The Evolution of Metacognition during a Vocational Undergraduate Degree in the Outdoors: Curriculum Development to Enhance the Transfer of Learning

by

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A thesis submitted in partial fulfilment for the requirements for the degree of MA (by Research) at the University of Central Lancashire

February 2018

Declaration

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I declare that while registered as a candidate for the research degree, I have not been a registered candidate or enrolled student for another award of the University or other academic or professional institution

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Abstract

For the outdoor sector to fully realise its potential to facilitate inter-and intrapersonal growth, increasingly employers are recruiting for sophisticated communication, critical thinking and refined reflective practice skills (Hickman and Collins, 2014). Along with underpinning the transition from undergraduate to outdoor practitioner (Gray, Hodgson and Heaney, 2011), reflective practice is regarded as the space where emergent concepts of professionalism are processed and articulated (Cooper and Stevens, 2006).

The project aimed to; 1) characterise student perceptions of their reflective development over the course of an undergraduate degree in the outdoors and 2) analyse how these evolutions can be best engineered within curriculum to develop professionalism.

The study employed a qualitative methodology to collect open-ended and emerging data. Rather than testing prefigured data, this study used an interpretivist approach to achieve its aims (Arthur, Waring, Coe and Hedges, 2012).

Following an open-ended questionnaire with outdoor undergraduates (n=28), a semi-structured focus group was directed to a purposive sample from the same cohort (n=3). This informed an open-ended questionnaire with (n=5) and a semi-structured Skype interview with (n=1) industry employers. The Interpretive Phenomenological Analysis, designed to understand ‘participants lived experience within a specific context’ (Pietkiewicz and Smith, 2014) was selected to analyse the data.

The central theme found and explored in this project concerns reconceptualising the practitioner's role as an ‘enabler’ of inter-and intrapersonal growth to enhance industry professionalism. It was argued that central to this agenda is the development of undergraduates reflexivity through mentoring and critical friendship.

The study has argued that whilst reflexivity may help to nurture industry professionalism, a greater synergy between industry stakeholders is required to avoid a ‘glass partition’ (Man, 2007) dividing and inhibiting unanimity of progress.

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II. Acknowledgements

I would first like to thank my supervisory team, in particular Dr. Mark Hickman, for his invaluable support and guidance throughout this project. I am also tremendously grateful to Sharon Rosser for collecting the ‘employer voice’ on my behalf. Thank you to the employers and students for providing their insightful perspectives and thank you to both critical friends, their advice and patience has challenged my perspective and enriched this project.

Lastly, thank you to Amanda, her unrelenting encouragement and support has been inspiring.

III. Abbreviations

AHOEC	Association of Heads of Outdoor Education Centres
BAHSS	Business, Arts, Humanities and Social Science
BCU	British Canoe Union
BERA	British Educational Research Association
CCM	Constant Comparative Method
CF	Critical Friend
CPD	Continued Professional Development
DofE	Duke of Edinburgh Award
IA	International [Duke of Edinburgh] Award
IPA	Interpretive Phenomenological Analysis
IOL	Institute for Outdoor Learning
LOtC	Learning Outside the Classroom
ML	Mountain Leader
NGB	National Governing Body
PGCE	Post Graduate Certificate in Education
RGS	Royal Geographical Society
RP	Reflective Practice
SPA	Single Pitch Award
UCAS	Universities and Colleges Admissions Service
UCLan	University of Central Lancashire

“experience is not what happens to you; it is what you do with what happens to you”

Aldous Huxley (1932)

1 INTRODUCTION

The outdoor industry is big business, worth an estimated £20bn a year in the UK (Gardner, 2013), steadily growing at 3.5% (Outdoor Learning Employers' Group, 2011) and directly employing over 26,000 people (Comley & Mackintosh, 2013). However, there are calls to upskill the sector (EQFOA, 2006) in order to fully realise its potential as a platform from which to facilitate inter-and intrapersonal growth. For some employers this perspective remains a 'want', cast to the shadows behind the 'need' for employees with technical competency (Barnes, 2004). In contrast, is an increasing recruitment drive for employees with sophisticated communication, critical thinking and refined reflective practice skills (Hickman & Collins, 2014).

Along with underpinning the transition from undergraduate student to successful outdoor practitioner (Gray, Hodgson & Heaney, 2011), reflective practice is regarded as the space where emergent concepts of professionalism are processed and articulated (Cooper & Stevens, 2006). However, in relation to the development of outdoor professionals, reflective practice remains under-researched (Hickman & Collins, 2014). In addition, the abstract nature of reflective practice (Moon, 2008; Muncy, 2010) frequently presents issues with its conceptualization and application. This project has attempted to bring a degree of clarity to this highly abstract process.

This project pursued two small scale data informed aims. Specifically these were to:

1) Characterise student perceptions of their reflective development over the course of an undergraduate degree in the outdoors and expose 'pracademic' themes amidst the literature.

2) Analyse how these evolutions can be best engineered to delivering a student centred, industry informed curriculum that aims to create autonomous and accountable professionals.

In addition, an ancillary aim of this project was to develop a more sophisticated awareness of the research process as a platform for doctoral research.

Phase one aimed to capture the student voice discussing their personal reflective development during the course of their undergraduate Adventure Sport Coaching and Outdoor Leadership degree programmes. Phase one commissioned a pilot study to generate the initial themes used to establish the direction for deeper more investigative questioning during a focus group with three, third year students. Potential themes from phase one were discussed with two 'critical friends' who helped to select which of these themes would be used to inform a questionnaire presented to five industry employers. The questionnaire responses then generated further discussion with the critical friends over establishing the direction for the final layer of data collection with the operations director of a global educational expedition company.

Although this approach may not yield results that can be considered either 'statistically generalizable' (Silverman, 2012), or transferable into other arenas, the research methods themselves may hold transferable value (Yin, 2014). In addition, the project has challenged the perspective from which 'employability' research typically stems. Whilst most prioritizes the employer voice, situating the 'needs' of today, this project has attempted to also account for the skills currently under development.

Approaching the end of my undergraduate degree in 2013, I was faced with the same employment dilemmas as many soon to be graduates. Weighing up my options, interests and motivations, I decided to pursue the outdoors from an educative perspective and enrolled on a PGCE. This allowed me to develop a growing interest in how we facilitate and 'translate' the lessons we learn from the outdoors. Growing up before the 'digital age' and inseparable from whichever bike I had at the time, I explored the North Downs of South East England in search of things further, faster and steeper. At the time, I was just having fun. Looking back, these experiences taught me valuable lessons in preparation, resilience, problem solving and managing risk. Today, living in a risk-averse and digital culture, many of the lessons I learnt from adventure are at risk of becoming 'endangered'. Next year marks my tenth year facilitating 'adventure'. During this time I have put plasters and ice packs on, and offered comfort and encouragement to thousands of children during a mutual quest for adventure. What I have learnt is that the most valuable skill we hold as facilitators is the skill of guiding others to infer their own value behind each plaster, bruise or tear.

For the benefit of the reader **fig.1** provides a structure diagram of the research project:

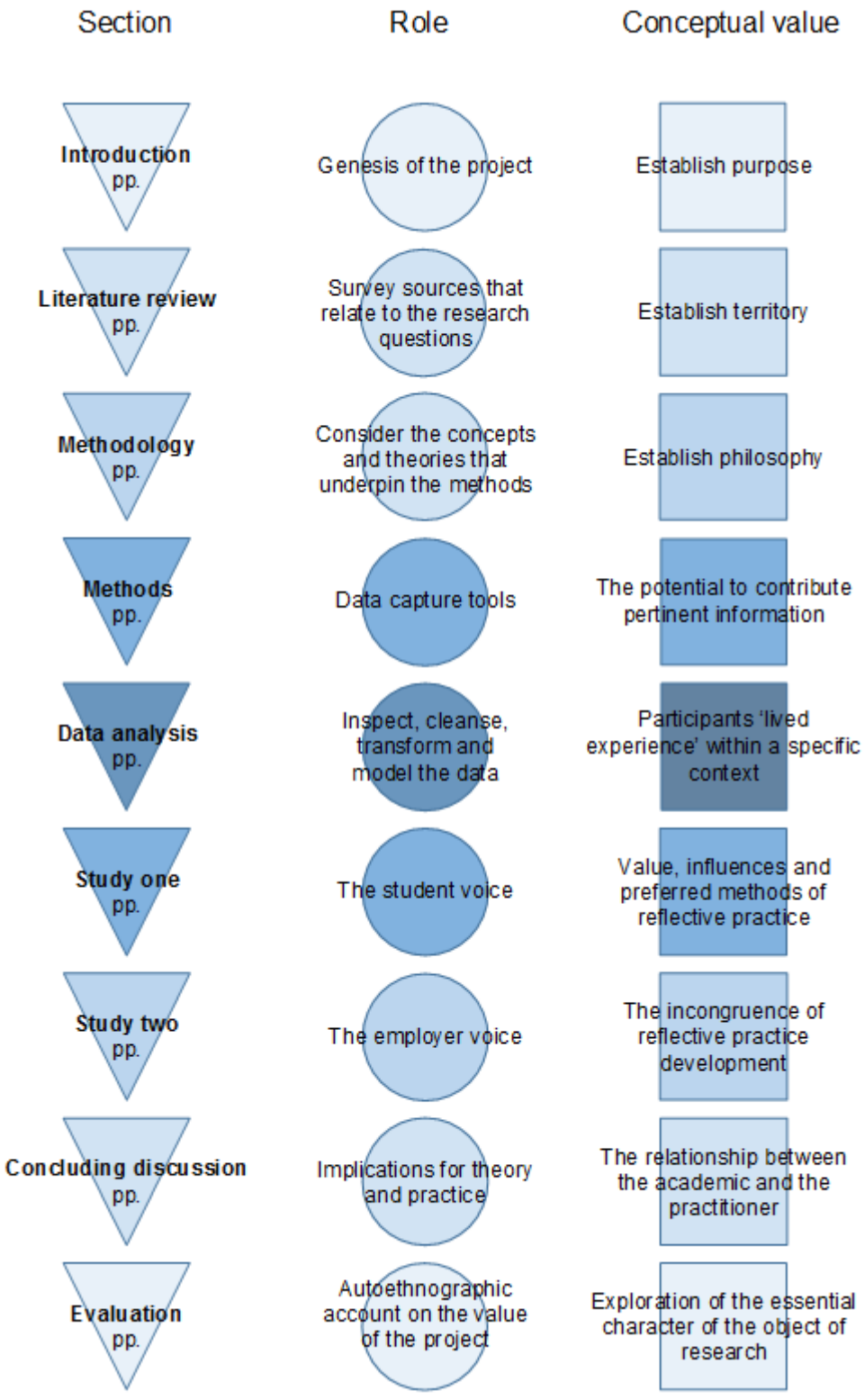


Fig.1 The structure of the research project

2 LITERATURE REVIEW

2.1 The Outdoor Sector

Findings in the Economic Impact of Outdoor Recreation in the UK (2013) estimated that approximately 2.85 billion visits to the natural environment took place between 2012 and 2013 (Comley & Macintosh, 2013). Narrowing the focus to adventure sports reveals that over the same period, nearly 250,000 people (aged 16+) went climbing or hill walking at least once a month (Sport England, 2013), five million registered visits were recorded at indoor climbing walls (Sport England, 2013) and over one million active canoeists made it the most popular water sport for the eleventh year running (Canoe England, 2014).

In addition, under the 2013 National Curriculum reforms, educational establishments are required to ensure that curriculum planning integrates well-structured opportunities to 'learn outside the classroom' between the ages of seven and 16, estimated at between seven and ten million people (Royal Society for the Prevention of Accidents, 2013). This makes schools one of the main and most prolific 'customers' of the outdoor education industry. Given the breadth of opportunities that schools are involved in, either as a consumer from third party providers or from itself as an internal provider delivering adventurous physical education, geography and science field trips or in co-curricular activities such as the Duke of Edinburgh Award (DofE), schools are central to the promotion and expectation of high quality provision.

Encompassing outdoor education, outdoor recreation, development training, expeditions and outdoor sports development, the outdoor industry is now worth an estimated £20bn a year in the UK alone (Gardner, 2013), steadily growing at 3.5% per annum (Outdoor Learning Employers' Group, 2011) and directly employing over 26,000 people (Comley & Mackintosh, 2013). The catalyst for this expansion is suggested as due to an increased demand in health-orientated recreation, an aging population with aspirations to remain active during retirement and government support to encourage and expand access and participation (Warwick Institute for Employment Research, 2010).

In terms of employment opportunities; small to medium sized enterprises make up the majority of employers, offering a diverse range of career pathways across its increasingly defined sub sectors (Thompson, 2011). Traditionally these sub sectors include; Outdoor

Recreation, generally regarded as a commercial ‘adventure experience’; Outdoor Education, seeking to promote transferable inter-and intrapersonal learning; and, Development Training, generally aimed toward corporate markets targeting inter-and intrapersonal professional development. Although Sports Development, predominantly catering for National Governing Body training and assessment awards (technical qualifications) remains a niche market, other areas are experiencing rapid growth, such as expeditions and explorations, which draw outcome parallels from both recreation and education. Adventure Therapy is the latest area to emerge (EQFOA, 2006). and be used as the basis for therapeutic interventions that promote psychological and personal healing.

The European Qualifications Framework for Outdoor Animators (EQFOA, 2006), suggested that the sector attracts a lower than average age of employee (18-24 years) than the rest of the economy, likely due to seasonal fluctuations where employment demand increases during the summer months. Three quarters of the sectors 26,400 employees are qualified to level three (A Level) on the European Qualifications Framework and approximately 50% being in part-time, volunteering or seasonal positions (Comley & Mackintosh, 2013). As an average, employees remain in the sector for less than ten years before moving into other ‘people orientated’ careers where generically transferable skills such as communication and problem solving are highly sought after.

As the sector continues to grow, the increased expense of seasonal recruitment and training and the lack of defined career development pathways, promises to magnify the existing concerns that surround industry professionalism. The EQFOA (2006, p.5) suggested that;

> “if the sector is to fully realise the potential for the benefits that the outdoors can bring to society and its citizens in all areas of activity and outcome, then there is a fundamental issue of professionalizing and upskilling the sector, especially in key areas of business, organisational and management development”.

The result of which has witnessed a growing number of universities offering outdoor related degree programmes. A search conducted on the Universities and Colleges Admissions Service (UCAS) website in June 2014 revealed 50 undergraduate courses and 71 postgraduate courses with either ‘outdoor’ or ‘adventure’ in the title. However,

this growth has not been met with universal approval, with many conventionally ‘time served’ employer's questioning;

> “why are more and more of these [outdoor degree] courses are springing up all over the country? As an employer I know that it is the National Governing Body (NGB) awards that are the priority with a degree being nice to have” (Gee, 2015).

This perspective prioritizes employer's ‘needs of the present’, however, since adventure education has been characterized by an overemphasis on technical skills at the expense of the inter-and intrapersonal skills needed for contemporary outdoor employment (Hickman & Stokes, 2015) this research aims to account for the ‘needs of the future’ and the potential for the skills currently under development.

Controversy surrounds calls to professionalise an ‘industry’ where 50% of employers are small to medium sized business using seasonal workers with basic technical qualifications. Given that the traditional outdoor apprenticeship is the assessment of technical competence, academic ‘routes in’ are clearly being viewed with a degree of scepticism by some employers. However, calls to ‘upskill’ the sector should not perhaps be dismissed so quickly given the volume of consumers reliant on the educational value that learning outside the classroom provides. So whilst contention may exist as to the efficacy of outdoor and adventure related degree programmes, they arguably have a place in training the modern practitioner.

2.2 Undergraduate Study

Munge (2009) suggested that outdoor degrees serve three primary functions; first, they develop a depth of knowledge that underpins best practice (Barnes, 2004; Little & Cosgriff, 2005; Higgins & Morgan, 1999; Maningas & Simpson, 2003). Second, they contribute to a growing body of evidence that serves to validate the purpose and value of outdoor practice (Dingle, 2005; Guthrie, 2001; Higgins & Morgan, 1999; Martin, 2001; Martin, 1998) and third, they produce practitioners that "have the historical and theoretical foundation to be able to articulate what we do, why we do it and how our work fills a need not met by more traditional schooling" (Plaut, 2001, p.138).

There is little doubt that education has “a purpose to change and develop behaviour of a learner to an outcome consistent with the expectations of the objective and customer” (Keenan, 2013). However, recent concerns of an education and economic ‘misalignment’ (Yorke & Knight, 2006) have resulted in scathing reports (Paulson, 2011; Ofsted, 2012; Patton, 2012) criticising programmes of education of failing to develop employability, “the capability to move self-sufficiently within the labour market to realise potential through sustainable employment” (Hillage & Pollard, 1998, p.2).

Whilst substantial and international research has focused on attempting to build and assess a list of skills that employers look for in new graduate employees (Meisinger, 2004; Hartshorn & Sear, 2005; Raybould & Sheedy, 2005), the approach of simply building a ‘wish-list’ of graduate skills that meet employers’ needs is regarded as an unrealistic (Yorke, Mantz & Harvey, 2005) and somewhat tenuous notion (Winch, 2006). Equally, a ‘generic list’ gives the impression that each skill is both recognisable and transferable as a separate or individual entity. In reality, many of these skills are symbiotic with each other, for example the co-dependency between effective communication and effective team working (Hager, 2006). In a recent study of ‘employability’ conducted by the World Economic Forum (2016), 900 companies were approached to voice their opinion. Skills that require empathy, positivity and the resilience to relearn as old skills become obsolete were voiced as the skills most relevant for the future. In addition, the ability to sieve through the huge volumes of data ‘noise’ associated with living in a digital age in search of relevance and meaning will require high levels of “critical thinking to navigate and find comfort in ambiguity. Therefore, a person’s capacity to apply concepts, ideas and problem-solving techniques across different sectors will determine whether or not they’ll thrive in the future workplace" (Alabi, 2016).

