working practice
3. Demonstrate comprehensive, detailed knowledge and understanding of the methodologies and typologies of Experiential Learning and APEL, and apply them in the context of their own prior learning and working practices
4. Analyse and evaluate the role of ethics and legal issues within the context of their experiential learning and APEL submission
5. Apply, question and relate the concept of active reflection in the generation of knowledge and learning within the context of their own learning and the learning of others

### ***Cognitive & Intellectual Skills***

On completion, the student will be able to:

1. Synthesise, appraise and evaluate data / evidence from a range of sources within the context of their prior experiential learning and working practices
2. Demonstrate increasing intellectual flexibility and comprehensive understanding of new ideas within their analysis of prior experiential learning
3. Analyse and critically reflect on their prior experiential learning demonstrating significant insights that will impact upon their personal and professional development
4. Critically reflect upon their own and others' practice and develop significant insights that will impact upon the work of others

### ***Practical/Professional Skills***

On completion, the student will be able to:

1. Appraise and evaluate their own learning and practice in relation to the world of work with increasing insight and synthesis
2. Appraise and evaluate their prior experiential learning and practices within the context of learning recognition and development; demonstrating comprehensive understanding of personal and professional development as a continuous practice that applies throughout a practitioner's working life
3. Operate ethically and autonomously in the analysis and critical reflection of their own learning and experiences in relation to the world of work and their employing organisation
4. Prepare a formal, written report on their prior experiential learning, supported by evidence and justified by argument, demonstrating appraisal, evaluation and synthesis through critical reflection

### ***Key Transferable Skills***

On completion, the student will be able to:

1. Plan, manage and evaluate a wide range of resources and the acquisition of new knowledge as appropriate and as part of a lifelong learning strategy
2. Deploy a wide range of skills in group activities and collaborative approaches to enhance learning and working practices within a range of contexts and with comprehensive, sophisticated understanding
3. Deploy a comprehensive range of skills in written and oral communication, general and work-related IT competence and relevant analytical, numerical and statistical interpretation skills as appropriate
4. Plan, manage and evaluate inquiry-led approaches to problem solving as part of a lifelong learning strategy

## **Assessment**

Level differentiation in the modules Learning Recognition & Development will primarily be via Learning Outcomes rather than Assessment Tariff.

Submission of a claim for Accreditation of Prior Certificated Learning (APCL)  
Submission, via hard copy or online, of APEL Portfolio for tutor feedback and discussion

APEL claims are highly individualised in terms of the amount and level of possible credit awards sought, evidenced and verified. It is recommended that:

A critical reflective essay on the learner's module experience as learning recognition and development.  
2000-2500 words

## **Assessment Criteria**

The standard University undergraduate criteria will be used to mark this piece of work. Students will be given both oral and written feedback as to the standard of their submission.

## **Indicative Resources**

### **Books:**

Boud, D. & Soloman, N. eds. (2001) *Work-based Learning: A New Higher Education?*, SRHE & OUP  
Brockbank, A. (2006) *Reflective learning in practice*. Gower  
Brockbank, A. & McGill, I. (2007) *Facilitating Reflective Learning in Higher Education*, OUP  
Ghaye, Anthony. (1998) *Teaching & Learning Through Critical Reflective Practice*, David Fulton Publishers  
Gray, D. (2006) *Learning through the workplace: guide to work-based learning*. Nelson Thornes  
Hargreaves, D. H. (2004) *Learning for life*. Policy  
Helyer, R. (ed) (2010) *The work-based learning student handbook*. Basingstoke: Palgrave Macmillan  
Jarvis, P. et al (2003) *The Theory & Practice of Learning*. Kogan Page.  
Learning Unlimited (2006) *Different in Similar Ways: Making Sense of Learning Styles* The Stationery Office Books  
Marton, Ference et al, eds, (1997) *The Experience of Learning: Implications for Teaching and Studying in Higher Education*, Scottish Academic Press  
Moon, Jennifer, (1999), *A Reflection in Learning & Professional Development*, Kogan Page  
Schön, D. A. (1991) *The Reflective Practitioner: How Professionals Think in Action*. Arena.  
Simosko, S (1996) *Applying APL Principles in Flexible Assessment; a Practical Guide*. Kogan Page.  
Wood, G (2006) *How to study: use your personal learning style to help you succeed when it counts* 2nd ed Learning Express

### **Journals:**

Action Learning: Research and Practice  
Active Learning in Higher Education  
Adult Learning  
Development and Learning in Organizations: An International Journal  
Distance Learning  
International Journal of Learning  
Journal of Workplace Learning  
Journal of University Teaching and Learning Practice  
Learning and Motivation