However, certain employability skills remain highly contextual (Lowden *et al.* 2011), grounded in and from practical judgement (Beckett & Mulcahy, 2006) in contexts “where the consequences of such skills can be seen” (Smith & Comyn, 2003, p.11). Some research expresses frustration that “employers take everything and give nothing” (Yorke & Knight, 2004, p.23) suggesting that some aspects of employability can only be developed in the workplace (Yorke, 2006). Holland (2006) agrees, suggesting that as knowledge and skills become contextually refined in the workplace, they should be nurtured by the employer and not by higher education. However, this perspective fails to

take into consideration the opportunities that undergraduates have to develop employability through judicious work experience.

In the outdoors, employers typically ‘need’ technical competency and procedural skills but ‘want’ the knowledge to facilitate activities that meet educational aims (Barnes, 2004; Mann, 2005b). So whilst it seems idealistic for industry employers to expect university graduates to possess the tacit skills and knowledge of a seasoned professional, like it or not, employers’ focus is on relevant work experience. This underpins concerns that new graduates lack practical experience and applicational judgement (Barnes, 2004; Little & Cosgriff, 2005) which, combined with their arrogance at possessing a degree, leads to an inaccurate perception of their own skill (Barnes, 2004; Munge, 2009).

> “Graduate recruiters were asked about the value of work experience when it comes to assessing students’ applications for graduate roles. Nearly half stated that it was either ‘not very likely’ or ‘not at all likely’ that a graduate who’d had no previous work experience at all with any employers would be successful during their selection process and be made a job offer, irrespective of their academic achievements or the university they had attended” (High Fliers, 2016, p.25).

Holmes’ (2006) study argued that rather than focusing on teaching and assessing skills, universities should focus on developing graduate ‘identity’. Taking into the consideration the dynamic nature of the outdoors and the multifaceted roles (Rae, 2007; Greenhaus *et al.* 2010) required to operate successfully as a practitioner, Van der Heijden (2002) adopts a similar stance to Holmes (2006) suggesting that students become ‘flexperts’ and entrepreneurs of their own career.

Despite concerns, outdoor and adventure related degrees are popular, and their continued global provision does suggest that they will continue to serve a role in preparing outdoor educators, leaders and managers into the future. However the employer's argument is loud and clear; new graduates must possess the basic practical skills needed to function in the environment they are situated. This requires developing theoretical skills alongside the applied skills and work experience to demonstrate competence to employers, who generally prefer to recruit graduates who have proven their abilities during work experience (High Fliers, 2015).

2.3 The fantasy gap

Outdoor and Adventure Education has widespread recognition of eliciting contextually transferable skills through experiential experiences that challenge across individual, social and environmental domains (Christie & Higgins, 2012; Hopkins & Putnam, 1993; McKenzie, 2003). Involving calculated exposure to risk in an attempt to develop inter- and intrapersonal growth (Meyer & Wenger, 1998) these activities, for example rock climbing and canoeing, have a longstanding reputation at fostering initiative, perseverance, determination, cooperation and resourcefulness (Celebi & Ozen, 2004; Luckner & Nadler, 1997). Priest (1986) suggests that *intra*personal refers to how one relates to 'the self', for example level of independence, self-concept, perception of abilities and limitations and *inter*personal refers to relationships between people, for example cooperation, communication and trust.

This requires the staff who facilitate these activities and experiences to possess a broad and diverse skillset. Thompson (2011) identified four key areas: 1) technical skills associated with the activities, 2) environmental understanding such as weather conditions, 3) experience working with young people and 4), the ability to facilitate transferable learning (for example highlighting the parallels that exist between different contexts). Increasingly, employment within the sector also requires staff to have both sophisticated communication and critical thinking skills (Hickman & Collins, 2014).

The conventional outdoor 'apprenticeship', predominantly modelled on the assessment of technical competency (Collins & Collins, 2012) and the procedural skills associated with each of the activities (Hickman & Collins, 2014) has created its own sector within the industry, enticing practitioners towards technical mastery and the elite statuses mapped out by NGB's. Whilst this approach has created outdoor leaders bristling with or aspiring toward high level technical qualifications, sustained employment opportunities that fully utilise high level technical skillsets remain in the minority. This has resulted in 'technically qualified' practitioners delivering high volume, sensation seeking 'shotgunned' experiences arguably incongruent with the vision of Priest, who in 1986 suggested that the most important learning to receive in adventure education is a matter of the inter-and intrapersonal relationships. Thirty years on and research indicates the tide maybe starting to shift back again (Hickman & Stokes, 2015).

The UK has a proud heritage of expeditioning, with educational aims and objectives taking young people to all corners of the globe since the first recorded youth expedition to Brownsea Island in 1907 led by Baden-Powell. In 2009 the Young Explorers Trust reported over 600 youth expeditions leaving the UK each year, a conservative figure by today's estimations in one of the fastest growing travel sectors of the 21st century (Rowe, 2008). Attracting the attention from researchers keen to investigate the value of expeditions, the "transfer of learning … should be considered essential not only as sound educational practice, but also as good economic sense" (Hickman & Collins, 2014 p.162).

Questioning the anecdotal 'accepted truth' that adventure education 'builds character', brings into question many commonly associated words such as; communication, team building, perseverance etc. Whilst many outdoor and adventure programmes are associated with inter-and intrapersonal growth, unfortunately the supposition that learning transference will occur can result in assumptions being made, not carefully planned objectives delivered (Tozer, Collins & Hathaway, 2011). For example, the Royal Geographical Society (RGS) suggests that resilience is required by participants on expeditions. According to the American Psychological Association (n.d.), resilience is "the process of adapting well in the face of adversity, trauma, tragedy, threats, or significant sources of stress". If assumptions are made that resilience will develop as a result of carrying a 20kg rucksack for 30km a day at 3000 metres above sea level, leaders can be faced with the volatility of intrapersonal shock, the uncertainty of intra personal coping strategies and the complexity of managing the ambiguity of inter-and intrapersonal conflict if participants fail to fulfil these assumptions.

Whichever perspective subscribed to in the "mountains speaking for themselves" (Drasdo, 1973; James, 1980; Neill, 2002) debate, as practitioners it is perhaps naive to assume that inter-and intrapersonal growth will occur as a result of the exposure and freedom to negotiate the outcome of the stress, challenge and mastery of an unfamiliar environment. Therefore, perhaps educational efforts should not be limited to demonstrations of 'wanted behaviour' but through a concerted effort to develop individual phronēsis (Stonehouse, 2010). With the growing soft skills deficit anticipated to penalise the UK economy by £8.4bn by 2020 (Development Economics, 2015) this highlights a need to challenge the assumptions behind inter-and intrapersonal development and find

ways to bridge the ‘fantasy gap’ behind practitioners self-perception with that of a common educational purpose.

The conventional outdoor apprenticeship has established an industry based on the assessment of technical competency, which anecdotally acts as the indicator by which practitioners are measured. In reality, the number of practitioners delivering experiences that require high levels of technical competence pales in comparison to the number of practitioners that deliver learning outside the classroom experiences to school groups. Despite overwhelming support for the value that learning outside the classroom affords, a pervasive argument presents the need to facilitate rather than assume that outdoor experiences will transfer into meaningful learning. The creation of this ‘fantasy gap’ where practitioners believe their own pedagogical assumptions and champion their personal achievements in technical mastery are now being reconceptualised in favour of a pedagogy that promotes inter-and intrapersonal growth.

2.4 The transference of adventure

Outdoor and adventurous activities have a longstanding reputation across a range of sectors from blue chip companies to primary education and the military as an effective platform for ‘transferable learning’ as explored by the English Outdoor Council in 2015:

1) Enjoyment - adopting of a positive attitude to challenge and adventure.
2) Confidence - developing character through taking on challenges.
3) Health - appreciating the benefits of an active lifestyle.
4) Social & emotional - developing empathy and interpersonal skills.
5) Environmental - the importance of conservation and sustainable practice.
6) Psychomotor skills - skills that underpin adventure participation.
7) Personal development - self-reliance, responsibility and perseverance.
8) Life skills - communication, problem solving, leadership and teamwork.
9) Motivation - increased curiosity and appetite for learning.

This platform is perhaps most commonly delivered as a series of activities or challenges designed to create metaphors that represent ‘real world’ situations. However, whilst these programmes can "when planned and implemented well, contribute significantly to

raising standards and improving pupils' personal, social and emotional development" (Ofsted, 2008),

In 2011 the National Curriculum précised key learning goals that all children should reach and devolved responsibility to the school to deliver “intellectual outdoor activities that encourage working as a team, build on trust and develop the skills to solve problems” (Department for Education, 2013). As a consequence of somewhat subjective learning objectives and reliance on third party technical expertise, the ‘pedagogical baton’ is often passed over to staff who are as discussed in the previous chapter, trained to deliver high volume, sensation seeking ‘shotgunned’ experiences that call on the mountains to speak for transference into the real world. This places recruitment ideology at the very centre of Learning Outside the Classroom [LOtC] provision. “Soft skills are hard to teach (Pota, 2016), “if you don't pick great people ... education cannot be improved (Robinson, 2013). However, recruitment cannot be considered as the only barrier to delivering meaningful LOtC provision. Commonly held misconceptions and assumptions about learning being a linear process, ‘done’ by individuals and as a result of teaching (Wenger 1998, p.3) are often seen as ‘accepted truths’ across society. This presents its own unique problems for outdoor education provision, such as the outdoors own credulity as a learning mechanism or the false-consensus bias of practitioners who struggle to empathise with those that don’t share an intrinsic affinity with adventure. Therefore, how to use the natural environment to spark meaningful learning that is transferable across other contexts and perhaps even more significantly what learners are left with after their experience has ended, continues to provide outdoor educators with much deliberation.

Experiencing meaning is not conjured from thin air, nor is it manufactured from a systematic routine. It is neither pre-existing nor fabricated. It is our understanding at that time, born from historical, dynamic, contextual and unique elements that shape our interpretation of the repeated patterns in our practice, allowing us to construct and negotiate our own wisdom. Continuous exposure to new experience even the nuances of day-to-day routine, provides a constantly evolving platform of interpretation and action. Therefore the meaningfulness of our engagement in the world should be viewed as a continuous process of renewed negotiation (Wenger, 1998).

Guiding others to transfer meaning from one context to another, is an even more complex process as it remains unique to each individual (Mayer, 2012). Practitioners are

reminded that transference is not readily accepted by all learners and, depending on their approach to learning, some may not benefit or even experience it at all (Tozer, Collins & Hathaway, 2010). In addition there are numerous barriers that serve to limit the potential for transfer. In adventure education 'self-handicapping' by withdrawal from activities due to cognitive discomfort is of ever present risk as a defence mechanism against ego threat (Prapavessis & Grove, 1998). In addition transference into sustained learning that lasts beyond the event itself provides yet more problems for the practitioner. Take the moment where a participant successfully completes their first rock climb. At that moment, improvements in self-esteem may provide the confidence to agree to face new challenges or see the transfer value from one context to another (Cheng, 2000). However, since practitioners rarely have contact with participants after their 'experiences', participants need to be left with skills that enable them to apply prior learning in future situations (Mayer 2012).

The role of the adventure educator positions them more as an 'enabler' (Plowman *et al.* 2007), operationalizing and managing activities, balancing risk against benefit, manipulating social settings to explore inter-and intrapersonal relations and setting opportunities that have the potential for meaningful, differentiated and transferable learning. This brings into question the efficacy of the conventional outdoor apprenticeship (Maher, 2012; Tozer, Collins & Hathaway, 2010; Collins & Collins, 2012; Hickman & Collins, 2014) and the need to once again consider the fantasy gap of practitioners' self-perception and purpose.

Whilst there exists extensive support for the outdoors as an effective platform from which to facilitate 'transferable learning', the evidence also highlights that facilitating the process is complex and often riddled with false assumptions. Given that third party providers are often employed to deliver schools outdoor education provision, there is a danger that inconsistent provision may leave some participants without any meaningful post experience transference. It is argued that by developing facilitators awareness and understanding of their own thought processes, they establish stronger cognitive foundations from which to transfer meaning from 'outdoors' to 'indoors'.

2.5 Metacognitive Pedagogy

Current standardisation and curriculum alignment, defined as a method of educational quality control (Wraga, 1999) has resulted in teaching and learning becoming "predetermined, pre-paced, and pre-structured" (Mahiri, 2005, p.82). This standardised approach is widely criticised for destroying the idea of a critically engaging and self-reflective education (Giroux, 2010), that disables students against the demands of globalization and the intensifying pace of change (McElwee, 2009). A wealth of literature argues that experiential education excels in developing the skills that empower students to think critically, make decisions and provide motivation to act, argued as the ultimate purpose in any form of education (Jewitt & Hickman, 2013). Research indicates that metacognition, the capacity to control the cognitive processes engaged in learning, is crucial to transferring the learning from 'outdoors' to 'indoors' (Tozer *et al.* 2012). Seen as intrinsically linked with reflective practice; metacognition is defined as 'a form of mental processing with a purpose to anticipate an outcome to relatively complex or unstructured ideas for which there is not an obvious solution' (Moon, 1999 pp. 23).

Despite calls from employers; "it is not enough to be innovative, or collaborative, it's also about knowing when and how to apply each of them" (Colondam, 2016), few systems exist that develop the metacognitive skills to know what learning strategies are available, how and when to apply them and then how to self-regulate them using goal setting, monitoring and evaluation techniques (Zimmerman *et al.* 1996). Metacognition relies on reflective practice to bridge experience and knowledge (Beard & Wilson, 2006). However, there are problems frequently raised concerning the conceptual clarity and notion of the term 'reflective practice' itself (Clarke *et al.* 1996), creating something of a paradoxical situation where 'reflection' is used in an unreflective manner (Bengtsson, 1995) and dangerously close to becoming a catch-all term for an ill-defined process (Bleakley, 1999).

Reflection in the context of learning concerns both intellectual and emotional processes designed to explore experiences that develop a new or more comprehensive understanding (Boud, Keogh & Walker, 1985). Described as a constantly evolving process, practitioners repeat cycles of examination, reflection and adjustment of practice (Grushka, McLeod & Reynolds, 2005). In 1977 van Maanen, and subsequently Zeichner and Liston (1987), proposed three categories of reflection; technical, practical and

critical. Technical reflection concerns the application of educational knowledge (van Maanen, 1977) and focuses on achieving predetermined outcomes, whilst practical reflection focuses on an interpretive understanding between principles and practice. Critical reflection concerns itself with the value of knowledge, and extends awareness to issues of social morality (Killen, 2007).

A positive consensus toward the value of reflective practice within professional environments (Dearing, 1997; Smith & Trede, 2013) has been growing for the last 30 years notably since Schön's (1983) seminal work on how professionals think in action. For the last decade reflective practice has been regarded as the space where emergent concepts of professionalism are processed and articulated (Cooper & Stevens, 2006). Reflective practice has received considerable attention in the higher education literature, largely being accepted as integral to effective graduate practice (e.g., Larrivee, 2008; Roberts, 2009; Stewart & Richardson, 2000) and a fundamental skill within professional environments such as nursing (Rolfe, 2014), social work (Wilson & Campbell, 2013) and teaching (Jones & Jones, 2013). However, it remains in relation to the development of outdoor professionals, under-researched (Hickman & Collins, 2014).

Conventionally it is argued that technical skills and experience are the key drivers to gaining employment outdoors (Boorman *et al*. 2008; Munge, 2009) despite a longstanding argument for 'sensemaking' to be viewed as of equal importance (Powell, 1989). Sensemaking is an interactive process tested through various degrees of separation. For example; 'I think' has no degree of separation, whereas 'he/she thinks' allows us to consider our own place within our and others communities of practice. This brings checks and balances that challenge our perspectives (Greenleaf, 2002) and preclude the creation of a community of ignorance. However, despite critical friendship and the value of a community setting, without a mechanism for sensemaking learning cannot be extracted (Weick, 1995).

Today, the support for skilful and refined reflective practice to underpin the transition from undergraduate student to successful outdoor practitioner is undoubtedly gaining momentum (Gray, Hodgson & Heaney, 2011). However, the negativity toward reflective practices' 'applicational stumbling blocks' indicates a need to identify, signpost and bridge the process with an effective means of guiding learners towards higher levels of cognitive functioning, through something immediately recognisable as applicable to their chosen domain (Jewitt & Hickman, 2013). If cognition is constantly adapting during

experiential learning (Von Glasersfeld, 1995), knowledge cannot be received passively, only built on. By simplifying the process of reflection, learners establish a continual process of reviewing experiences that contribute to the development and enhancement of knowledge. By providing the tools necessary to learn how to learn, students can begin to create new knowledge from existing experiences resulting in increased self-determination, empowerment and self-actualisation (Bhoyrub *et al.* 2010).

The standardised approach to modern education has restricted the freedom for learners to discover and infer personal meaning in favour of teaching to the test. It is argued that not only has this linear approach left many learners demotivated, but the deliberate sidelining of reflective practice, argued as the space where professionalism is conceptualised has also left employers concerned by an economic and education misalignment. The latest example of education not serving the expectations of its customer, are accounting firm Ernst and Young who are “no longer considering degrees or A-level results when assessing employees” (Garner, 2015).

The aim of this study was to evaluate the reflective development of undergraduate outdoor students against industry employers’ needs and expectations. In doing so, a review of the literature highlights that compulsory education has provided little to no reflective foundations for undergraduate programmes to build on. Given the experiential and reflective nature of outdoor education and the seven - 10 million children each year exposed to it, it therefore seems logical to ensure that the next generation of graduate outdoor practitioners are equipped to improve the current incongruence with reflective pedagogy.

3 METHODOLOGY

Introduction

The principle aim of the research was to discuss how metacognition evolves during a vocational undergraduate degree in the outdoors and what this meant for employability within the sector. The study employed a qualitative research methodology to collect open-ended and emerging data in an attempt to better understand how reflective practice is characterised by stakeholders across the outdoor sector. Informed by these

characterised ‘themes’, the study went on to reverse engineer strategies that optimise undergraduate reflective pedagogy.