### **Electronic:**

Infed.org – The encyclopaedia of informal education  
<http://www.infed.org/index.htm>  
Learning and Teaching – Experiential Learning Information  
<http://www.learningandteaching.info/learning/experience.htm>

## Appendix C – Main Study PRep Templates

### Praxis Representation (PRep) Template 1 (Affective Learning)

#### Instructions

In the grid on page 2 there are 6 statements relating to *reflection and learning*:

1. Reflection helps to improve learner-workers *self-esteem*
2. Reflection helps to improve learner-workers *self-confidence*
3. Reflection helps to improve learner-workers *motivation*
4. Reflection helps learner-workers to identify and question their underlying *attitudes, values and beliefs*
5. Reflection helps learner-workers be *open to change*
6. Reflection helps learner-workers define/re-define their *self-identity*

I want to find out whether the reflective learning activities you have engaged in during the reflective component of the work based studies degree have helped to make these statements true for you, and if so, how it happened and what evidence there is to demonstrate that it happened. The reflective learning component of the course includes the activities and assignments that you completed as part of the *Learning Recognition and Development* module (including the experiential learning portfolio).

Please complete the grid on page 2. To help you to complete it I have provided some definitions below. You might also find it helpful to refer to your learning journal, assignment work, APEL portfolio and the learning activities completed during the reflective component of the course. When completing the grid please type in the boxes provided. You can write as much as you want – don't worry about using more than 1 page.

I would appreciate it if you would complete the grid and email it to me ([k.ions@tees.ac.uk](mailto:k.ions@tees.ac.uk)) by **Friday 10<sup>th</sup> January 2014**. If you have any questions about how to complete it please don't hesitate to email or phone me on (01642) 738310.

#### Definitions

**Self-esteem:** A judgment of an individual's worthiness (Breckler, Olsen and Wiggins, 2008). The degree to which an individual approves of or likes oneself (Blascovich and Tomako, 1991).

**Motivation:** An internal state that activates and gives direction to a person's thoughts, feelings and actions (Lahey, 1995). Instigating, directing and sustaining behaviour to meet goals (Franken, 2006).

**Self-confidence:** Our judgment of our capability to successfully accomplish something (Hollenbeck and Hall, 2004).

**Attitudes:** An opinion that one has about a specific object or situation that predisposes one to respond in a particular way (Rokeach, 1968).

**Values:** A standard that we use to judge morals, justify our behaviour and tell us how to act (Rokeach, 1968).

**Belief:** A proposition about the world that is accepted as truth (Richardson, 1996).

**Open to change:** A mindset that enables an individual to adapt to new and unforeseen circumstances and embrace new experiences.

**Self-identity:** an individual's perception of "self" in relation to characteristics such as personality, skills, occupation and abilities (Bong and Clark, 1999).

**Praxis Representation (PRep) Template 1**

	Reflection helps to improve learner-workers <b>self-esteem</b>	Reflection helps to improve learner-workers <b>self-confidence</b>	Reflection helps to improve learner-workers <b>motivation</b>	Reflection helps learner-workers to identify and question their underlying <b>attitudes, values</b> and <b>beliefs</b>	Reflection helps learner-workers be <b>open to change</b>	Reflection helps learner-workers define/re-define their <b>self-identity</b>
Is this statement true for you? (please delete as necessary) <i>Only answer questions below for statements you have answered 'yes' to.</i>	Yes/No	Yes/No	Yes/No	Yes/No	Yes/No	Yes/No
How do you know it is true for you? (what evidence is there from your working practices for example - please give specific examples where possible) <i>Please give specific examples where possible</i>						
Which experiences helped to make this happen? <i>You may refer to particular reflective learning activities, models, theories, techniques and/or make general comments</i>						
How do you feel about this happening?						
What are the implications of this happening for the future?						

## Praxis Representation (PRep) Template 2 (Lifelong Learning)

### Instructions

In the grid on page 2 there are 4 statements relating to *reflection and learning*:

1. Reflection helps learner-workers to *recognise, evaluate and improve their own learning*
2. Reflection promotes *deep learning*
3. Reflection helps learner-workers to *evaluate their career goals and ambitions*
4. Reflection helps learner-workers to *identify their learning and development needs*

I want to find out whether the reflective learning activities you have engaged in during the reflective component of the work based studies degree have helped to make these statements true for you, and if so, how it happened and what evidence there is to demonstrate that it happened. The reflective learning component of the course includes the activities and assignments that you completed as part of the *Learning Recognition and Development* module (including the experiential learning portfolio).

Please complete the grid on page 2. To help you to complete it I have provided some definitions below. You might also find it helpful to refer to your learning journal, assignment work, APEL portfolio and the learning activities completed during the reflective component of the course. When completing the grid please type in the boxes provided. You can write as much as you want – don't worry about using more than 1 page.

I would appreciate it if you would complete the grid and email it to me ([k.ions@tees.ac.uk](mailto:k.ions@tees.ac.uk)) by **Friday 14<sup>th</sup> March 2014**. If you have any questions about how to complete it please don't hesitate to email or phone me on (01642) 738310.

### Definitions

***Recognise, evaluate and improve own learning***: Identify learning that has been gained (including experiential learning) in a range of settings (workplace, social settings, formal educational settings etc.), assess the value of the skills, knowledge and competencies gained and develop strategies to enhance learning further e.g. strengthening learning styles; learning in a different way that leads to better results, embracing new learning opportunities etc.

***Deep learning***: Critically analyzing new ideas and knowledge, exploring how new knowledge can be used in 'real life' and relating theoretical ideas to own experiences (Ramsden, 2003)

***Evaluate career goals and ambitions***: Assessment of what an individual wants to achieve in life relating to their current or future occupation (e.g. career change, promotion, change of direction etc)

***Identify learning and development needs***: Recognising the knowledge, skills and competencies to perform effectively in current or future job roles

**Praxis Representation (PRep) Template 2**

	Reflection helps learner-workers to <i>recognise, evaluate and improve their own learning</i>	Reflection promotes <i>deep learning</i>	Reflection helps learner-workers to <i>evaluate their career goals and ambitions</i>	Reflection helps learner-workers to <i>identify their learning and development needs</i>
Is this statement true for you? (please delete as necessary) <i>Only answer questions below for statements you have answered 'yes' to.</i>	Yes/No	Yes/No	Yes/No	Yes/No
How do you know it is true for you? (what evidence is there from your working practices for example - please give specific examples where possible) <i>Please give specific examples where possible</i>				
Which experiences helped to make this happen? <i>You may refer to particular reflective learning activities, models, theories, techniques and/or make general comments</i>				
How do you feel about this happening?				
What are the implications of this happening for the future?				

## Praxis Representation (PRep) Template 3 (Professional Learning)

### Instructions

In the grid on page 2 there are 4 statements relating to *reflection and learning*:

1. Reflection helps to **validate the existing professional practices** of learner-workers
2. Reflection helps learner-workers to improve learner-workers **professional decision making skills**
3. Reflection helps learner-workers to **extend their professional practice**
4. Reflection helps learner-workers to understand the **organisational context** in which they work and learn

I want to find out whether the reflective learning activities you have engaged in during the reflective component of the work based studies degree have helped to make these statements true for you, and if so, how it happened and what evidence there is to demonstrate that it happened. The reflective learning component of the course includes the activities and assignments that you completed as part of the *Learning Recognition and Development* module (including the experiential learning portfolio).

Please complete the grid on page 2. To help you to complete it I have provided some definitions below. You might also find it helpful to refer to your learning journal, assignment work, APEL portfolio and the learning activities completed during the reflective component of the course. When completing the grid please type in the boxes provided. You can write as much as you want – don't worry about using more than 1 page.

I would appreciate it if you would complete the grid and email it to me ([k.ions@tees.ac.uk](mailto:k.ions@tees.ac.uk)) by **Friday 28<sup>th</sup> March 2014** If you have any questions about how to complete it please don't hesitate to email or phone me on (01642) 738310.

### Definitions

**Validate existing professional practices** – Insight into the effectiveness of the strategies and approaches you use in a professional context. This can be achieved through academic sources, data from research and/or proven effectiveness of the use of the same strategy or approach in another organisation

**Professional decision making skills** – ability to weigh up the pros and cons of each option in a professional context and choose the best option for a particular situation

**Extend professional practices** – Advancing the experience, skills, competencies, knowledge and strategies that can be applied in a practical environment relating to a particular job role/profession.

**Organisational context** - The way the organisation is structured and how it operates, including strategy, culture, policies and practices. (Dulewicz and Higgs, 2005)

**Praxis Representation (PRep) Template 3**

	Reflection helps to <b>validate the existing professional practices</b> of learner-workers	Reflection helps learner-workers to improve learner-workers <b>professional decision making skills</b>	Reflection helps learner-workers to extend their <b>professional practice</b>	Reflection helps learner-workers to understand the <b>organisational context</b> in which they work and learn
Is this statement true for you? (please delete as necessary) <i>Only answer questions below for statements you have answered 'yes' to.</i>	Yes/No	Yes/No	Yes/No	Yes/No
How do you know it is true for you? (what evidence is there from your working practices for example - please give specific examples where possible) <i>Please give specific examples where possible</i>				
Which experiences helped to make this happen? <i>You may refer to particular reflective learning activities, models, theories, techniques and/or make general comments</i>				
How do you feel about this happening?				
What are the implications of this happening for the future?				