The participants used in this research were first and third year undergraduate students reading outdoor related courses at the University of Central Lancashire. The employer voice was drawn from a body of experienced outdoor educators operating as freelance instructors as well as the operations director from a global educational expedition company.

The study pursued two main phases. The first focused on capturing the student voice, detailing their perceptions about their own reflective development during the course of their degree. The second phase presented the student voice to industry employers in an attempt to calibrate the incongruence of reflective development between stakeholders. Rather than testing prefigured data, this study uses an interpretivist approach and emergent data to achieve its aims (Arthur, Waring, Coe and Hedges, 2012).

This chapter aims to explore aligning the principal research aim with an appropriate methodological approach.

Research Philosophy

A year on since qualifying as an outdoor education teacher in 2014 my reason for undertaking this research is founded from personal interest and professional philosophy. The first layer of questioning, **study one**, listened to the student voice about their perceptions of their reflective development over the course of their undergraduate degree. ‘Pracademic’ - the brokerage of academic-practitioner interactions - (Volpe & Chandler, 2001), themes were generated from the student responses amidst the literature to emphasise the student voice and show how contemporary student learning can deliver future developments in the outdoor industry. Most graduate employability research prioritizes the employer's voice, but this situates ‘needs’ in the present and does not account for the potential of skills currently being developed. The subsequent discussion and analysis of the student voice went on to inform the direction of questioning needed to address the study's second aim, **study two**.

Study two presented the pracademic analysis of the student voice generated within study one to industry employers with the aim of engineering pedagogical strategies within an industry informed curriculum which itself aims to create autonomous and accountable professionals.

Methods were selected on the basis that: 'the subsequent analysis answers the research question(s) and were compatible with the philosophical assumptions about ontology, epistemology and methodology which underpin the design of a study', (Fade & Swift, 2011, p.107). Whilst it can be considered a mistake for postgraduates to extensively critique ontology and epistemology, they principally informed the methods that generated the data needed to address the research aims and objectives of the project (Easterby-Smith, Thorpe & Lowe, 2002).

Therefore, in order to establish a pragmatic baseline; ontology can be seen as the way in which social reality is perceived. For example, from an objectivist or quantitative perspective, social reality is secure, external and objective, divorced from their own perception (Matthews & Ross, 2010). However, from a constructivist or qualitative perspective, the social reality is that of a negotiated phenomenon which allows opposing 'truths' (Mallett & Tinning, 2014), that rely on sensemaking by individuals (Weick, 1995). Epistemology on the other hand is concerned with how we shape our understanding of the world, *how do we know what we think we know?* In one corner stands the positivist who seeks methods to test objective natural science, and in the other stands the interpretivist who seeks to understand the subjective meaning of social action.
In this research, the proposed collection of perceptual data avoids the 'objective and measurable' (Matthews & Ross, 2010) and instead endeavours to understand the subjective (Laws & McLeod, 2004). In further support, research concerning the pedagogy of outdoor adventure can be considered better served through a qualitative and less positivist approach (Barrett & Greenaway, 1995).

Resources

To make the project sustainable and avoid making unrealistic or unmanageable plans, careful consideration was given to efficiently managing time; costs, samples, and access required to complete this project (Gray, 2014). The project was managed over four distinct phases.

1) The first phase - develop manageable and sustainable project aims and the submission of both research programme approval and ethical clearance.
2) The second phase (study one) collected the first layer of data with undergraduate students to establish the 'student voice' and inform the direction of questioning for study two.
3) The third phase (study two) targeted industry employers with a questionnaire informed by a pracademic analysis of the student voice. This phase aimed to expose any incongruence between employer and student. The results of this questionnaire were then used to inform the final layer of questioning to a former operations director of an educational expediting company concerning matters of pedagogy.
4) The fourth phase allowed two months to discuss, conclude and evaluate the findings of both studies before the project's submission at the end of December 2016.

A curiosity for the topic and motivation for my continued professional development as an outdoor educator established my intellectual resources. Although ample and contemporary literature exists on graduate employability, as previously discussed this is principally centred on employer's current needs, not the skill potential currently being developed during undergraduate study. Furthermore, research into *outdoor* graduate employability has largely been anecdotal, which provided further motivation at making an original contribution to the growing body of literature.
Submission deadlines and full time work commitments dictated the design of the study, as did reducing any costs associated with its successful completion. It was also required to design the second phase data collection electronically using Skype and email as I relocated overseas to take up a position teaching outdoor education at an international school half way through the project. Although concerns were discussed with my supervisory team and critical friends (see below), they envisaged no problem in achieving its successful completion, provided that sampling remained accessible.

Critical Friends

My approach did present implications for notions of validity, reliability and generalizability. However, these implications were considered a largely positivist criteria and were instead replaced by implications centred on trustworthiness and authenticity (Patton, 2002) underpinned by the careful use of critical friends. Initially presented as an idea by Stenhouse (1975), the decision to employ critical friends was principally to offer alternative interpretations of the emerging themes and reduce the isolation of my solitary reflection (Deuchar, 2008). Whilst the discussions with critical friends can be considered essential in establishing the trustworthiness of my research, it is understood that critical friends should have an unbiased agenda toward the project's success and not bound by social ties that might influence their criticality (Swaffield & MacBeath, 2005). Therefore, a list of potential critical friends was drawn from professional associates only and their strengths and weaknesses detailed in Appendix 1 (**app.1**). The final selection was decided upon as a male and a female to avoid gender bias (Oakley, 1998), and in an attempt to bring a cross-sector perspective, one was selected based on their outdoor industry expertise and the other due to their expertise in curriculum development. This also brings a degree of trustworthiness to the process of managing the data.

Arrangements, Access and Ethics

A risk assessment was carried out in accordance with UCLan requirements. Full consideration was given to the ethics of the project. Operating within an ethic of respect for all participants involved, individuals were treated equitably and with freedom from prejudice. In addition participants provided informed consent without duress and were informed of their right to withdraw for any or no reason at any time in accordance with BERA (2011). As an intern at the beginning of the project I didn't have any influence over the curriculum, and therefore no problems existed with influences of power. Participants were issued with both an Information Sheet and Consent Form (included as an appendix to the UCLan Ethics Committee Application Form submitted to BAHSS) to assist in their decision making.

Goodson and Sikes (2001) point to a full range of potentially harmful complications where ethics are concerned and the following were taken into account:

- Nothing should be done to cause harm
- Confidentiality
- Data protection

The Consent Form also clearly articulated the storage and disposal protocols for the data, specifically that it would be kept on a password protected hard drive, and that hard copy data would be kept in a locked filing cabinet. Bryman (2012, p.143) argues that confidentiality and anonymity should be embedded within the research process, a view also supported by Weiss, (1994) and Tolich (2004). However, Mirgiro and Oseko (2010) state that anonymity can only be reasonably assured by 'cleansing' the data (Kaiser, 2009) to protect the identities of respondents from any consequences of their responses, ensuring opportunities for future research.

The undergraduate student sample used within the pilot study consisted of 28 participants, 14 first years and 14 third years drawn at random from Adventure Sports and Outdoor Leadership cohorts. Since the pilot questionnaire responses were anonymous; age, gender and experience of the respondents remains unknown. Study one went on to conduct a focus group with three, third year undergraduates, all of whom were male and under the age of 30.

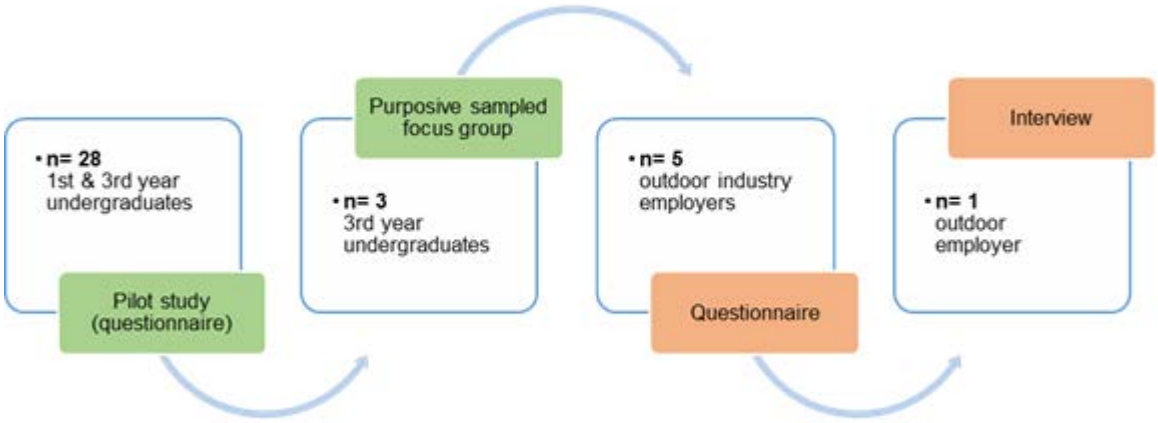
Study two collected data using an open ended questionnaire with five employers from industry. A biographical overview of their experience is detailed in **tab.1** on page 52.

4 METHODS

Scholars suggest that the selection of samples in qualitative research is not necessarily guided by the representativeness of a wider group but by the potential to contribute pertinent information. Arthur, Waring, Coe and Hedges (2012) suggest that a purposive sample is likely to generate information pertinent to the research aim(s). Therefore questioning was directed toward a sample group of three students from the third year cohorts of Adventure Sports Coaching and Outdoor Leadership undergraduate degree programmes. A pluralist methodological approach was used to increase the validity and

reliability of the results by producing convergent findings about the same empirical domain (Erzerberger & Prein, 1997) as illustrated in (**fig.2**).

Study 1: Students metacognitive understanding and application



Study 2: Implications for student's postgraduate employability

Fig.2 Sequence of data collection per study

The first layer of data (pilot study) used questionnaires to shape the foundations for subsequent layers of research, allowing me to 'thematically map' the subject area and make decisions about next stages of investigation. Consideration was also given to the most effective methods for extracting the data most pertinent to achieving the research aims. A synopsis of their strengths and weaknesses has informed my decision to employ the following methods:

Questionnaire

Distinct practical advantages existed to collecting the pilot study using a questionnaire in terms of cost, effectiveness, accessibility (Kumar, 2014) and also in establishing wide distribution (Adams & Cox, 2008). However, some disadvantages also existed, namely, their inadequacy at collecting subjective data, therefore questions were designed as open ended and not based on a Likert Scale which may only collect limited information.

Questionnaires may also be tainted by 'impression management' through embellishments, false reporting and omission (Leary & Kowlaski, 1990) in an effort to create a positive self-image (Jones & Pittman, 1982). Despite these criticisms, a questionnaire provides a valuable opportunity to 'map' the subject area, before the subsequent and more focused investigation (Olsen, 2012).

Focus groups

A purposive sample of those that took part in the questionnaires were invited to take part in a focus group. Focus groups are considered to be an established and legitimate form of qualitative data collection frequently used in social science (Grønkjær, Curtis, Crespigny & Delmar, 2011). The rationale behind their use is based on the notion that knowledge is created through experiences and interaction. The environment of a focus group encourages a greater degree of interaction that leads to a greater depth of discussion (Gratton & Jones, 2010). The method encourages participants to explore their perceptions, attitudes and feelings toward the topic of discussion in an attempt to generate meaningful understanding of group norms and their cultural values (Krueger & Casey, 2000). However, much like all methods, focus groups bring disadvantages. Participants may for example be influenced by the others in the group, and again in an attempt to create positive self-image may be persuaded to say things that do not accurately reflect their feelings (Rubin & Babbie, 2010).

Interview

Stake (1995) suggests that all people will view no phenomenon in the same way and that the interview is an ideal tool to separate multiple and/or competing realities discussed during a focus group. Arguably, this provides the reasoning for Patton's (2002) observation that deeper explanations are found during interviews. However, interviews bring the potential for response bias from both interviewers' agenda and respondent's perceptions of the interviewer's characteristics (Hoyle *et al.* 2002). However the dynamic responsiveness of interviews can equally be considered a strength of opportunistic research (Rubin & Rubin, 2005). In an attempt to reduce bias and misinterpretation, my

unfolding interpretation of the interview will be verified by the interviewee (Schön, 1983; Kvale & Brinkmann, 2009).

5 DATA ANALYSIS

Allowing and responding to changes informed from the data, two data analysis tools were considered: the Constant Comparative Method (CCM) (Glaser, 1965) and Interpretative Phenomenological Analysis (IPA) (Smith, Flowers & Larkin, 2009). Corbin and Strauss (2015) suggest that data comparison is the foremost form of data analysis in qualitative research, highlighting the common techniques such as reading, re-reading, colour coding, diagrams and matrices offer tried and tested resources for the researcher. However, for the novice qualitative researcher, Boeije (2002) suggests that the freedom to explore these options can be confusing, therefore Hickman and Palmers' 3i (2012) reflexive model was employed to select (**fig.3**), and deselect (**fig.4**) which raw data would be used to generate the emerging themes (Farmer, Robinson, Elliot & Eyles, 2006).

The aim of the analysis was to 'step into the shoes' of the subject and view reflective development from their perspective. Since the IPA approach is designed to understand 'participants lived experience within a specific context' (Pietkiewicz & Smith, 2014) it was considered to be the most appropriate method of data analysis. Phenomenology is concerned with identifying and extracting meaning from phenomena. However, since complete empathy with a participant is not possible, IPA becomes principally a process of sensemaking via interpretation and translation. Therefore, in order to achieve the most accurate reflection of a participant's perspective, questions were open and framed to promote the most comprehensive answers.

Since it is recommended that researchers fully immerse themselves in the data, focus groups and interviews were transcribed verbatim (Pietkiewicz & Smith, 2014). This produced hard copies of all three methodological approaches; questionnaires, focus groups and interviews and established the same 'platform' from which to code and connect recurring raw data. This recurring raw data was then colour coded (Keenan *et al.* 2005) into emerging 'lower order' themes with corresponding conceptual similarities. These lower order themes were then organised into overarching higher order themes (**app.3 & app.7**).

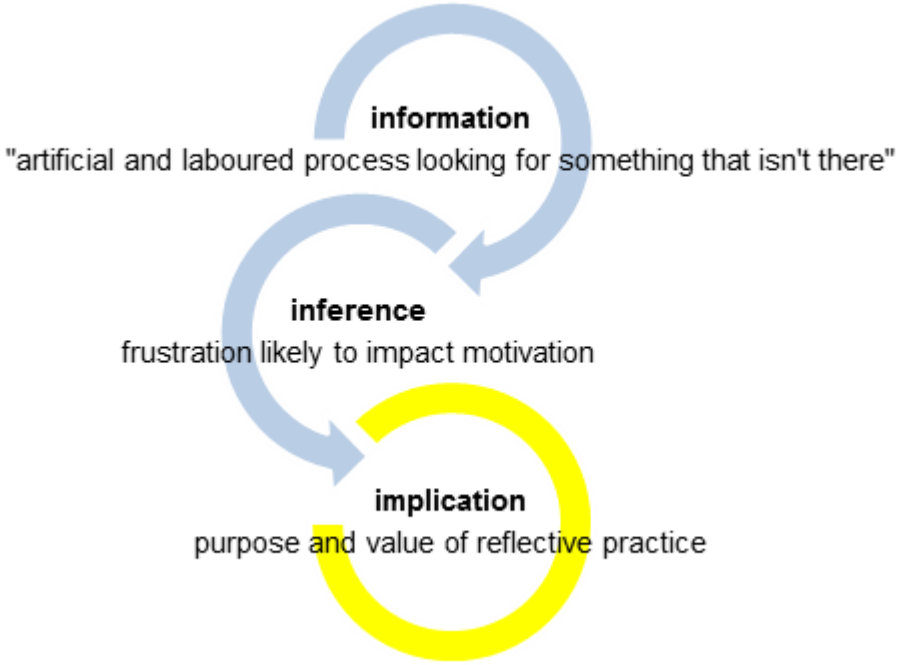


Fig.3 Hickman and Palmers' (2012) 3i reflexive model used to **select** emergent themes.

A structure diagram is used (**fig.5**) to explain the process of mining the data. In the thematic analysis of focus group one (**app.6**), responses that related to the 'purpose and value' of reflective practice, for example; "artificial and laboured process looking for something that isn't there" were highlighted in yellow. Whereas responses that related to the 'influences and methods' of reflective practice, for example; "more valuable than personal reflection as having additional people gives it a different perspective" were highlighted in green.

Conceptually similar example responses were then clustered into 16 lower order themes, before being grouped into eight higher order themes. This was the final stage of solitary analysis before critical friends were invited to consult on which four higher order themes would be dropped, in lieu of the limitations imposed by the word count of this project.