## Praxis Representation (PRep) Template 4 (Organisational Learning)

### Instructions

In the grid on page 2 there are 3 statements relating to *reflection and learning*:

1. Reflection helps to *facilitate the transfer of learner-workers tacit knowledge to others* in the organisation
2. Reflection helps to make learner-workers *tacit knowledge into explicit knowledge*
3. Reflection helps learner-workers to *implement changes in organisations*

I want to find out whether the reflective learning activities you have engaged in during the reflective component of the work based studies degree have helped to make these statements true for you, and if so, how it happened and what evidence there is to demonstrate that it happened. The reflective learning component of the course includes the activities and assignments that you completed as part of the *Learning Recognition and Development* module (including the experiential learning portfolio).

Please complete the grid on page 2. To help you to complete it I have provided some definitions below. You might also find it helpful to refer to your learning journal, assignment work, APEL portfolio and the learning activities completed during the reflective component of the course. When completing the grid please type in the boxes provided. You can write as much as you want – don't worry about using more than 1 page.

I would appreciate it if you would complete the grid and email it to me ([k.ions@tees.ac.uk](mailto:k.ions@tees.ac.uk)) by **Friday March 14<sup>th</sup> 2014** If you have any questions about how to complete it please don't hesitate to email or phone me on (01642) 738310.

### Definitions

**Tacit knowledge:** This is knowledge that is gained largely through our 'experiences'. It is our own personal knowledge that cannot be easily articulated by verbal means (Polyani, 1966). It is often skills based such as walking, dancing, playing football etc. It can include how we handle particular situations using our insight, emotions and observations to guide us. Tacit knowledge is rooted in action and context, can be acquired without awareness and is typically not articulated or communicated. Tacit knowledge is sometimes described as 'know-how' (Brown and Duguid 1998)

**Transfer tacit knowledge:** Tacit knowledge can be transferred to others through substantial communication and collaboration with others - it can be transferred to others through practice based social networks such as Communities of Practice (Goffin and Koners, 2011).

**Explicit knowledge:** This is formalised and codified knowledge (Brown and Duguid, 1998). It is easy to identify, store, retrieve and disseminate (Wellman, 2009). Explicit knowledge can be represented in the form of documents such as drawings, operating procedures, manuals of best practice etc.

**Making tacit knowledge explicit:** To make tacit knowledge into explicit knowledge individuals can engage in reflective processes to enable them to examine their experiences and evaluate the effectiveness of their actions by discussing them (Sheckley and Keeton, 1997). Such knowledge can then be written down, disseminated throughout the organisation etc.

**Implement change in organisations:** This can include implementing changes to processes, procedures, methods; developing new tools and techniques; training others, helping to change the attitudes and behaviours of teams and/or individuals in the organisation.

Praxis Representation (PRep) Template 4

	Reflection helps to <i>facilitate the transfer of learner-workers tacit knowledge to others</i> in the organisation	Reflection helps to make learner-workers <i>tacit knowledge into explicit knowledge</i>	Reflection helps learner-workers to <i>implement changes in organisations</i>
Is this statement true for you? (please delete as necessary) <i>Only answer questions below for statements you have answered 'yes' to.</i>	Yes/No	Yes/No	Yes/No
How do you know it is true for you? (what evidence is there from your working practices for example - please give specific examples where possible) <i>Please give specific examples where possible</i>			
Which experiences helped to make this happen? <i>You may refer to particular reflective learning activities, models, theories, techniques and/or make general comments</i>			
How do you feel about this happening?			
What are the implications of this happening for the future?			

## Appendix D – Main Study Interview Guide

### Interview Guide

#### Date & Time of Interview:

#### Interviewer Preamble

These interviews are follow-up interviews to the learning grids that you completed and should take no more than 1 hour. The interview will be recorded digitally but all responses will be kept confidential and any information you provide which is used in the final thesis will not be traceable to you - pseudonyms will be used and your organisation will not be named. You don't have to discuss anything you don't want to and you can end the interview at any time without giving me a reason. The structure of the interview is fairly simple. I will start by asking you some general questions about your role and responsibilities then I will ask you questions about the ways in which the reflective element of the work based studies degree you are enrolled on has impacted on you and your organisation, and, how you have learnt through reflection.

#### General Introductory Questions

What does your organisation do?

What is your current role in the organisation?

What responsibilities do you have?

#### Affective Learning Questions

##### *Self-esteem*

Has reflection helped you to improve your self-esteem?

In what ways is this apparent (examples)?

How did this change happen?

##### *Confidence*

Has reflection helped you to improve your confidence?

In what ways is this apparent (examples)?

How did this change happen?