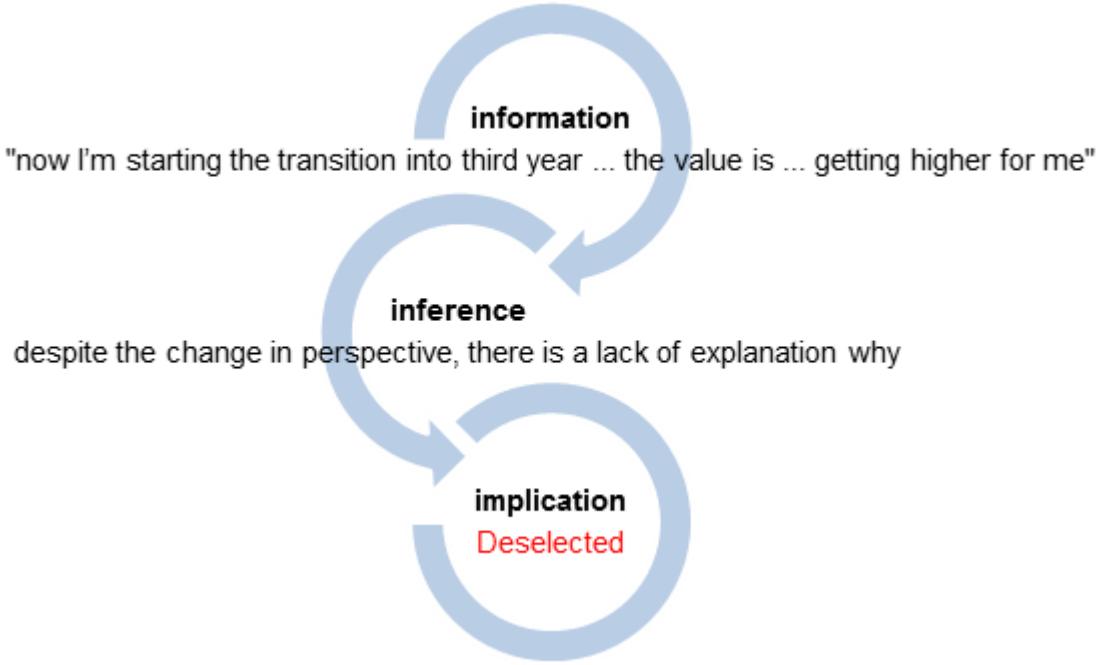


Fig.4 Hickman and Palmers' (2012) 3i reflexive model used to **deselect** emergent data.

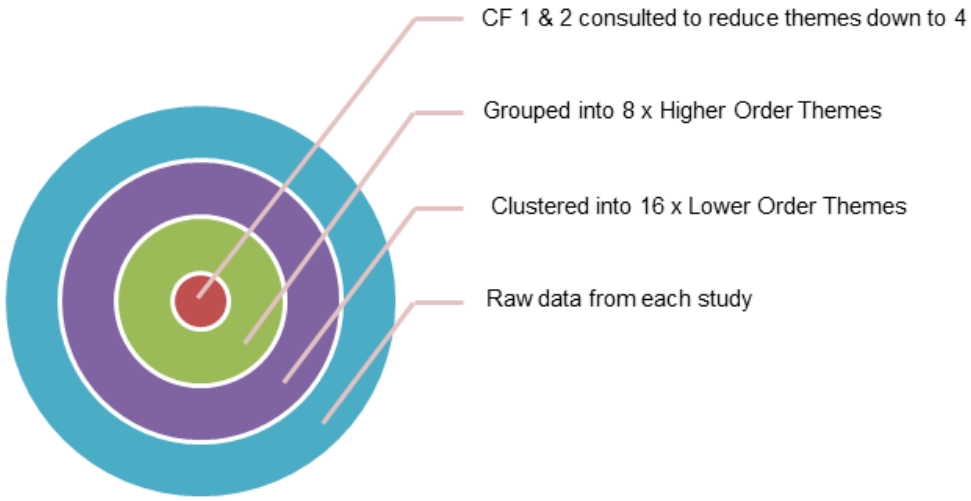


Fig.5 The process of mining the raw data.

6 STUDY ONE: THE STUDENT VOICE

6.1 Introduction

The aim of the pilot study was to generate ‘themes’ that characterised students’ perceptions of their own reflective development over the course of their undergraduate degree, thus providing a ‘bearing’ toward achieving the project's first aim.

Pseudonyms were ‘attached’ to each completed questionnaire to enhance the verisimilitude of the discussion and convey a humanistic picture of individual’s emerging perspectives. It should be noted however that the pseudonyms cannot be seen to accurately reflect the gender of each respondent. Following the analysis of the pilot study questionnaire, 16 lower-order themes were generated and consolidated into eight higher-order themes as detailed in **app.3**. At this point critical friends were employed to reduce this number of higher order themes down to four (highlighted in green in **table 1, app.4**) in order to give justice to each theme, given the constraints imposed by the word count of this project:

1. The purpose and value of reflective practice.
2. Reflective practice influences and methods.
3. Contextual transference.
4. Reflective pedagogy.

These four themes moulded the direction of questioning for the focus group. Three third year students; Ian, Ed and Tim took part with the aim of building on and drilling into the responses provided within the pilot study. The focus group took place using Skype since geographical limitations, between the researcher in Brunei and the participants in England prevented the focus group from being held face-to-face.

Skype is a relatively novel approach to collecting data and there remains limited research into its efficacy as a research tool. However, from my own perspective as both expat and researcher, as long as two reasonably strong internet connections exist (>500kbps) and time differences negotiated, Skype provides immediate and low cost access to global networks and international data collection. Ethical issues were treated the same as would be for face-to-face interviews and focus groups, first by obtaining informed consent and the right to withdraw at any point for any and no reason explained. Permission to record

the audio of the interview was requested and granted for the purpose of transcribing later (Cater, 2011). One computer program that claimed to facilitate recording Skype calls was tested in advance of the focus group, however it yielded poor and unreliable results, so the decision to use an external device to record audio only was considered 'safer'.

The focus group sought insight into participants' perceptions of the value, influences and preferred methods of reflective practice. They were also asked for their understanding of contextual transference and their stance on being a 'reflective advocate' within professional practice. Responses from both the pilot study questionnaire (**Q1**) and study one focus group (**FG1**) are used alongside each other to contextualise the exploration of the four themes under investigation in this chapter.

6.2 The purpose and value of reflective practice

The pilot study sought to gain insight into students own reflective priorities whether that be the 'soft' inter-and intrapersonal skills or the 'hard' technical skills needed for example to rig a group abseil. For first year students, 75% reported prioritising technical reflections over inter-and intrapersonal reflections. This was exemplified by responses such as "being able to perform … properly consistency is more important" (William, Q1) and, "my … priority is technical, [I'd] like to develop a higher standard rather than worrying about interpersonal skills" (Lucy, Q1) and although reflective practice "helps me [to] understand what I need to do to improve my skills, ... I would rather learn practical skills" (Hannah, Q1).

The development of technical proficiency dominated first year undergraduate critical reflections, arguably to the exclusion of other issues crucial to wider professional development. However, this must be kept in context because, for young practitioners at the onset of their career, the skills that determine employability are largely practical. However, for students in their third year, they appear to shift their priority toward inter- and intrapersonal reflections exemplified by responses such as "reflective practice is a recognised method used by the IOL [Institute for Outdoor Learning] and key employers so our understanding of it is essential" (Megan, Q1). However, this statement does allude to a shift governed by a sense of necessity rather than a sense of heightened critical understanding.

First year students' overwhelming preference to develop technical proficiency was brought to critical friends as the first theme (**app.3**) for discussion. Although this shift in favour of inter-and intrapersonal reflections for third year students, both preferences can be considered to be rooted from students' attitudes and values. Critical friend one (CF1), selected for his experience with curriculum development commented that "if you are trying to build reflective practice progression the first thing to deal with is the "I'll write a reflective log if I have to" attitude that views reflective practice as a bolt on rather than of integrated value. Critical friend two (CF2), selected for her educative experience in forest schools wasn't surprised by first years attitude "as novice practitioners, they have perhaps insufficient work based experience on which to reflect". This perspective formed the basis for subsequent questioning during a purposively sampled focus group.

Asked what reflective practice helps to achieve, third year student Ian reported that "it helps to contextualise experience, a little bit kind of like a reference point" (Ian, FG1). Ed, also in his third year, explained;

> "I'll report on them more as an incident instead of logging a whole of the day, so if something does happen I have a time and date to use as a reference point for later on whether that be needed in a legal situation or just a research situation" (Ed, FG1).

Both students' articulate methods of *capturing* information, but with some reluctance, as Ed stated "only when I have to" (Ed, FG1). Findings from both pilot study and focus group saw 75% of Adventure Sports Coaching and Outdoor Leadership students prioritizing their technical reflections over inter-and intrapersonal reflections in their first year typified by responses such as; "not used it much so hard to say what the value is" (Ben, Q1). However all students were required to capture 'information' from their residential experiences with the aim of providing contextual references within their assignments. 'Doing' something with this information is notoriously difficult though and therefore understandable that given the difficulties with conceptualizing reflective practice (McLaughlin, 1999; first year students' enthusiasm is both anecdotally and personally tested when it comes to applying it (Jewitt & Hickman, 2013).

Stimulating curiosity about what as yet unknown information the reflective process may yield is arguably the key to successful engagement with the process. CF2 supported this statement "you can't teach [critical curiosity], it's about being motivated and able to engage". Curiosity cannot simply be defined as the impetus to gain knowledge for

knowledge sake, nor can it be simply be viewed as being intuitively drawn to a topic, in this case reflective practice. Curiosity is triggered when what we want to know exceeds what we already know (Loewenstein, 1994). First the topic must grab our attention, but this must give rise and causally accompany a motivation to know more about the topic (Schmitt & Lahroodi, 2008). This creates a mutually supportive relationship between attention and sustained motivation. This motivation becomes in part responsible for the decisions that concern the choices about our future learning goals (Carver, 2006).

During the focus group interview, Tim, like Ian and Ed explained that he engaged with RP because “assignments [required him] to do it in the first place” (Tim, FG1), a position similar to Ed who explained; “for me it's being able to log down what you’ve done” (Ed, FG1). However, Tim then goes on and expands “[I] then go back to it and think about how you can improve ... figure out what to do next” (Tim, FG1). This realisation that the captured information could be of use beyond a simple method of record keeping demonstrates his curiosity and motivation to know more; Tim explained; “I didn't think much of it [reflective practice] until a few weeks back … but now I’m starting the transition into third year [I’m] starting to use what I've written down and recorded in the past to reflect on, the value … is getting higher for me” (Tim, FG1). Tim’s comment sparked Ed to share his lightbulb moment when reflective practice exposed itself as more than ‘diarizing events’; “it wasn't until ... I was reading through my [expedition] logs that there were these things I’d missed that other people had picked up, that I could link them all together and make a coherent timeline of some pretty serious events, so I’ve seen the value” (Ed, FG1).

These moments can be viewed as ‘critical incidents’ (Beames, 2004), milestones in their metacognitive development as information begins to form “a value judgement ... and the basis of that judgement is the significance we attach to the meaning of the incident” (Trip, 1993, p.8).

6.3 Reflective practice influences and methods

As previously discussed, the pilot study suggests that first year students are predominantly concerned with reflecting on their technical skills. There is a general acceptance that “from what I’ve been told its [reflective practice] important…. employers

seem to look for a certain level of reflection from their staff when recruiting" (Sarah, Q1), however for first year students the skills that determine employability are conceived as largely practical. Whilst some describe using reflective practice to support technical skill development such as "reverse chain practice performing rolling in a kayak" (William, Q1), the majority describe reflective practice as a 'future intention', "I think that by the time I graduate I will know how important it is. But right now my knowledge isn't advanced enough to see the benefit" (Michael, Q1). This uncertainty about what to and how to align CPD beyond graduation as it is not really of current importance formed the second theme (**app.4**) brought to critical friends for discussion.

CF1 refers to reflective practice during teacher education as being "engrained through a continual process of planning, doing and reviewing" in an attempt to develop autonomy. For some students in year one this process toward reflective autonomy has begun; "I can reflect on sessions I have run so that I can improve them if necessary and also understand what I did well" (Charlotte, Q1). But there is a sense that as Ian reported is an "artificial and laboured" process that "detracts by looking for something that isn't there" (Ian, FG1). Ian's comments support CF2 observations that the learners "are novices and focusing on gaining experience".

Given the previously discussed conceptual and applicational problems with reflective practice, it often becomes institutionally structured and supervised. CF1 observed that "if you want robust professionals that really engage in reflection for CPD then developing autonomy is key" (CF1). CF2 suggested that it is likely to be a more organic process, "as experience begins to develop, individual motivation will guide notions of professionalism".

Autonomy is defined by the Oxford dictionary as "the right or condition of self-government and freedom from external control or influence". However, developing *reflective* autonomy cannot be expected to be achieved by just simply handing over the reins. Jones (2002) describes developing reflective autonomy in newly qualified teachers as a balance between autonomy and conformity or freedom and restriction, an ambiguous tension unique to each learner. The subsequent questioning during the focus group aimed to understand the reflective drivers, what influences the students to engage with reflective practice and the methods they use to engage with the process.

Asked to explain what their preferred method of reflective practice was, Ian responded:

> "it depends… last year [I] kept a travel journal [which] wasn't specifically for reflective practice, but I have looked back on things for specific examples. But to be honest most of the stuff will be like a discussion... I see a lot of value in critical friendship, which I personally get more out of. I think when I record written stuff, the act of it makes it artificial, whereas through a discussion you can bounce ideas off I personally see as more valuable" (Ian, FG1).

Ed agreed:

> "I find it's much more valuable to talk to someone about an experience as you are then both contributing a perspective to that one experience, then after in a professional context if it's necessary I'd tend to write things down just in case there's a message in there that I know or might forget, or something I think I'll find useful in future experiences" (Ed, FG1).

Both of these students, in their third year demonstrate a growing sophistication and autonomy in their reflective practice within discussions, whereas Tim preferred to capture information in written or voice recordings. Asked why they chose to adopt their respective strategies, Tim explained that "voice recordings [are] a lot easier to use than taking out a book and pen" (Tim, FG1), whilst Ian explained that for him "it's more valuable the less structured it is" (Ian, FG1). Ian went on to discuss how for him it needs to feel "inherent" as opposed to "artificial and laboured … looking for something that isn't there" (Ian, FG1).

In an attempt to explore 'reflective maturation', the students were invited to comment on what influences them to engage with reflective practice. Ed explained; "for me I write things down on expedition ... because I was just a bit too fatigued to, so there was no value in the moment it was more afterwards" (Ed, FG1). Ian, building on his previous comments disagreed, "I think it's something you do naturally ... thinking about things that have happened before and comparing situations so the influences are in themselves" (Ian, FG1).

Tim explained that what influenced him was, like Ed driven by "the time it takes to write" (Tim, FG1), before elaborating:

> "if I was to talk to someone else about it [instead] and not on a voice recording [or] write it down ... I find it much more applicable and helpful than [working out]

> what it means on my own. To have someone else[s] ... perception to help figure out if I'm right or wrong is helpful" (Tim, FG1).

Ian responded:

> "I think that's a really valid point you look at, say in a staff meeting you do reflect on performance, what you did right, what you did wrong, you work as a collective to try and improve the situation. In a way I think that's more valuable than personal reflection as having additional people gives it a different perspective and likely to broaden your horizons which is a positive, so I think it's more beneficial" (Ian, FG1).

The discussions surrounding methods and influences stimulated 'meta-reflection' amongst the group citing examples that highlight a growing confidence with applying reflective practice processes 'off-piste' and away from the conformity and restriction needed at the beginning of their reflective careers. The focus group also indicated a growing preference for the use of reflective discussions with either critical friends or peers as opposed to the more formal and mechanistic approaches of journal entries followed by post experience evaluations.

6.4 Contextual transference

The pilot study indicated that some students isolate their reflective practice within its literal translation. This was exemplified by one third year student who suggested that it provides "little benefit to assignments that are not directly related to my experiences" (Hugo, Q1). Another first year student explained "I think it's a good skill to have … but I think equal importance should be put doing the practical bits" (Rebecca, Q1), suggesting that reflective practice is 'removed' from the practical experiences. However, whilst some third years appear to be grasping a notion of contextual transference, "prior learning affecting new learning or performance" (Cree & Macaulay, 2000, pp. 2-3) there is limited contextual explanation beyond; "link[ing] my theoretical learning from the course to my practice and vice versa" (Paul, Q1).

The ability to transfer one's learning from the classroom to other professional contexts is not only regarded as a demonstration of competence (Botmaa *et al.* 2015), but "built upon the fundamental premise that human beings have this ability to transfer what they have learned from one situation to another" (Desse, 1958 p.213). The decision to

question the students on their perception of contextual transference was due to CF1 who stated “enabling contextual transference is key... to transfer knowledge learnt in one context to shed light on another”. However currently, for some third years, reflective practice is done “only for assignments” (Nicolas, Q1).

This perspective views reflective practice as a surface level skill, blind to its potential in developing ‘learnacy’, the ability and willingness to manage independence and ownership over learning (Claxton, 2002). Developing these skills is argued as reducing the need for direct contact time and enabling more efficient feedback between facilitator and the facilitated (Collins & Collins, 2015).

The focus group was invited to explain what their understanding of contextual transference was. Ian stated:

> “obviously the specific skill of the activity is going to be different depending on what it is, but people management is very transferable and within reason you are likely to encounter similar situations in varying activities with individuals, means a previous experience may help you to deal with something in another context” (Ian, FG1)

Tim added:

> “when I was working [as an instructor], the skill that I’m facilitat[ing], they [the students] get more from it if they've already experienced what's happened ... so if I was [instructing how to] walk across the road and a car is just about to go past, [they learn] that [they] need to look, so in the future [they] can apply that skill again (Tim, FG1)

Ian and Tim go part way to explaining transfer ‘distance’. ‘Near’ transfer refers to learning within the same construct, for example crossing a road in a new location. ‘Moderate’ transfer shares inherent values in a new construct, for example cooking on an open fire. Finally ‘far’ transfer requires tapping into related but disparate cognitive domains, for example using the achievement of successfully climbing to the top of a climbing wall to help overcome a fear of public speaking (Lange & Heinz-Martin, 2015).