##### *Motivation*

Has reflection helped you to improve your motivation?

In what ways is this apparent (examples)?

How did this change happen?

##### *Attitudes, values and beliefs*

Has reflection changed your attitudes/values/beliefs?

In what ways is this apparent (examples)?

How did this change happen?

##### *Openness to change*

Has reflection made you more open to change?

In what ways is this apparent (examples)?

How did this change happen?

##### *Self-identity*

Has reflection changed or helped you re-define your self-identity?

In what ways is this apparent (examples)?

How did this change happen?

## **Lifelong Learning Questions**

### ***Improve learning***

Has reflection changed or helped you improve your learning?

In what ways is this apparent (examples)?

How did this change happen?

### ***Deep learning***

Has reflection helped you to become a deeper learner?

In what ways is this apparent (examples)?

How did this change happen?

### ***Career***

Has reflection helped you to evaluate your career goals and ambitions?

In what ways is this apparent (examples)?

How did this change happen?

### ***Development needs***

Has reflection helped you to identify your learning and development needs?

In what ways is this apparent (examples)?

How did this change happen?

## **Professional Learning Questions**

### ***Existing practices***

Has reflection helped you to validate your professional practices?

In what ways is this apparent (examples)?

How did this change happen?

### ***Decision making***

Has reflection helped you to better make professional decisions?

In what ways is this apparent (examples)?

How did this change happen?

### ***Extend practices***

Has reflection helped you to extend your professional practice?

In what ways is this apparent (examples)?

How did this change happen?

### ***Organisational context***

Has reflection helped you to understand the organisational context in which you work?

In what ways is this apparent (examples)?

How did this change happen?

## **Organisational Learning Questions**

### ***Transfer tacit knowledge***

Has reflection helped you to transfer your tacit knowledge to others in the organisation?

In what ways is this apparent (examples)?

How did this change happen?

### ***Make tacit knowledge explicit***

Has reflection helped you to make your tacit knowledge explicit in any ways?

In what ways is this apparent (examples)?

How did this change happen?

### ***Change organisation***

Has reflection helped you to make any changes in your organisation?

In what ways is this apparent (examples)?

How did this change happen?

## **Closing Questions**

What do you think has been the greatest impact on you personally of becoming more reflective?

What do you think has been the greatest impact on your organisation of becoming more reflective?

# Appendix E – Participant Information Sheet and Consent Form

## Participant Information Sheet

**Research into the development of praxis in learner workers engaged in Higher Education (HE) work-based learning (WBL) programmes and the organisations in which they work and learn**

### Who will do the research?

Kevin Ions is doing this research as part of his Education Doctorate thesis at Durham University.

### What is the purpose of the study?

*The purpose of the main study is to find out how Higher Education work based study programmes affect the learning, work, careers and attitudes of students who undertake them. The study examines how organisations are changed by work based learners, and what the critical success factors are for the design of successful work-based learning programmes.*

### Why have I been asked to participate?

You have been asked to participate because you are a work-based learner currently studying towards an Undergraduate work-based learning qualification.

### What is expected of me?

*You will be asked to:*

- *Complete four learning grids relating to reflective learning.*
- *Engage in a discussion group*
- *Be interviewed*

*The learning grids will take approximately 30 minutes each to complete. You will not be expected to complete all of them in one go – you will complete them in stages over several weeks. There will be one discussion group lasting no more than 1.5 hours. You will discuss reflective learning and its impact on you and your organisation with other participants in the study. Interviews will take no more than 1 hour. The reflective pieces of work that you produced as part of your Learning Recognition and Development module will also be analysed by the researcher.*

### What happens if I don't want to take part or change my mind?

You are under no pressure to take part in the study. If you do decide to take part you can withdraw from the study at any point without giving a reason by contacting XXXXXXXXXXXXXXX.

**What will happen to the information collected?**

*The information collected will be used to help answer the research questions of the study. Interviews will be digitally recorded and fully transcribed. You will be given copies of interview transcripts and provided with the opportunity to take out or amend any part of it that you do not wish to be reported in the findings. Interview data will be stored on a password protected computer and will only be accessible by the researcher. All written information collected (e.g. completed mapping grids etc.) will be held in a secure location and will only accessible by the researcher. All information gathered will be confidential and kept securely, in strict accordance with the Data Protection Act.*

*Names of participants or places will not be used in the thesis or any published work resulting from the study.*

**Will the outcomes of the research be published?**

*You will receive a summary in laymen's language of the study and its results. An analysis of the information will form the basis of Kevin Ions Education Doctorate thesis and may be published in academic journals.*

**Contact Information:**

Kevin Ions



**Consent Form**

**TITLE OF PROJECT:** *Research into the development of praxis in learner-workers engaged in Higher Education (HE) level work-based learning (WBL) programmes and the organisations in which they work and learn*