Ian explained:

> “I agree to an extent, if we talk about transferring confidence from one experience to another ... I don't think one person's singular success on a climbing wall will

> translate into them being more confident overall as I think it's an accumulation of things. However, ... if you [present the idea that] by doing this you might become more confident that might [act as a] placebo, … you've shown you can do it … so when it comes to a situation when they need to be confident they may be able to refer back to the experience" (Ian, FG1)

Ed proposed that during a debrief you ask;

> "you've just pushed yourself out of your comfort zone, do you [now] think you could speak in front of a group of people? I think [that question would] devalue the transference because they didn't find the [value] themselves. If it was guided to a certain point where they could stumble upon it themselves that's much more valuable than if it's completely guided. However, facilitating this for a whole group is a lot more difficult than [for an individual]" (Ed, FG1)

When questioned how they facilitate transference, Ian responded;

> "in the context that I've worked in you're not there [to improve] high end performance, you're basically there to ensure they are having a good time. [In] a positive experience you gain all these other skills like confidence and social skills cos you're enjoying the moment, so for me that's the thing you want to assess, are people enjoying it" (Ian, FG1)

Asked if enjoyment forms the primary discussion point in subsequent debriefing, Ed and Tim both agreed that it was. Whilst in the context of working as outdoor instructors during the summer work experience that the students refer to, the assumption that transference will occur as a result of being enjoyable, can as previously discussed overshadow the need for carefully planned objectives to be delivered (Tozer, Collins & Hathaway, 2011). Five years on and calls for outdoor learning to be formally adopted (Kinver, 2016) illustrate the need to continue developing pedagogical strategies that optimise outdoor learning opportunities.

Since "reflection on one's thinking processes appears to promote transfer of skills" (Perkins & Salomon, 1992, p.5), it seems logical to infer that any conceptual discomfort with 'intrapersonal' reflective practice will, by definition result in similar discomfort with attempts at facilitating reflective practice. This discomfort is acknowledged as 'cognitive dissonance', experiencing conflicting cognitions between belief and behaviour (Festinger, 1957) such as the belief that one is unbiased, against contradictory behavioural evidence (Stone & Cooper, 2001). Whilst cognitive dissonance is credited with stimulating the reflective process (McFalls & Cobb-Roberts 2001; Thompson *et al.* 2010), the stimulation is felt to be unpleasant, as a result practitioners are driven to

restore ‘cognitive consistency’. The evidence within this study indicates that novice reflective practitioners experiencing cognitive dissonance may resort to avoidance or dismissal strategies that restore cognitive consistency, such as Ian’s comment “I know how to reflect I’m not an idiot” (Ian, FG1).

6.5 Reflective pedagogy

The pilot study suggested that for third year students, 77% prioritised interpersonal over technical skills development;

> “I reflect on my technical skills ‘in action’ with critical friends and use a reflective journal to explore personal attitudes and attributes, attempting to construct ‘who I am’ rather than what I do” (Paul, Q1)

However, as suggested by CF1, despite clearer explanations by year three, the passive engagement exemplified by one third year student; “it maybe sometime until I actively participate” (Joshua, Q1), indicates that for some, reflective practice is viewed as bolted on rather than embedded in practice. This perceived separation is an important pedagogical crux to overcome before a more integrated perspective can hope to be achieved. CF2 believed that engagement with reflective practice will “largely depend on how they are encouraged to [it] in a work based environment”.

The shift in priority for third years from technical to interpersonal skills development indicates a nod toward employability:

> “I see technical skills as a tick box exercise to gain a position…..anyone can gain an NGB, but it is worthless if the individual cannot communicate or have confidence in decision making” (Stephan, Q1)

To evaluate if engagement with reflective practice is passive and as a result of their perceptions of employers expectations, subsequent questioning focused on the relationship the students have with facilitating reflective practice within a professional context, such as during their summer work placements. Asked how they would promote reflective practice Ed responded:

> “I would if it was a necessary tool for them to have. I would probably say from a legal standpoint it [reflective practice] provides a lot more protection and make them see the usefulness of it. But to get other people to see that [the value] would probably be the best way to take it up” (Ed, FG1)

Ian agreed:

> “you need to come to [experience the] value off your own back as it were. I think it has a lot of value, and it should be promoted, but at the same time it might be annoying you rattling on about RP all the time, instead tactfully suggest its value” (Ian, FG1)

Tim agreed with Ian and Ed; “I couldn't go up to a peer and say I’m reflecting like this, maybe you should think about doing the same thing…. someone [has] to experience [the value for] themselves” (Tim, FG1).

This perspective tries to remove the accountability of needing to promote reflective practice, in favour of reflective self-discovery, which as the literature explains has both conceptual and applicational difficulties (Jewitt & Hickman, 2013). However, this rather contradicts responses when asked if they would have discovered the value of reflective practice without the degree course. Tim was adamant he wouldn't have, Ed wasn't sure and Ian commented:

> “as much I didn't like it in the first year, having it forced upon me so I have to do it has been beneficial, it's been a bit like pulling teeth sometimes, you just need to get over the annoyance of it before you can see the value in it. It's probably been down to a bit of arrogance that I don't need to do this, I know how to reflect I’m not an idiot” (Ian, FG1)

Ian was asked if he thought he would have intuitively discovered reflective practice, he responded:

> “yes, I don't think I would have labelled as such, but ... you can see the way the governing bodies and log books are set up so that reflective practice is inherent within the system, [the degree] perhaps shortens the journey but in the long term you would come to similar conclusions without having to focus directly on it” (Ian, FG1)

All the students agreed that the value of reflective practice cannot be taught, rather it needs to be discovered. However, the students did not express a consensus as to how best to achieve this. As previously discussed, reflective practice is known to be vague, difficult to conceptualise and apply (McLaughlin, 1999; Jewitt & Hickman, 2013). This

study highlights that confusion still remains. Ed in particular refers to reflective practice as ‘legal protection’ discussing how generating a thorough account of any unfortunate incidents provides protection should any legal ramifications arise. This account is what Hickman and Collins (2013) describe in their 4i model of critical reflection as ‘information’, the first of a four stage process that goes on to evaluate inference, implication and intent. Therefore, simply writing a detailed account of ‘information’ cannot be considered ‘reflective practice’.

By Ian’s own admission, his perspective may taint how effective the reflective process is for him “[its] arrogance that I don't need to do this” (Ian, FG1). Tim, is far more positive about the process “from what I’ve learnt so far, it’s really useful [as it helps] me to figure out what to do next” (Tim, FG1) and although “the assignments are like the gateway for me to do it ... I have been doing it on my own as well” (Tim, FG1).

This evidence suggests a range of conflicting opinions, cognitive biases and heuristic traps are at play, creating barriers that prevent a connection with reflection. It is inferred that heuristics have influenced the shift in third year’s attitude. For example the social proof heuristic has a powerful influence over decisions if we are uncertain but our community of practice is convinced. Combine this social proof heuristic with a need to feel the value for engaging with a degree in the first place you arrive at a commitment heuristic and a deeply rooted desire to appear consistent with our public image of choices, beliefs and opinions (Aronson, 1999).

6.6 Conclusion

It is clear that for the majority of students at the onset of their career, developing technical proficiency is of the highest importance. This is reasoned threefold; first, they simply enjoy ‘doing’, second, the skills that determine employability are predominantly practical and third, technical skills remain tangible, amongst the more ambiguous nature of reflective practice. However for third years the distinct priority shift toward inter-and intrapersonal reflection whilst on one hand indicates a growing academic maturity, must also, given responses such as [engaging with reflection] “when I have to” must also be viewed with a degree a scepticism. The main concern being that the shift is forged from a belief that as a soon to be graduate ‘*I should be thinking this way’.* This as CF1

suggested is centred on attitudes and values and provided the direction of questioning for study two.

A common catalyst for engaging with the reflective process was put down to assignment requirements. When asked how they engaged, many described the process of how they *captured* information, without explaining how the captured information would be subsequently used to inform decision and sensemaking processes. This is not altogether unexpected as we know that for many the process of 'doing' something with the captured information is often regarded as vague and difficult to conceptualise. However, it is perhaps not the academic challenge that is the problem, but instead having the curiosity required to challenge established preconceptions. To take Ian's comment "it's probably been down to a bit of arrogance that I don't need to do this, I know how to reflect I'm not an idiot", infers frustration with being asked to look back, not frustration with how to. Since curiosity is by definition concerned with aspiring to know more than is already known, it seems logical to deduce that by stimulating the critical curiosity needed to engage with reflective practice, we are in effect enhancing the motivation to pursue it.
Many of the students in this study described reflective practice as a future intention, claiming that at their current level of thinking and limited 'bank' of experiences, it's pointless anyway. There is danger that this perspective can create a self-fulfilling prophecy which is fuelled by a need to acquire the technical skills that largely determine immediate employability. In addition, the freedom to engage with different reflective approaches may present something of a double edge sword that fails to provide the conformity needed to guide novice learners through the notoriously difficult process.

When asked to describe their preferred methods of reflective practice the students leant towards the less structured and more instinctive conversational approaches that critical friendship affords. In particular the appreciation that dialogue provides the freedom to naturally bounce ideas around to build a more accurate picture.

The undergraduate courses described by the students in this study are logistically organised and academically underpinned by residential and seasonal work opportunities which, is as CF1 describes, akin to the continual process of planning, doing and reviewing as ingrained in teacher training. Many students work as seasonal outdoor instructors over the summer in global multi-activity centres offering 'taster' sessions to school and youth groups. As discussed in the literature review, these 'camps' provide an

effective platform from which to facilitate ‘transferable learning’ that raises pupils' personal, social and emotional development.

However, it is evident that a great number of assumptions are made about how these experiences transfer into real world settings. Since the notion of transference is underpinned by the effective use of reflective practice, it was seen as a valuable opportunity to dig deeper into the applicational understanding of the participants. Ian felt that transference ‘success’ could be measured on a case by case approach but that bold statements surrounding confidence and trust following a singular activity would be tenuous. Ed believed that transference is easier if the group recognise it for themselves, in essence eliminating the need for reflective facilitation. All participants felt that their main job was to ensure enjoyment and a bonus if transference was gained. It was inferred that despite recent calls for outdoor learning to be formally adopted, using reflective practice to transfer and assess understanding, remains at best passive and side-lined and at worst neglected altogether.

The evidence indicates to a shift in perspective for third years, away from developing the technical skills of tying knots and throwing rescue lines, toward the development of inter- and intrapersonal skills underpinned by effective reflective practice. Whilst all the student participants agreed that the value of reflection practice must be intrinsically inferred, there was no conclusion on how best to achieve this. Equally, clear and present confusion and frustration with reflective processes, influenced from by a range of cognitive biases and heuristic traps created barriers to students’ meaningful engagement. Reflective practice can be seen as mangled in its transfer from theory to practice as the theories from which the ‘outdoors’ have based their studies were first developed from other professions such as business and social work. This has meant that ‘meaning’ can easily become lost in translation from the less complex ‘classrooms’ where traditional reflective practice has been developed.

Although it can certainly be argued that to some degree we will all organically develop our own reflective ability, which in the main is conducted within the community of a safe, non-threatening and non-critical environment. The primary fact remains that for an industry dominated by outdoor education, possessing the skill to make the implicit - explicit, ensures that transference becomes an issue of calculation not assumption.

Putting theory into practice and practice into theory is the role of the pracademic outdoor practitioner. If 'theory' serves no purpose other than to initiate a whimsical exploration of philosophical meanderings, it will only be packed in their 'daysack' once, whilst theory that demonstrates potential, becomes moulded to suit both user and situation. Since the process of testing the applicational value of theory can only be done 'in the field', work experience forms a central and vital stage of each undergraduate practitioners development. It is therefore proposed that underpinning the third years shift in perspective is in part due to the real-world demands explored during their work placements.

7 STUDY TWO: THE EMPLOYER VOICE

7.1 Introduction

The overwhelming shift in priority away from the technical skills of tying knots toward the facilitation of inter-and intrapersonal growth, demonstrates undergraduate students' growing levels of sophistication. However, study one has highlighted that this transition can be turbulent and littered with heuristic traps and cognitive biases. Study two aims to build on these findings by asking employers what they think about the students' responses and what industry should be doing to help.

Following the analysis of study one, 28 lower-order themes were generated and consolidated into eight higher-order themes as detailed in **app.7**. At this point critical friends were employed again to reduce this number of higher-order themes down to four (highlighted in green in table 1, **app.8)** in order to give justice to each theme, given the constraints imposed by the word count of this project.

The remainder of this chapter (**13.2**) explores these four themes and how they have influenced the subsequent collection of a purposive sample focus group and interviews:

1. Metacognitive strategies
2. Cognitive dissonance
3. Critical Friendship
4. Pedagogical strategies

A questionnaire was sent electronically to the University's Outdoor Programme Manager to be distributed amongst the freelance staff employed by the University to deliver Undergraduate 'Frontier Education' courses. The 'employers' were first asked to provide a short biography of their industry experience; job title, time in industry and area of expertise - an attempt to understand *who* they are not necessarily *what* they do. **Tab.1** provides this overview. This was seen as a good method of capturing a sample of responses from experienced members of the outdoor community from which to compare against the student responses and inform the subsequent and final layer of interview data from.

Tab.1 Employer biography

Name	Job title	Time in industry	Area of expertise
Jamie	Deputy head of centre	25 years	Academic, kayak and climbing coach, expedition leader.
Jessy	Head of Outdoor Education Service	25 years	Management now, paddler back in the day!
Jim	Head of Centre	20 years	Canoe/kayak coach, mountain instructor, mentor to staff.
Walter	Health & Safety Manager	25 years	Outdoor educator/field trip leader
Jon	Operations Manager	16 years	Expedition Leader, Safety and Leadership Consultant & Trainer

The questionnaire was used to establish an employer perspective on how the students' reflective development during the course of their undergraduate study would best be engineered to suit the needs of industry. Employers responded to six questions concerning:

1. The value of RP in the industry
2. Intrinsic vs extrinsic transference
3. Measures for RP competence
4. The role of HE in developing RP
5. The role of industry in nurturing RP
6. Improving the synergy between industry and HE

The final interview took place with 'Jon', a Leading Practitioner of the Institute for Outdoor Learning and former operations director of an international educational expedition company.

Jon was asked to comment on:

1. The skills needed to facilitate meaningful outdoor experiences.
2. How cohesion with RP could be achieved amongst stakeholders.
3. Developing, promoting and supporting critical friendship and mentoring.
4. Assessing RP competence.

Responses from both study two questionnaire (**Q2**) and study one interview (**I2**) are used alongside each other to contextualise the exploration of the four themes under investigation in this chapter.

7.2 Metacognitive strategies

CF1 identified that "students would need to learn [metacognitive] techniques as … [it is] not a skillset people will arrive with at University from School" (CF1). CF2 also agreed that learning metacognitive strategies is essential since they allow the "process and negotiat[ion] [of] thinking [which] is key to teaching and learning". Whilst a philosophical debate on the purpose of schooling is beyond the remit of this research, it is perhaps important to understand the current educational focus;

> "shaped, down to the last detail, by the requirement to prepare for examinations… not on open-ended discussion or enquiry, but on learning 'what we need to know' to succeed in whichever examination is next on the horizon" (Taylor, 2016).

This is important to understand as any subsequent discussions on reflective pedagogy must be underpinned by where learners have come from, before new learning goals can be effectively mapped. In this case students have spent a large part of their academic life being 'drilled to deliver' in accordance to the demands of standardised tests. This didactic approach leaves little room to explore meaning (Leacock, 1969) and interpret abstract principles (Ross & Kilbane, 1997), and arguably underpins why 87% of lecturers are concerned that 'teaching to the test' heavily contributes to students being underprepared for undergraduate study (Suto *et al.* 2012).

In this study outdoor employers were invited to comment on where undergraduate students in the outdoors *should* be headed. When asked what role reflective practice plays within the outdoor industry, one employer explained:

> "reflective practice has a key role within the outdoor industry, along with core educational interpersonal and technical skills in primarily asking the simple questions; what, when, how and why? Why am I doing this? Why are my participants doing this? What and when are they learning and how can they improve/understand etc? This can lead to improved and profound understanding of student centred developmental learning" (Jim, Q2).

This perspective considers reflective practice important on both sides of the 'teacher' and 'student' coin. By understanding how to analyse and evaluate from *both* perspectives brings 'wisdom' by peeling away the layers of an experience in an attempt to reveal a deeper and more meaningful core. Another employer values reflective practice as it "requires students to critically evaluate what they do regularly, but probably more than the detail of exactly what they did, it's more thinking about the why they did it" (Jessy, Q2). This 'Socratic' method relies on a complex interplay of questions, content and process that emphasise high-level cognitive reasoning and "induces independent problem-solving skills" (Kearney & Beazley, 1991).

In contrast another employer points out that "not all learning has to be constantly analysed. It is important to allow students to internalise their experiences sometimes without constantly externally interpreting them" (Jessy, Q2). This reignites the longstanding debate as to whether the mountains can speak for themselves to which one employer commented; "[the mountains] need to be transferred to gain the most benefit. To most people they at most give a small whisper" (Jamie, Q2). This perspective was reinforced by another employer:

> "what you do in [the mountains] and get from them depends on the facilitator's guidance. Transference is part of the whole experience and should be omnipresent. Without the experience reflection and transference, the experience is diluted. You've left half of your lesson on the hill!" (Jim, Q2)

This debate in many ways characterises the tension with outdoor learning. Arguably all of the employer's responses are completely correct. Not *all* learning from *every* experience can and should be made explicit. However, guidance from the 'learned' to the 'learner' should ensure that everyone can walk off the hill better equipped to make sense of what they have learnt. The facilitator's role is therefore not perhaps to mark a

set of learned outcomes but to create an environment which is conducive to both internal reflection and explicit discussions, creating a climate that is experientially led, helping learners to draw their own conclusions (Overholser, 1993). As one employer stated “a reflective practitioner is aware of this as soon as the session begins. Balance and appropriateness” (Jim, Q2).

The responses from Q2 provided the direction of questioning to Jon, the former operations director of an international educational expedition company. Asked what skills facilitators need to develop in order for learners to infer meaning during outdoor experiences?

Jon responded;

> “we need leaders to have an understanding of the educative process and the transfer of learning, being able to create learning opportunities within the context of an expedition setting” (Jon, I2)

There is ‘readiness’ for the transfer of learning from adventure using ‘isomorphic framing’, where the climbing wall holds, harness and rope provide metaphors for opportunities or challenges in life (Ali, 2016). However;

> “it is about leaders having the skills to transfer learning into more tangible contexts “such as [improvements in] personal admin … that receive emails from parents… as a result of the expedition” (Jon, I2)

Jon went on to propose:

> “reflective practice is a key and crucial element of any leadership position and it's the skill of having an understanding about the learning process and creating the opportunities for learning, [as well as the] usual suite of communication and listening skills that are needed to facilitate meaningful learning experiences”.