Note to Participants: Please complete the whole of this sheet yourself

*Please cross out  
as necessary*

Have you read the Participant Information Sheet? YES / NO

Have you had an opportunity to ask questions and to discuss the study? YES / NO

Have you received satisfactory answers to all of your questions? YES / NO

Have you received enough information about the study? YES / NO

Who have you spoken to? \_\_\_\_\_

Do you consent to participate in the study? YES/NO

Do you consent to the digital recording of interviews YES/NO

Do you consent to the publication of anonymised extracts from the data collected as part of the study? YES/NO

Do you understand that you are free to withdraw from the study:

- \* at any time and
  - \* without having to give a reason for withdrawing and
  - \* without affecting your position in the University?
- YES / NO

**Signed** ..... **Date** .....

(NAME IN BLOCK LETTERS) .....

## Appendix F – Pilot Study PRep Templates

### Praxis Representation (PRep) Template 1 (Affective Learning)

#### Instructions

In the grid on page 2 there are 4 statements relating to *reflection and learning*:

1. Reflection helps to improve learner-workers *self-esteem*
2. Reflection helps to improve learner-workers *motivation*
3. Reflection helps learner-workers to identify and question their underlying *attitudes, values and beliefs*
4. Reflection helps learner-workers be *open to change*

I want to find out whether the reflective learning activities you have engaged in during the reflective component of the work based studies degree have helped to make these statements true for you, and if so, how it happened and what evidence there is to demonstrate that it happened. The reflective learning component of the course includes the activities and assignments that you completed as part of the *Learning Recognition and Development* module (including the experiential learning portfolio).

Please complete the grid on page 2. To help you to complete it I have provided some definitions below. You might also find it helpful to refer to your learning journal, assignment work, APEL portfolio and the learning activities completed during the reflective component of the course. When completing the grid please type in the boxes provided. You can write as much as you want – don't worry about using more than 1 page.

I would appreciate it if you would complete the grid and email it to me ([k.ions@tees.ac.uk](mailto:k.ions@tees.ac.uk)) by **Thursday 5<sup>th</sup> April 2012**. If you have any questions about how to complete it please don't hesitate to email or phone me on (01642) 738310.

#### Definitions

**Self-esteem:** A judgment of an individual's worthiness (Breckler, Olsen and Wiggins, 2008). The degree to which an individual approves of or likes oneself (Blascovich and Tomako, 1991).

**Motivation:** An internal state that activates and gives direction to a person's thoughts, feelings and actions (Lahey, 1995). Instigating, directing and sustaining behaviour to meet goals (Franken, 2006).

**Attitudes:** An opinion that one has about a specific object or situation that predisposes one to respond in a particular way (Rokeach, 1968).

**Values:** A standard that we use to judge morals, justify our behaviour and tell us how to act (Rokeach, 1968).

**Belief:** A proposition about the world that is accepted as truth (Richardson, 1996).

**Open to change:** A mindset that enables an individual to adapt to new and unforeseen circumstances and embrace new experiences.

**Praxis Representation (PRep) Template 1**

	Reflection helps to improve learner-workers <b><i>self-esteem</i></b>	Reflection helps to improve learner-workers <b><i>motivation</i></b>	Reflection helps learner-workers to identify and question their underlying <b><i>attitudes, values</i></b> and <b><i>beliefs</i></b>	Reflection helps learner-workers be <b><i>open to change</i></b>
Is this statement true for you? (please delete as necessary) <i>Only answer questions below for statements you have answered 'yes' to.</i>	Yes/No	Yes/No	Yes/No	Yes/No
How do you know it is true for you? (what evidence is there from your working practices for example - please give specific examples where possible) <i>Please give specific examples where possible</i>				
Which experiences helped to make this happen? <i>You may refer to particular reflective learning activities, models, theories, techniques and/or make general comments</i>				
How do you feel about this happening?				
What are the implications of this happening for the future?				

## Praxis Representation (PRep) Template 2 (Lifelong Learning)

### Instructions

In the grid on page 2 there are 2 statements relating to *reflection and learning*:

1. Reflection helps learner-workers to *recognise, evaluate and improve their own learning*
2. Reflection helps learner-workers to *evaluate their career goals and ambitions*

I want to find out whether the reflective learning activities you have engaged in during the reflective component of the work based studies degree have helped to make these statements true for you, and if so, how it happened and what evidence there is to demonstrate that it happened. The reflective learning component of the course includes the activities and assignments that you completed as part of the *Learning Recognition and Development* module (including the experiential learning portfolio).

Please complete the grid on page 2. To help you to complete it I have provided some definitions below. You might also find it helpful to refer to your learning journal, assignment work, APEL portfolio and the learning activities completed during the reflective component of the course. When completing the grid please type in the boxes provided. You can write as much as you want – don't worry about using more than 1 page.

I would appreciate it if you would complete the grid and email it to me ([k.ions@tees.ac.uk](mailto:k.ions@tees.ac.uk)) by **Thursday 12<sup>th</sup> April 2012**. If you have any questions about how to complete it please don't hesitate to email or phone me on (01642) 738310.

### Definitions

***Recognise, evaluate and improve own learning***: Identify learning that has been gained (including experiential learning) in a range of settings (workplace, social settings, formal educational settings etc.), assess the value of the skills, knowledge and competencies gained and develop strategies to enhance learning further e.g. strengthening learning styles; learning in a different way that leads to better results, embracing new learning opportunities etc.

***Evaluate career goals and ambitions***: Assessment of what an individual wants to achieve in life relating to their current or future occupation (e.g. career change, promotion, change of direction etc)

**Praxis Representation (PRep) Template 2**

	Reflection helps learner-workers to <i>recognise, evaluate and improve their own learning</i>	Reflection helps learner-workers to <i>evaluate their career goals and ambitions</i>
Is this statement true for you? (please delete as necessary) <i>Only answer questions below for statements you have answered 'yes' to.</i>	Yes/No	Yes/No
How do you know it is true for you? (what evidence is there from your working practices for example - please give specific examples where possible) <i>Please give specific examples where possible</i>		
Which experiences helped to make this happen? <i>You may refer to particular reflective learning activities, models, theories, techniques and/or make general comments</i>		
How do you feel about this happening?		
What are the implications of this happening for the future?		

## Praxis Representation (Prep) Template 3 (Professional Learning)

### Instructions

In the grid on page 2 there are 2 statements relating to *reflection and learning*:

1. Reflection helps to *validate the existing professional practices* of learner-workers
2. Reflection helps learner-workers to *extend their professional practice*

I want to find out whether the reflective learning activities you have engaged in during the reflective component of the work based studies degree have helped to make these statements true for you, and if so, how it happened and what evidence there is to demonstrate that it happened. The reflective learning component of the course includes the activities and assignments that you completed as part of the *Learning Recognition and Development* module (including the experiential learning portfolio).

Please complete the grid on page 2. To help you to complete it I have provided some definitions below. You might also find it helpful to refer to your learning journal, assignment work, APEL portfolio and the learning activities completed during the reflective component of the course. When completing the grid please type in the boxes provided. You can write as much as you want – don't worry about using more than 1 page.

I would appreciate it if you would complete the grid and email it to me ([k.ions@tees.ac.uk](mailto:k.ions@tees.ac.uk)) by **Thursday 19<sup>th</sup> April 2012** If you have any questions about how to complete it please don't hesitate to email or phone me on (01642) 738310.

### Definitions

**Validate existing professional practices** – Insight into the effectiveness of the strategies and approaches you use in a professional context. This can be achieved through academic sources, data from research and/or proven effectiveness of the use of the same strategy or approach in another organisation

**Extend professional practices** – Advancing the experience, skills, competencies, knowledge and strategies that can be applied in a practical environment relating to a particular job role/profession.

**Praxis Representation (Prep) Template 3**

	Reflection helps to <b><i>validate the existing professional practices</i></b> of learner-workers	Reflection helps learner-workers to extend their <b><i>professional practice</i></b>
Is this statement true for you? (please delete as necessary) <i>Only answer questions below for statements you have answered 'yes' to.</i>	Yes/No	Yes/No
How do you know it is true for you? (what evidence is there from your working practices for example - please give specific examples where possible) <i>Please give specific examples where possible</i>		
Which experiences helped to make this happen? <i>You may refer to particular reflective learning activities, models, theories, techniques and/or make general comments</i>		
How do you feel about this happening?		
What are the implications of this happening for the future?		

## Praxis Representation (PRep) Template 4 (Organisational Learning)

### Instructions

In the grid on page 2 there are 2 statements relating to *reflection and learning*:

1. Reflection helps to make learner-workers *tacit knowledge into explicit knowledge*
2. Reflection helps learner-workers to *implement changes in organisations*

I want to find out whether the reflective learning activities you have engaged in during the reflective component of the work based studies degree have helped to make these statements true for you, and if so, how it happened and what evidence there is to demonstrate that it happened. The reflective learning component of the course includes the activities and assignments that you completed as part of the *Learning Recognition and Development* module (including the experiential learning portfolio).

Please complete the grid on page 2. To help you to complete it I have provided some definitions below. You might also find it helpful to refer to your learning journal, assignment work, APEL portfolio and the learning activities completed during the reflective component of the course. When completing the grid please type in the boxes provided. You can write as much as you want – don't worry about using more than 1 page.