The evidence points toward two distinct developmental goals in the metacognitive pedagogy of outdoor undergraduates. The first, concerns the development of undergraduates personal metacognition, their use of learning strategies available, how and when they apply them and how they regulate, monitor and evaluate their success. The second concerns how metacognition is used within educative facilitation; not only in guiding learners to find meaning and relevance from seemingly abstract activities (such as rock climbing) into something more personally relevant and tangible. This may leave

some learners with enough confidence to attempt to make sense of seemingly abstract situations using basic metacognitive strategies.

7.3 Cognitive dissonance

CF1 postulated that in order to make a professional standard of reflective practice ... you have got to deal head on with the fact there are people that don't buy into it. CF2 agreed "if you don't deal with barriers, you allow them to exist". It is evident, given one such response; "an able reflective practitioner is as important as an, SPA, ML, or BCU coach" that reflective practice is undoubtedly valued. However, as another employer states it remains "hard to find a measurable indicator of an internal process" (Jessy, Q2) which perhaps adds fuel to why some people don't buy into it. Another employer described the outdoor industry as "a spectrum of operators delivering a very wide range of activities which are so diverse that they are not cohesive" (Jamie, Q2). This lack of cohesion may also be to blame for a lack of solidarity in championing the cause for reflective practice. He went on to note:

> "The level of knowledge of a significant number of employers of reflective practice is poor to non-existent. Employers need to do more [but] universities are in a good position to lead on this, they need to bring undergraduates to a position where they graduate as instructor practitioners" (Jamie, Q2)

Yet there remains unimpeachable support for reflective practice, suggesting "it can improve client experience and aid in the continual development of essential dynamic risk assessment skills" (Jamie, Q2).

Another employer stated:

> "as an outdoor instructor you are often working away from other instructors with your own group, therefore it is essential that you constantly evaluate your own sessions and judge why some things work better than others. Career development and growth … depend[s] on good reflective practice" (Jessy, Q2)

A notion first presented by Donald Schön over thirty years ago.

Reflective practice cannot be headlined with statistics. Its nature is to be interrogative and personal, the polar opposite of the 'teaching to the test' approach that many novice

practitioners at the early stage in their career are most accustomed to. For many, confused and uncomfortable with trying to process ‘grey areas’ can trigger ego defence mechanisms that restore cognitive consistency to avoid trying to understand what Moon (1999 pp. 23) describes as ‘complex or unstructured ideas for which there is no obvious solution’.

Consider a top roping session (the action) with a group of school children (the student) at a crag in the Lake District (the environment). The instructor leading the session (the coach) is doing so for the first time since passing their SPA (the self). These variables all need making sense of by the coach to ensure the session delivers its objectives (**fig.5**). For this example assume that the session objective is simply to have an enjoyable and safe climbing experience. Additional objectives would clearly present additional variables. So if one of these variables changes, for example it starts to rain or one of children starts to misbehave, then a dynamic response is required in order to steer the session back to being safe and enjoyable. An algorithm for every response; if X happens proceed to Y, cannot be taught, there are simply too many. Even the standard and emergency operating procedures designed to be as algorithmic as possible still require interpretation which ultimately reinforces the need for reflexive management.

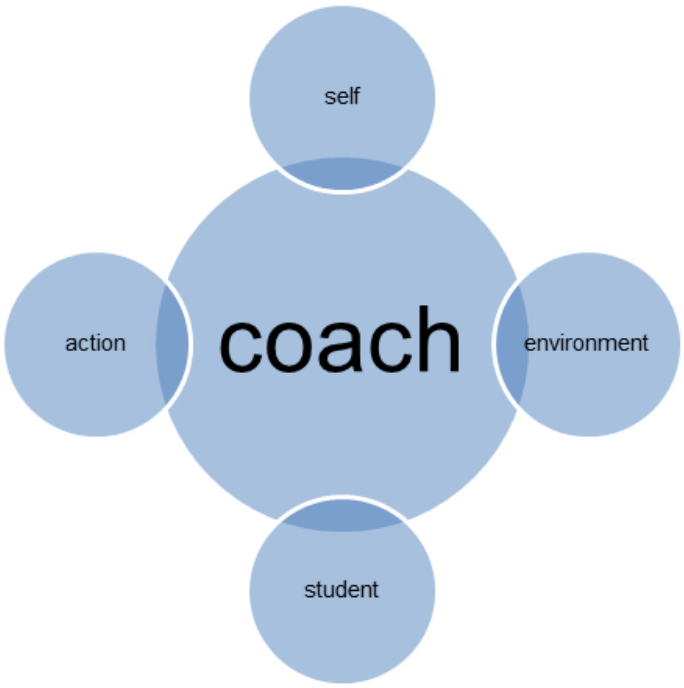


Fig.6 Coach centred leadership

It is conceived that reflective cognitive dissonance is the manifestation of repeated fractures within several stages of the reflective process, cliff-hangers at critical stages of understanding. The question then is a matter of support, mentoring and critical friendship to help splint the fractures and repair understanding. This arguably requires a synergy amongst stakeholders that employers were asked to comment on how they would improve; “maybe choose to work with employers who adhere to certain standards [such as] AHOEC Gold Standard centres” (Jessy, Q2). This would naturally follow a path of least resistance by pursuing a stronger more synergistic relationship with stakeholders that all share a similar vision to model best practice.

Since the argument leans toward a collaborative approach to embrace and nurture reflective practice development, Jon was asked how reflective practice cohesion could be promoted and conceptual barriers clarified?

> “Reflective practice means different things to different people, [which is ok, but] since the people in a position to guide others are not sure …. there is no cohesion at the top. The facilitators oversee[ing] the trainees, struggle also with reflective practice so it becomes self-fulfilling, [and] no one really gets it. The IOL scheme aims to ‘establish a degree of commonality ... [and] works. It certainly did for me … [I learnt] reflective processes that I hadn't come across before … the lessons are there if [you] can draw them out” (Jon, I2)

“The IOL scheme is a good starting point” (Jamie, Q2) and has potential as a quantifiable target for practitioners to aim towards achieving reflective practitioner status. However;

> “the people that set up the [IOL] scheme have moved on and there is now a new generation there who are now trying to rethink it … and make reflective practice about professional accreditation and chartered institute status” (Jon, I2)

Whilst the IOL or similar schemes may help to add extrinsic motivation they may also provide clarity and guidance which may actually help to prevent reflective cognitive dissonance. Future research in this area may help to clarify this.

A plethora of variables are to blame for the conceptual and applicational reasons why many users don't buy into and experience cognitive dissonance with reflective practice. However, in the unstable ‘outdoors’, unexpected changes in weather conditions, a twisted ankle or the volatility of intrapersonal shock half way up a climb, reflective practice provides practitioners with a structure for thinking and the tools to respond to change. However, despite overwhelming support for reflective practice, the evidence

points toward a lack of cohesion amongst industry stakeholders, as to ways to clarify, model and guide best practice, namely who should be doing what and how. A strong case is presented for employers to establish supportive environments underpinned by mentoring and critical friendship.

7.4 Critical friendship

This study has repeatedly reported that critical friendship provides invaluable support for the reflective outdoor practitioner. Defined as a “trusted person who asks provocative questions, provides data to be examined through another lens, and offers critique of a person’s work as a friend” (Costa & Kallick, 1993 p.50), critical friendship provides a pragmatic approach to reflecting in the outdoors when other more ‘conventional’ methods are impractical. CF1 commented; “critical friendship is vital as an external check on your own reflection” and as Ian reported also provides “a different perspective and ... broadens your horizons” (Ian, FG1). CF2 supported this stating; “it is important to learn from people challenging you and you know how to challenge others perspective professionally. That is the real world”.

Whilst evidence supports the notion of critical friendship for outdoor practitioners (Hickman & Eaton, 2011), successful ‘friendships’ can be seen to hinge on negotiating variables centred on attitudes and values and the initial motivation to engage with them. However, the examples of reflective cognitive dissonance given in this study so far illustrate that critical friendship cannot be expected to solve all the conceptual and applicational problems associated with reflective practice (McLaughlin, 1999). However, early on in careers and nestled within a carefully synergised package of support, critical friendship may yield potential in guiding novice practitioners across the bridge from knowledge to understanding, a notoriously difficult process (Jewitt & Hickman, 2013).

The need for “plenty of early support ... with an assigned mentor” (Jessy, Q2) remains clear, but as reflective confidence grows, formal support, as described by CF1 “happens more frequently, less formally” and becomes as Ian prefers “more valuable [and] less structure[d]” (Ian, FG1). However, as another employer argues, the success of this support rests on “developing an environment where [everyone] evaluates each other’s practice [and] thinking process[es]” (Jessy, Q2). Another employer reinforced this

arguing the “need to create an ‘ethos’ that helps and supports in the development of reflective practice” (Walter, Q2).

These reports raise the question of ‘reflective support’ in the bigger picture, again fuelling the argument for a greater synergy amongst stakeholders. It is acknowledged that everyone is to some extent ‘reflective’ to a lesser or greater degree (Posner, 1989). This infers potential for reflective development which Ingleby and Tummons (2012) pose can be achieved through a process of mentoring. Lawy and Tedder (2011) agree, however in the same breath outline that there is no ‘best practice’ model for mentoring. Whilst the term is a well-known act between two people, the mentor and protégé, Haggard and Turban (2012) identified over 40 definitions, ensuring that a consensus as to its function remains highly subjective. What is clear is the ‘traditional process’ lacks structure and delivers a highly inconsistent outcome that is primarily influenced by the motivations of the mentor (Allen, 2004). Jon was asked, what industry could do to promote and support critical friendship and mentoring;

> “I agree that the idea of coaches and mentors providing critical friendship is crucial, I also think that their experience should be ‘giving back’, having mentors that are willing to give back, and I think that organisations who are thinking that way, ... are trying to … develop leaders for the future...has to be encouraged and supported” (Jon, I2)

It was felt this response implied that critical friendship could only be offered by those with extensive experience. Jon was asked to clarify whether people could be trained to act as critical friends;

> “Yes, but ... when people hear the word training they have mixed reactions, how much time will this take and will it add to my job etc. … [however] I think it needs to be embedded into practice right through into senior positions … [and] part of the process of development within NGB’s. I don't think there is a problem embedding it in careers almost at every level” (Jon, I2)

Jon was asked if embedding critical friendship and mentor ‘coaching’ could be extended to undergraduates with little or no experience in the industry.

> “I don't think there is any harm. The best thing about [outdoor related degrees] ... is it is all about portfolio building, [which is relevant as] you build a career based on your experience as much as you build your NGB’s and theoretical standpoint. Having it embedded in the course and [developing] understanding [prepares

them to] be in a position at some point where they [can offer] critical friendship or even mentor someone else at uni" (Jon, I2)

This perspective continues to build support for the notion of developing pedagogical strategies that 'train the trainer'. Whilst not all experiences will set out to explicitly isomorphically frame 'life's challenges' within the context of rock climbing, or attempt to build metacognitive competence through canoeing, the interpersonal relationship between 'expert and novice' will inescapably require a degree of knowledge transfer if only to enhance safe practice.

Despite the breadth of employment options across the sector, the industry fundamentally remains centred around building meaningful and effective interpersonal relationships. Therefore the dominant driving force for the development of industry newcomers must be to prepare them to enter their 'community of practice', the "common conceptual framework for action" (Bain, Lancaster & Zundans, 2009, p.336), with the core reflective skills needed to engage with professional practice (Walkington, 2005). For new members joining the community this presents an opportunity "not to learn from talk as a substitute for legitimate peripheral participation; it is to learn to talk as a key" to full engagement within the community (Lave & Wenger, 1991, p.109). Critical feedback is therefore viewed as central to successful engagement within this process (Cushion, 2004), in terms of both current understanding and future directions of the industry (Daniel, Auhl & Hastings, 2013).

7.5 Pedagogical strategies

CF1 suggested that to achieve reflective practitioner status, there "has to be a standardised framework or measurement [as to] how good they are as reflective practitioners". This infers that exploratory research used to deepen perceptual understanding, has to be translated or aligned into more quantifiable and institutionalised language in order to enhance its value beyond that of 'second grade' knowledge. CF2 disagreed with CF1 believing that "it's about ensuring that they have 1) the experiences to reflect on, 2) something to reflect with and 3) people to discuss what they learnt with".

This does not mean to suggest that reflective practice should be devoid of any conformity or regulation. Importantly, reflective practice becomes a valid and reliable method of

analysis through the process used to drive and underpin the enquiry. For example, one employer described how; “I would recommend the use of a log book/diary/journal of reflections, [combined] with peer and mentor support” (Jim, Q2). This approach, allowed Paul to “construct ‘who [he is]’ rather than what [he does]” (Paul, Q1), gave Ian the opportunity to “look back on things for specific examples” (Ian, FG1), and provided Ed with ‘proof’ in the event of “a legal … or research situation” (Ed, FG1).

One employer suggested an alternative pedagogical strategy:

> “enable students to use [reflective practice] in a facilitative role. This is easier when there is a visual skill involved e.g. in paddling and harder when it is meaningful life experience. More focus could be placed with this aspect and how it may be developed to enhance the learning experience and the applications it may have” (Jamie, Q2)

This approach also supports CF1 who argued that “the only way of truly testing if they do it [reflect] in practice is to observe them in practice”. The notion of delivering reflective pedagogy by ‘teaching the teacher’ how to facilitate reflective practice, may have substantial merit. Reflective practice is as much about developing applicational judgement as it is about developing theoretical understanding, without one, there is no virtue in the other.

One employer suggested:

> “for some people it is off-putting to have to talk about what happened during the session every time. The instructor needs to judge how much, and when they review what happened. They also need to recognise when some really powerful (internal) learning has taken place, and leave the person to process it in their own way” (Jessy, Q2)

Triangulating our position, reflective pedagogy must be more supportive and mechanistic early on in careers. The classic approach of reflective training by first recording information through a journal and subsequently ‘testing’ the virtues, pitfalls and preferences of various methods of reflective practice allows for theoretical understanding to develop. With increased development and sophistication, the ‘stabilizers’ can be removed in favour of more dynamic approaches such as critical friendship. Throughout this time reflective practice development should be ‘mentored’ to ensure that the process remains valid and reliable and an appropriate depth and that breadth of evaluation is consistently achieved. However, like reflective practice, mentoring is not expected to be

a skill that undergraduates will naturally possess and will therefore also need to be developed. In addition, by adopting and developing a peer mentoring system, for example third years mentoring second years, develops applicational judgement and facilitation skills of reflective practice, mentoring and critical friendship, all described within this study as integral aspects of an outdoor practitioners employability. As Einstein reminds us “if you can't explain it simply, you don't understand it well enough”.

Jon was asked whether reflective practice should, and if so could be assessed in industry:

> “It's a tricky one, my gut feeling is we shouldn't be assessing it to hit educative levels, but I think there is an element of working with people to help develop it over a period of time, I don’t think it’s something we can assess straight away against levels … [however] there are probably benchmarks that can be assessed against, but not in a formal sense” (Jon, I2)

Asked to expand on the notion of benchmarks, Jon replied;

> [they should assess] “personal ability to reflect and the depth and context of their reflection [and] how they [use reflective practice] to help them … [in the context of] critical friendship, peer assessment, feedback and mentoring” (Jon, I2)

Jon went on to note that the role of the facilitator is to add breadth and depth to thinking and;

> “not allow it to just happen on one plane [by using] challenging questions. Outdoor learning is just one part of a much broader industry in some ways. You can guide tourists who just want to go up a mountain and have an experience. But on the other hand you could be doing exactly the same activity with a group of young people but turning it into a learning experience. So you need to have the flexibility to be able to switch between” (Jon, I2)

The evidence suggests that pedagogical strategies should aim to equip each facilitator to become what Van der Heijden (2002) described earlier as a ‘flexpert’. This ultimately affords practitioners with the skills to infer and respond to situations which rely on a range of specific skillsets. This applied metacognition is underpinned by the need to develop both intrapersonal and facilitative reflective competence. Despite the need to teach, nurture and support reflective practice, contemporary reflective pedagogy appears as vague and as subjective as the process of reflection itself, caused in part due to a lack

of synergy between stakeholders who are central to justifying its value, promoting its application and nurturing its development.

7.6 Conclusion

The second study aimed to build on the findings of study one by asking employers what they think about the student's responses given in study one and what industry should be doing to help.

Study two concludes that the didactic approach of contemporary education has left learners transitioning into undergraduate study ill prepared for qualitative based enquiry and the skills to draw meaning from abstract principles. Given the centrality these skills have for contemporary employment within the outdoor industry, developing the metacognitive skills needed to be able to 'infer and respond' must be seen as fundamental objectives within outdoor undergraduate programmes. However, as the study reveals, there are in effect two distinct skillsets each represented by one side of a metacognitive 'coin'. The first side, heads; refers to *my* personal reflective practice and how *I* challenge *my* perceptions about *my* world. On the flip side, tails, is concerned with how *facilitators* teach reflective practice to *others*, enabling them to challenge *their* own perceptions about *their* world. Although both sides of the same coin, 'tails' hinges on being able to effectively draw on teaching and learning strategies in order to question others *what* they know to be true (ontology) and, *how* they know what they know is true (epistemology) in order to successfully develop their own metacognition.

The study understands that new undergraduate students are unlikely to arrive at university with any reflective skillsets. It also understands that for many novice practitioners, reflective practice is a confusing, artificial and laboured afterthought. It is evident that the first step in becoming reflective is to experience its value before any expectation of it becoming omnipresent within their own practice. Arguably the first stage in this exploration is to explore the difference between 'breadth and depth'. These form the axes of reflective enquiry and reflective facilitation by examining the topic of reflection or an individual's reflection against your / their circle of influence. It has been suggested that facilitating reflective practice may help with conceptualisation due to forced simplification and that perhaps more focus could be placed on this during undergraduate

study. Explicit facilitation also allows others to observe your implicit understanding, providing the basis for feedback, critical friendship and mentoring.

Employers have called for leaders who can create and transfer meaningful learning opportunities within the context of dynamic and unstable environments, in addition to the pre-requisite technical skills associated with activity delivery. The role of the facilitator therefore is less concerned with specific learning outcomes and more focused on creating a climate conducive to enquiry, reflection and sensemaking. However, the lack of clarity with this approach has frequently highlighted barriers in terms of its conception, application and assessment. It has been argued that this confusion and discomfort have fuelled a self-fulfilling prophecy as to why so many people don't buy into reflective practice.

This problem appears to extend beyond that of the facilitators, being equally prevalent amongst a significant number of employers who also struggle with the ambiguity of reflective practice. Anecdotally there appears to be a distinct lack of cohesion amongst stakeholders championing the cause beyond the lip service of a five minute debrief. Universities were highlighted as being in a good position to lead on this. Given this responsibility, it is arguably crucial that undergraduates are trained not only to be reflective practitioners and facilitators but also trained to offer critical friendship and mentoring within the organisations they work for. It was also suggested that perhaps the easiest way to build momentum for gold standard practice would be to follow a path of least resistance with stakeholders that share similar values and expertise in an attempt to become a beacon for others to follow.

Critical friendship featured prevalently throughout study two, considered not only to be an effective external check on reflections, a means of challenging preconceptions and broadening horizons but also in helping to create a climate of support. Whilst many traits may be used to describe the perfect critical friend or mentor, the lack of role clarification forces us to rely on the motivations of the individuals tasked with supporting professional development. Despite this a wealth of responses has indicated to the importance of good support from an assigned mentor, especially during early career development. However, whilst there is little doubt within educational literature that support is more effective when individualised, the increased freedom has the potential to fan the flames of cognitive dissonance. This perspective presents an argument for undergraduates to be ‘trained’

as critical friends and mentors, allowing themselves to take the lead over the mentor and steer the support they need in a mutually beneficial direction.

Critical friends and mentoring are therefore proposed as invaluable across and throughout outdoor practice at every level, in essence creating a community of practice that is open to challenge, development and support. It was suggested that since degree programmes form a strong foundation from which practitioners can build their professional portfolio, dispensing and receiving critical friendship and mentoring will form an integral part of the communities of practice of the future. Adding further support, despite much speculation as to what skills will be required for future employability, inter- and intrapersonal skills are considered almost guaranteed. It therefore seems logical to infer that for those trained to develop, nurture and support the growth of these skills, position themselves as very employable.

The aim of the second study was to present the student voice to industry employers and investigate implications for industry. In this, the second study has achieved what it set out to do. Study two makes the following observations concerning the reflective development of outdoor undergraduate students:

1. Two distinct angles within a reflective curriculum:

   i) The development of the intrapersonal skills needed to 'infer and respond' to the dynamic situations that occur whilst operating as a practitioner within the outdoors.

   ii) The development of interpersonal and facilitative skills that draw on teaching and learning strategies. This targets the reflective development of others during outdoor experiences and serves three distinct purposes; first to transfer and create meaning from experience. Second to develop practitioners own understanding through the process of explanation and third, enabling critical friends and mentors to observe practitioners implicit understanding.

2. Study two also highlights the important and perhaps underused roles of the critical friend and mentor in the development of the reflective practitioner. Developing the skills needed to act as an external check on colleagues'

reflections whilst challenging each other's preconceptions is argued as benefiting supportive communities of practice of the future.

An extension to the study would aim to examine how schemes such as the Institute for Outdoor Learning's individual accreditation may act as extrinsic motivators to integrating reflection within practice, adding a further layer of support and clarity and contributing to the reduction of reflective cognitive dissonance.

8 CONCLUDING DISCUSSION

8.1 Synopsis of findings

It was concluded that aim one of the study; *to characterise students' perceptions of their own reflective development during a vocational outdoor undergraduate degree*, was achieved. It was also concluded that the first aim of study two; *to discuss the implications of the student voice*, was also achieved. However, since the implications for practice; how these evolutions can be engineered within a curriculum that aims to create autonomous and accountable professionals, are discussed next (chapter **8.2**), as of this point, study two can only claim a partial success in achieving its aims.

The evidence for the achievement of the aims so far is outlined below:

Study one reported that third year students shifted their priority away from the technical skills that determine immediate employability toward the inter-and intrapersonal skills needed to enhance the growth of industry professionalism. The continued growth of the sector has magnified concerns surrounding industry professionalism, sparking calls to upskill key areas of business, organization and management. These calls have initiated and operationalized higher education institutions to facilitate academic routes into industry, causing controversy amongst some employers who favour the more traditional 'apprenticeship' of assessing technical competence. This is, perhaps, reflected by the simplistic way in which practitioner-orientated literature continues to deal with reflective practice (Davis, 2016). However, in a recent paper outlining the proposed profile of a contemporary educational expeditioner leader it was suggested that leaders must;

> “be able to reflect on, and personally learn and develop from their experiences. These skills will be fundamental in guiding others towards meaningful outcomes from their expedition experiences” (Dyer, 2017)

The chorus of support for this grows increasingly louder, and is reflected by the findings from this work. Equally, this research has emphasised that assumptions should not be made about learning transference occurring as a result of experience (Dewey, 1938). As Huxley (1932) suggests, “experience is not what happens to you; it is what you do with what happens to you”.

Part of the problem is associated with the outdoor industry defining, articulating and moderating its own concept of expertise. The risk being that any community of expertise develops into a community of ignorance if it fails to take cognisance from external agents (Leary, 2007). Smithson (2015) quite clearly explains that without openness to new, often challenging ideas, communities of practice risk the social construction of ignorance. The vexation toward graduate entry exemplifies this ignorance, especially since the agenda of employability research is to account for the ‘needs of the future’ and the potential for the skills currently under development. The central ‘need of the future’ found and explored in this project concerns reconceptualising the practitioner's role as an ‘enabler’ of inter-and intrapersonal growth. However, the didactic approach of contemporary education continues to leave students ill prepared to explore the sensemaking (Weick, 1995) and interpretation of abstract principles needed for undergraduate study.

This project has reported on reflective practice underpinning the transition from undergraduate student to successful outdoor practitioner (Gray, Hodgson & Heaney, 2011). One employer argued it to be “key to an instructor delivering the best experience to participants in all situations” (Walter) whilst the literature argued it to be the space where emergent concepts of professionalism are processed and articulated (Cooper & Stevens, 2006). However, despite students reporting that “our understanding of it is essential” (Megan, Q1), conceptual and applicational difficulties were exemplified frequently through examples of cognitive dissonance such as “I know how to reflect I’m not an idiot” (Ian, FG1). What has become evident as a result of this study is a challenging dichotomy, where students are very happy to learn how to build a belay or break out of an eddy, but less happy to learn to how to challenge their own self-concept, the first step toward independent thinking and learnacy (Claxton, 2007).

Herein lies the heart of the issue: Whilst there will always be a role in industry for specialists who guide summiteers, coach performance kayakers and train aspirant mountain bike leaders, the core role of the outdoor facilitator must not be overshadowed by an illusion about their preferred identity. Accepting that the principal role of the facilitator is to explore the educational potentiality of the outdoors and transfer its 'meaning' into something more personally relevant to learners, places learnacy inherently within each experience and establishes the need for reflexive facilitators.

Reflexivity is defined as an introspective process (Ryan, 2005) that reflects on and critically evaluates one's own reflections, particularly in relation to working with uncertainty (Parton & O'Byrne, 2000). This places the 'facilitator' as the researcher, introspectively investigating their interaction with, and impact on, both learner and environment. Therefore, if practitioners cannot engage with reflexivity, there is no chance of them being able to teach reflective practice to clients in educational settings, thus weakening their effectiveness in any kind of educative role.

This research has sought to propose how reflexivity can be developed during undergraduate study. It is argued that the first step in this process is for learners to adopt the perspective of both consumer and provider of reflective practice. However, the reluctance "I would if it was a necessary tool for them to have" (Ed) and "you're basically there to ensure they are having a good time" (Ian) exemplifies a reluctance to engage with providing reflexive education. This facilitative reluctance is arguably perpetuated by a reluctance to engage with personal reflexive processes. It was argued that the development of reflexivity could best be achieved by a network of support in the shape of critical friendship and mentoring within communities of practice and expertise. At the same time, the developing reflexive skills would prevent a critical disability (Greenleaf, 2002) from occurring within the same communities of practice and or expertise by undermining the totalitarian ego through the same critical friendship and sensemaking processes. In conclusion, developing critical friendship and mentoring skills during undergraduate study offers great potential for the advancement of understanding, since the critical friend learns more about reflective practice than the reflector themselves (Swenson & Sims, 2000).

8.2 Implications for theory and practice

In theory, theory and practice are the same. In practice, they are not (Anecdotally attributed to Albert Einstein).

Fundamentally distinguishable as abstraction (theory) and application (practice), the tension between theory and practice has been exemplified throughout this project. Put simply, through the eyes of the theorist, theory results in practice and practice results in theory. Through the eyes of the practice, theory is abstracted practice and practice is applied theory.

However, in a vocational setting, arguably the most important objective is to establish credibility, supporting for the argument that research has its highest value when it is practice based (Giacobbbi, Poczwardowski & Hager, 2005). In addition, to avoid what Man (2007) described as a 'glass partition', where theory and practice avoid sharing expertise and resources, despite watching each other work in the same direction, this project has not pursued implications for theory and practice separately. Instead the project has attempted to encourage the interconnected and interrelated concept of knowledge.

The findings of this study reveal a number of implications for both practice and theory:

The study understands that the 'chalk and talk' approach of contemporary schooling fails to prepare students for undergraduate study (Suto *et al.* 2012). Despite a growing movement in favour of; "ditching the rote learning and focusing on transferable skills" (Alabi, 2016), currently programmes of education that aim to develop students' reflexivity must first establish students' reflective 'foundations' before any reflexive exploration can be expected. Whilst reflective practice may to some degree be learned through osmosis, Smith and Irby (1997) argue that pedagogy must move away from being the 'purveyor of information' to a 'facilitator of learning'. The study has frequently referred to three strategic approaches used to facilitate this behaviour change:

1. Through the use of a reflective journal. This method along with voice recordings and photographs were described by the students participating in this research as their default method of capturing the 'triggers' to reflective practice.

2. Employing an immediately recognisable and applicable mechanism to guide learners through the notoriously difficult reflective process (Jewitt & Hickman, 2013).
3. Critical friends and mentors offer support and guidance to challenge preconceptions and allow “ideas to be bounced around” (Ian, FG1) within communities of practice.

These approaches are centred on facilitating behavioural change; “no longer are learners seen as mere passive recipients of knowledge, but they are encouraged to be actively engaged in becoming reflexive of their own practices” (Johnson & Bird, 2006, p.640). Reflexivity differs from reflection. Whilst reflection looks back to gain insight from prior learning, reflexivity is concerned with developing a critical transparency in decision making by scrutinising multiple layers of “personal, methodological, theoretical, epistemological, ethical and political” data (Engward & Davis, 2015, p.1532). Whilst the literature associates reflexivity primarily in the context of the qualitative researcher, arguably the reflexive practitioner can, like the researcher, establish credibility (Patton, 2002) by making transparent (DeSouza, 2004) the constructs that implicitly and explicitly influence their decision-making. Schwandt (2001) defined these constructs as 1) “the process of critical self-reflection on one’s biases, theoretical predispositions, preferences” and 2) acknowledging that “the enquirer is part of the setting, context and social phenomenon he or she seeks to understand” (p. 224). However, despite widespread discussion (Doyle, 2012), questions as how to become reflexive (Karakayali, 2004; Riach, 2009; Holmes, 2010) and the limited supply of reflexive models remain prevalent. In addition, there remains the danger that an over reliance on one particular framework could jeopardise the rigor that the user is trying to establish (Alvesson & Skolberg, 2009).

Whilst selection bias may present potential concerns with rigur, a pragmatic stance would be to acknowledge that the novice undergraduate entering the conceptually murky world of reflexive practice must start somewhere. Alvesson and Skolbergs’ (2009) ‘reflexive interpretation’ model was considered a good place to start having previously been field tested evaluating teaching and learning of reflective practice in an MA Education module. In the study, Bates (2014, p.239) concluded that the model was an “invitation to engage in a reflexive practice”. The model is presented over four levels; the first, considers the collection of information that explores aspects of social phenomena and the affected

participants. This is interpretive and ‘listens’ for similarities, contradictions and gaps within the narratives (Engward & Davis, 2015). The second, considers how the information is ‘grappled’ with to develop emerging themes (Charmaz, 2006), whilst the third level considers the implications of the researcher's own sociocultural, historical and motivational agenda (Hammersley & Atkinson 1995). The fourth and final level considers the way in which the findings are communicated, or as Smaling (200) terms ‘communicative generalization’ for its transferability potential.

This raises the important question as to why reflexivity, a process fundamental to the integrity of the qualitative researcher (Boler, 2008), should also be a requirement for the outdoor practitioner. The study has argued that transfer of learning from ‘outdoors to indoors’ is essential for the efficacy of ‘experiences’ that claim to develop inter-and intrapersonal growth. So, whilst participants use reflective practice to infer their own meaning, facilitators are on hand to offer them reflexive support. This support critiques and authenticates participants reflective processes (Guba & Lincoln, 2005) by managing both parties personal biases in order for each party to better understand their own epistemological influences (Bates, 2014).

What emerges from this perspective is the need to support novice practitioners, particularly those on work experience during their undergraduate programmes, in developing reflexivity. Whilst the study has reported on the value that critical friends bring to both supporting (Costa & Kallik, 1993) and developing practice (Swenson & Sims, 2000), critical friendship must also be viewed as a ‘reactive’ relationship. Whilst this clearly has a place, the study argues that for novice practitioners, the more ‘proactive’ role of the mentor (Ingleby & Tummons, 2012) is perhaps better positioned to nurture practitioners’ reflexive development. Wanberg, Welsh and Hezlett (2003) suggest that a mentor may benefit the learner in three ways; first, by enhancing their strategic and or tacit knowledge, second, by improving their technical skills and third by enhancing their motivation and attitude.

The study suggests that mentoring is not only a critical part of work experience (Walker *et al.* 1995) during undergraduate study, but that also undergraduate study provides a good opportunity for the students to develop mentoring skills themselves (Jon, I2). Establishing a mentoring relationship between third and first year students would provide a good opportunity to develop and observe third years becoming reflexive advocates. In addition, first years receive critical support through a notoriously difficult period of

conceptualisation (Jewitt & Hickman, 2013) and also get to see third years demonstrate a willingness to develop their own soon to be graduate identity (Tulgar, 2015).

8.3 Project extension and dissemination strategy

The project has exposed and highlighted opportunities to extend the project by investigating additional interrelated themes if it were not for the limit imposed by the word count of this project. Two potential areas for future research have been selected for discussion, whilst a third is discussed as a platform for doctoral study.

The first potential area would be to investigate further motivators behind reflective practice. In particular; the accreditation scheme introduced and managed by the Institute for Outdoor Learning was highlighted as a potential means of 'quantifying' (Jamie, Q2) the reflective competence of practitioners. Given the ambiguity that surrounds reflective practice it is suggested that the scheme's 'reflective credentials' may help to establish an extrinsic motivation by pursuing something tangible. Future research in this area may help to clarify this.

The second potential area concerns Skype as a new and exciting vista for research agendas. Moving overseas halfway through this project meant that I was forced to adopt alternative means of collecting data and communicating with my supervisory team. Given the sector's opportunities for international employment, work experience and expeditioning, as a research tool, Skype provides an exciting opportunity to gather data from hard to reach groups as well as hard to reach destinations, the potential is of yet unexplored.

The third and final potential area would build on the basic research conducted within this project into a wider stakeholder case study of the perceptions surrounding employability in two primary groups: vocational outdoor undergraduates, to determine what they think employability is, and whose responsibility it is to develop; and vocational outdoor staff, asking similar questions. The focus would be to more effectively synergise undergraduate outdoor provision with employability across the sector.
Disseminating the findings of this project are explored below (**tab.2**).

Tab.2 Project dissemination strategy

Date	Method	Title	Value
09/16	**Workshop** International Award staff	Part 1: Establishing a reflective culture	Advised teaching staff on how to 'set the tone' that promotes a reflective culture
09/16	**Workshop** International Award students	Part 1: Reflective practice and the process of learning from experience	Introduced the value and purpose behind reflective practice
01/17	**Workshop** International Award staff	Part 2: Mentoring students reflective development	Strategies to support in the mentoring of IA students
01/17	**Workshop** International Award students	Part 2: Transferring meaning from one context to another	Exploring how an experience can be meaningful in contexts beyond the experience itself
04/17	**Paper (academic)** Professional Development in Education	Challenging the status quo: a case study of undergraduates professional development through reflective practice	Concerned with mentoring and coaching; professional learning; management and leadership of continuing professional development with higher education
06/17	**Workshop** British Exploring Leadership programme	Leading to promote learning from experience	Developing the educational expedition leader
09/17	**Paper (professional)** The Professional mountaineer	Reflective practice and professional development: practical tales from the field	Sent to all mountaineers at Guide, MIA and MIC level
Winter 2017	**Workshop** North West IOL Conference	Becoming and sustaining the role of critical friend	Targets educational outdoor practitioners and students across North West England
01/18	**Paper (professional)**	Reflective Practice and outdoor learning.	Targets educational practitioners in outdoor centres

	Horizons		
05/18	**Paper (academic)** Journal of Adventure Education and Outdoor Learning	Developing the next generation of outdoor graduates.	Aims to publish on social, cultural, political, ethical and environmental issues in the outdoors.
09/18	**Paper (academic)** Journal of Reflective Practice	Nurturing the reflexivity of undergraduate outdoor practitioners.	Looks at new ways of conceptualising and particularly transferring learning into applied settings.
02/19	**Paper (academic)** International Journal of Doctoral Studies	Broadening the vista: Using Skype for hard to reach research agendas.	Looks at novel research methods, methodologies and supervision in the contemporary world.