I would appreciate it if you would complete the grid and email it to me ([k.ions@tees.ac.uk](mailto:k.ions@tees.ac.uk)) by **Thursday April 16<sup>th</sup> 2012** If you have any questions about how to complete it please don't hesitate to email or phone me on (01642) 738310.

### Definitions

**Tacit knowledge:** This is knowledge that is gained largely through our 'experiences'. It is our own personal knowledge that cannot be easily articulated by verbal means (Polyani, 1966). It is often skills based such as walking, dancing, playing football etc. It can include how we handle particular situations using our insight, emotions and observations to guide us. Tacit knowledge is rooted in action and context, can be acquired without awareness and is typically not articulated or communicated. Tacit knowledge is sometimes described as 'know-how' (Brown and Duguid 1998)

**Explicit knowledge:** This is formalised and codified knowledge (Brown and Duguid, 1998). It is easy to identify, store, retrieve and disseminate (Wellman, 2009). Explicit knowledge can be represented in the form of documents such as drawings, operating procedures, manuals of best practice etc.

**Making tacit knowledge explicit:** To make tacit knowledge into explicit knowledge individuals can engage in reflective processes to enable them to examine their experiences and evaluate the effectiveness of their actions by discussing them (Sheckley and Keeton, 1997). Such knowledge can then be written down, disseminated throughout the organisation etc.

**Implement change in organisations:** This can include implementing changes to processes, procedures, methods; developing new tools and techniques; training others, helping to change the attitudes and behaviours of teams and/or individuals in the organisation.

**Praxis Representation (PRep) Template 4**

	Reflection helps to make learner-workers <i>tacit knowledge into explicit knowledge</i>	Reflection helps learner-workers to <i>implement changes in organisations</i>
Is this statement true for you? (please delete as necessary) <i>Only answer questions below for statements you have answered 'yes' to.</i>	Yes/No	Yes/No
How do you know it is true for you? (what evidence is there from your working practices for example - please give specific examples where possible) <i>Please give specific examples where possible</i>		
Which experiences helped to make this happen? <i>You may refer to particular reflective learning activities, models, theories, techniques and/or make general comments</i>		
How do you feel about this happening?		
What are the implications of this happening for the future?		

## Appendix G – Pilot Study Group Session Instructions

### Instructions

1. Each group member should read through each of the other group members ***PRep template 1 responses***
2. In your group ask each other questions about their responses to the learning grid questions. The purpose of this is to help each group member to ***reflect on their answers***. You may want to ask other group members to elaborate on their answers, explain them in a different way or clarify what they mean. It may be that particular answers are of particular interest to you and you would like to explore them in more depth.
3. Based on your discussions each person may refine or add to their own responses. I have left spaces for you to annotate your grid.
4. Repeat steps 1 to 3 for ***PRep templates 2 - 4***. Each repetition of the cycle should take no more than 25 minutes which will mean a maximum time of 1 hour and 40 minutes to complete the whole process.
5. Take your annotated learning grids with you and amend your original grids electronically and email me copies by **25<sup>th</sup> April**. I will contact each of you individually to arrange a 1 hour individual interview.

## Appendix H – Pilot Study Interview Guide

### Interview Guide (Pilot Study)

#### Interview Date & Time:

#### Interviewer Preamble

These interviews are follow-up interviews to the learning grids that you completed and should take no more than 1 hour. The interview will be recorded digitally but all responses will be kept confidential and any information you provide which is used in the final thesis will not be traceable to you - pseudonyms will be used and your organisation will not be named. You don't have to discuss anything you don't want to and you can end the interview at any time without giving me a reason.

#### Introductory Question

What does your organisation do and what is your role and responsibilities within it?

#### Affective Learning

Has reflection changed the way you understand and express emotions and beliefs and self-worth? (e.g. self-esteem, motivation, attitudes, change?), if so....

In what ways is this apparent and how did it happen?

#### Lifelong Learning

Has reflection changed helped you to develop and improve your skills and knowledge and evaluate career? (e.g. recognise learning, career goals and ambitions), if so....

In what ways is this apparent and how did it happen?

#### Professional Learning

Has reflection changed helped you to examine and extend your professional practices? (e.g. validate practices, new practices), if so....

In what ways is this apparent and how did it happen?

#### Organisational Learning

Has reflection helped you to create, capture and transfer knowledge and change your organisation? (e.g. convert tacit to explicit knowledge, implement change), if so....

In what ways is this apparent and how did it happen?

#### Closing Questions

What do you think has been the greatest impact on you personally of becoming more reflective?

What do you think has been the greatest impact on your organisation of becoming more reflective?

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