My supervisor, Dr Hickman and I have already published together and have discussed this dissemination strategy, conceived on the basis of it being considered, feasible and realistic. Whilst this firm and achievable strategy will take 24 months to come to fruition, it will target both academic and professional audiences as suggested by the recently published Stern Report (2016).

9 EVALUATION

The research sought to ‘listen’ to the student voice explain their reflective development over the course of their degree. Questioning probed the perceptions, attitudes, beliefs and values of participants, allowing the freedom to explore rather than corner the subject area. Recurring observations became themes, then discussed amidst the literature and used to inform the next layer of questioning. This allowed the ‘story’ to unfold rather than follow a set path. Allowing participants the freedom to speak about their ‘lived experiences’ justified the selection of the Interpretive Phenomenological Analysis to identify, make sense of and extract meaning from participants’ responses. Themes of recurring statements, observations, words and phrases were then grouped and assigned a colour according to their conceptual similarity. Critical friends were then employed as

a defence against my own biases when deciding which of these themes provided the most value to achieve the aims of the project.

The methods used to collect the data required to answer the research questions were forced to change midway through the project due to my relocation overseas. Bell and Newby (1977) reported that the linear research project needs to be flexible enough to cope with internal and external shocks, but not so fluid as it lose its focus. Skype buffered this shock with ease sparking its potential as a research tool for hard to reach groups.

At the point when I am just about to submit, retrospectively the journey has felt rewarding and insightful since it was first conceptualised over 24 months ago. In addition I might also be able to claim a degree of competence on both the subject matter and managing a research process. However, the self-discipline required to keep the project 'on task' has felt onerous at times and unsympathetic to the realities of being a full time teacher. Perhaps the biggest shock to the project was relocating overseas halfway through it. As a teacher at an international boarding school, my school day starts at 07:00 and when on boarding duty, runs through to 22:00. Each term is bursting with events, productions and tournaments on top of an already busy schedule, leaving little space to sit quietly and write a masters by research. However, as I write the closing sentences of the project, there is a greater sense of accomplishment given that, unlike undergraduate study, this has not been my sole agenda. At any point it would have been easy to succumb to pressures of daily life or become jealous of colleagues enjoying their half term on a beach in Bali whilst I sat typing. But, by the continuous momentum of small steps each day, this journey reaches its destination and in doing so provides the space to plan for the next one.

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11 APPENDICES

Appendix 1

Tab.3 Critical friend selection

CF	M/F	Position	Strength	Weakness
CF 1	M	International School Academic Director	• Accessible • Tasked with curriculum development	• No outdoor industry experience • Not HE related
CF 2	F	Junior School teacher and forest school specialist	• Accessible • Views the outdoors for its educative potential	• No ‘ice axe’ experience • Forest school ‘curriculum’ limits experiential potential.
CF 3	F	Freelance outdoor guide	• Industry experience • Experience managing people outside of personal comfort zones.	• Less accessible (frequently on expedition) • Less concerned with educating, more focused on safe leading.
CF 4	M	Newly qualified physical education teacher	• Accessible • Strong and fresh theoretical knowledge. • Relate to research process.	• Limited ‘outdoor’ experience. • Limited educational experience.

Appendix 2

Tab.4 Pilot study key findings

Q1. What is the value of reflective practice to your understanding of your course, and to your development as a professional in the outdoor sector?

FHEQ level 4 (1st year undergraduate)	**FHEQ level 6** (3rd year undergraduate)
• Unsure of the 'usefulness' of RP • Recognises importance without example • Consuming and frustrating • Focusing on practical skills instead • "Not used it much so hard to say"	• Allows me to grasp concepts and apply them in different contexts • Important when linking theory and practice • Benefited practical but not academic development • Vital as part of CPD especially when using critical friends

Q2. What is your current RP priority: technical development or interpersonal skills, and why?

FHEQ level 4 (1st year undergraduate)	**FHEQ level 6** (3rd year undergraduate)
Interpersonal 25% Technical 75%	Interpersonal 77% Technical 33%

Q3. How does your priority align with your understanding of professional practice beyond graduation?

FHEQ level 4 (1st year undergraduate)	**FHEQ level 6** (3rd year undergraduate)
• After graduation more emphasis is placed on technical skills • Unsure • Both technical and interpersonal skills are important	• In line with my career choice and required CPD • Toward the improvement of practice and employability • The development of interpersonal skills is vital in all career choices

Q4. What do you perceive is the relevance of technical skills development and people orientated skills development in your soon to be role as a graduate outdoor professional?

FHEQ level 4 (1st year undergraduate)	FHEQ level 6 (3rd year undergraduate)
• People-orientated skills are transferable to any business. • People skills important to establish trust with clients and employers. • Technical skills essential for employment in the outdoor sector • Believe both skills are co-dependent but unsure how	• Technical skills will play a limited role. • Technical skills tick the box, people skills allow you to educate. • To be a successful coach / educator you need a balance of both. • Technical skills create a platform then people skills take over

Pilot study key findings

Level 4

- 75% focusing on practical skills development
- Mixed feelings about the 'usefulness' of RP and can be consuming and frustrating
- Technical skills essential for employment in the outdoor sector
- People-orientated skills are transferable to any business.
- Unsure about aligning CPD beyond graduation

Level 6

- 77% focusing on people skills development
- RP links theory and practice and promotes new applicational contexts.
- A successful coach / educator needs a balance of technical and people skills.
- Technical skills open doors then people skills take over.
- Greater clarity about aligning CPD beyond graduation

Appendix 3

Tab.5 Higher and lower order organisation of pilot study themes

Higher-order Themes	Lower-order Themes	Raw Data
Recognises the value of RP, but is viewed as a distraction from the immediate priority of developing technical skills.	Recognises potential value Practical skills remain priority	"it helps me understand what I need to do to improve my skills, however I would rather learn practical skills"
RP adds meaning to a range of experiences by enabling contextual transference.	RP Facilitates transference RP Deepens understanding	"massively important to my professional development and linking my theoretical learning from the course to my practice and vice versa"
Not really of current focus to First Years who are uncertain about what to and how to align reflective CPD beyond graduation.	Technical and interpersonal skills are of equal importance. Recognition that RP will become important after graduation.	"from what I've been told it's [RP] important. Employers seem to look for a certain level of reflection from their staff when recruiting"
Third years have an appreciation for, but uncertainty in how RP will contribute in developing CPD beyond graduation.	Interpersonal skills more important for employability Recognition that RP will become important after graduation.	"I can see the value, [in RP] however it maybe sometime until I actively participate"
Technical competence needs to be developed first before addressing interpersonal skillsets.	Focused priority on technically competence. Develop interpersonal skills in the future.	"technical development, because I want to develop my knowledge before I develop my skills in passing on my knowledge"
Shift in priority toward interpersonal skills as they become viewed as more important.	Interpersonal skills are more important for employability Now technical skills are obtained focus shifted to interpersonal skills	"at the beginning it was technical due to having very little knowledge, but now as an ML I focus on interpersonal skills as it's more important"
Belief that a successful practitioner in the outdoors needs a balance	Technical and interpersonal skills are of equal importance.	"having technical skills and people-orientated skills in any role is more relevant than reflective practice, as

of both technical and interpersonal skills.	Isolated distinction between people, technical and reflective practice skills.	these will be the skills I'll be teaching others"
Whilst technical skills may 'tick boxes' their dismissal in favour of the more complex interpersonal skills may suggests arrogance in having a degree.	Technical and interpersonal skills are of equal importance. Priority to establish technically competence first	"I see technical skills as a tickbox exercise to gain a position, and see people orientated skills as effectively transferring knowledge and ability to function in professional environments"

Appendix 4

Tab.6 Critical friend's assessment of pilot study themes

What is the value of reflective practice to your understanding of your course, and to your development as a professional in the outdoor sector?			
Yr	**Higher Order Theme**	**CF1**	**CF2**
Yr 1	Recognises the value in RP, but views it as a distraction from the immediate priority of developing technical skills.	If you are trying to build RP progression the first thing to deal with is the "I'll write a reflective log if I have to" attitude that views RP as a bolt on rather than of integrated value.	Not really surprising. As novice practitioners, they have perhaps insufficient work based experience on which to reflect.
Yr 3	RP adds meaning to a range of experiences by enabling contextual transference.	Contextual transference is the key. Build it into the course - assess student's ability to transfer knowledge learnt in one context to shed light on another.	Third years are using RP to facilitate, not just personally reflect on their own experience. This demonstrates a higher level of sophistication.

What is your current RP priority: technical or interpersonal skills, and why?			
Yr	**Higher Order Theme**	**CF1**	**CF2**
Yr 1	Technical competence needs to be developed first before addressing interpersonal skillsets.	I can see the argument for needing to know stuff before you can reflect on why you know the stuff and how you can improve your knowledge of the stuff.	Novice practitioners need time to play and experience, before anything can begin to be analysed. If this process happens too early it could become artificial.
Yr 3	Shift toward interpersonal skills as they become viewed as more important. Technical skills can be refined 'in action'	There still needs to be a core of technical skills from a health and safety perspective aligned against industry standards.	It's about creating a balance between the two. Each are equally important and reliant upon each other.

How does your priority align with your understanding of professional practice beyond graduation?			
Yr	**Higher Order Theme**	**CF1**	**CF2**
Yr 1	Uncertainty about what to and how to align CPD beyond graduation. Not really of current importance.	In teacher education RP is engrained through a continual process of planning, doing and reviewing. However, the process is often institutionally structured. If you want robust professionals that engage in reflection for CPD then developing autonomy is key.	Again demonstrates that learners are novices and focusing on gaining experience. As experience begins to develop, individual

Yr 3	Appreciation for, but uncertainty in how RP will contribute in developing CPD beyond graduation.	Despite a clear development in understanding by year 3, passive engagement implies that its applicational value is born from institutional expectations and demands and not from intrinsic motivation.	Largely dependent on how they are encouraged to use RP in a work based environment. Accepting that they are still novices requiring support.

What do you perceive is the relevance of technical skills development and people-orientated skills development in your (soon to be) role as a graduate outdoor instructor?

Yr	Higher Order Theme	CF1	CF2
Yr 1	Belief that a successful practitioner in the outdoors needs a balance of both technical and interpersonal skills.	Separate distinction of 'people skills' and reflective practice. As a practitioner surely the key thing is to not only reflect on what you're doing, but also to help your participants reflect on what they infer.	The learners own journey in becoming reflective is likely to be used to contextualise the development of others.
Yr 3	Technical skills may 'tick boxes' but belittled in favour of the more complex interpersonal skills gained during their degree.	This is about changing values and attitudes from "I've got a degree, therefore I'm fine" perspective toward a more task focused, continuous self-appraisal of professional skill deficits and opportunities.	Learners are going into an applied environment, where practical skills are seemingly the most influential. It will be a mutual process between learner and employer that establishes the value of RP.

Appendix 5 Study one focus group transcript 05/05/16

Me: what does reflective practice help you achieve?

Ian: helps you to contextualise experience a little bit kind of like a reference point that certainly develops over time, like initially for me personally as a first year kind of didn't really see the value of it, I thought it was quite an inherent skill, maybe like changed my mind as you gained different experiences, you began to see the value of it a little bit more. It might be easier to comprehend if you have the experiences and then talk about it afterwards initially saying this is what you'll do potentially

Me: so for you [Ian] it's about contextualising an experience

Ed: I didn't really use it until 2nd year when I went on expedition to collect data for my dissertation, couldn't see the use of it until then, then it wasn't until this year when I was reading through these logs and there were these things that I'd missed that other people had picked up, that I could link them all together and make a coherent timeline of some pretty serious events, so I've seen the value for that purpose.

Tim: For me it's being able to log down what you've done and then go back to it and think about how you can improve cos over the summer when I went to camp America between first and second year and throughout my expedition that I've just come off I was able to log down and figure out what to do next if that makes sense, so I can move onto the next step of whatever is going on like the next activity at camp America or the next day of the expedition.

Me: What value do you place on RP?

Tim: personally I didn't think much of it in first year, I didn't think much of it until a few weeks back the value wasn't that apparent at all, but now I'm starting the transition into third year and starting to use what I've written down and recorded in the past to reflect on, the value is upping, it's getting higher for me.

Me: is that cos you [Tim] have to use it for assignments?

Tim: yeah the assignments are like the gateway for me to do it in the first place but I have been doing it on my own as well, so if I was to do an activity day I would do it anyway out of repetition.

Ed: for me the value for me, the only time I use it is when I have to, so I don't use it out of personal choice it's something I that enforced upon myself, for example when I had to collect data and record personal logs, then I'll report on them more as an incident instead of logging a whole of the day, so if something does happen I have a time and date to use as a reference point for later on whether that be needed in a legal situation or just a research situation.

Me: so you [Ed] use it more as a log

Ed: yeah, then if needs be I can go back to them and look at them and put them into a different context.

Ian: I think for me it's more valuable the less structured it is the better, if it's more inherent to have to make a decision that I can reflect upon something it's hugely beneficial, however if it's artificial and laboured it detracts by looking for something that isn't there. Its definitely more viable if you're in an environment where your looking into a past experience.
Me: so what influences your decision to engage with RP?

Ian: I'm not sure it's as simple as…. I think it's something you do naturally, the fact it's been labelled as RP, kind of gives a name for something you're already doing. Your naturally thinking about things that have happened before and compare situations so the influences are in themselves just by giving it a name so you have to write an assignment does not make it a defining factor, it just means you've been set a task

Ed: for me when I write things down on expedition I wasn't reflecting on that at that moment, because I was just a bit too fatigued too, mentally and physically, so there was no value in the moment it was more afterwards. The only way that influenced me so I could go back over my logs later on.
Tim: yeah the thing that influences me with the value of it is the time it takes to write them down or spend time what it means to you, whereas if I was to talk to someone else about it and do it maybe not on a voice recording and not to write it down but if I was to have someone to talk to about what has gone on throughout the day I find it much more applicable and helpful that what it means to write down what it means on my own. To have someone else to read through it and give their personal view on it, their perception to help figure out if I'm right or wrong is helpful.

Ian: Can I elaborate on that, I think that's a really valid point you look at a say a staff meeting you do reflect on performance, what you did right, what you did wrong, you work as a collective to try and improve the situation. In a way I think that's more valuable than personal reflection as having additional people gives it a different perspective and likely to broaden your horizons which is a positive, so I think it's more beneficial.

Ed: The one benefit i definitely saw when doing my dissertation to having anonymised reflection was people weren't afraid to say what they thought because it was such a natural process that they got used to, they just wrote in their reflective log, that allowed me to compare something that I viewed and experienced that didn't bother me at all but it meant a great deal to someone else. But instead of my interviewing and asking them about the incident they were able to write down their answer straight away and give an honest reflection on the incident provided a different perspective.

Me: What is your understanding of contextual transference?

Ian: Obviously the specific skill of the activity is going to be different depending on what it is, but people management is very transferable and within reason you are likely to encounter similar situations in varying activities with individuals, means a previous experience may help you to deal with something in another context.
Tim: If I was to jump on that, one thing I noticed when I was working is that the skill mainly that I'm doing or trying to facilitate, they get more from it if they've already experienced what's happened, the skill that you are trying to put across they've already experienced it for you to put it across. So if I was to walking across the road and a car is just about to go past, then I have learnt that I need to look. So in the future I can apply that skill again in the future.

Me: If you're not necessarily talking about skill, imagine we are at a crag with a group of kids and at the end of the session during the debrief, discussing the parallels that exist when climbing that are relevant into another context such as comfort zones and pushing yourself to achieve things that you didn't think you could achieve before.

Ed: I feel that personal transference is a lot easier to obtain if I was to get a group to recognise the transferability of a certain activity. For me to then say in the context of climbing you've just pushed yourself out of your comfort zone, do you think you could speak in front of a group of people, I think telling them that devalues the transferability because they didn't find the transfer themselves. If it was guided to a certain point where they could stumble upon it themselves that's a much more valuable transfer than if it's completely guided. Finding transer for a whole group is a lot more difficult than finding personal transference.

Ian: Yeah I agree to an extent, if we talk about transferring confidence from one experience to another is quite individual, so I don't think one person's singular success on a climbing wall will translate into them being more confident overall as I think it's an accumulation of things. However, in a weird kind of way, if you express the opinion, by doing this you might become more confident that might placebo someone into being more confident, you've done this you've shown you can do it, then you've reinforced it verbally so when it comes to a situation when they need to be confident they may be able to refer back to the experience.

Me: what do you talk about in a debrief?

Ian: I'd say that skills are the least important things, especially in the context that I've worked in. You're not there for high end performance, you're basically there to ensure they are having a good time and that's the most important thing because ensuring that the experience is enjoyable is one of the most valuable asset that one can have as an outdoor instructor, because from a positive experience you gain all these other skills like confidence, social skills cos you're enjoying the moment, so for me that's the thing you want to assess, are people enjoying it, obviously if there are issues like if anyone has a problem then you can address that, but for me it's making sure the experience is enjoyable.

Me: So that's what you chat about in your debrief, have you enjoyed it? Is that the same for all of you?

Ed: I agree with all of that.

Tim: Yes

Me: What methods of reflective practice do you use?

Tim: Personally I use a journal, but I also use voice recordings as well, just because the voice recording on my phone is a lot easier to use than taking out a book and pen.

Me: Ok so that's capturing it, Ian will you keep a journal doing the CA [centre assistant] scheme?

Ian: It depends, I was fortunate enough to go travelling last year and kept a travel journal then, and at first it wasn't specifically for reflective practice, but I have looked back on things for specific examples. But to be honest most of the stuff will be like a discussion, as I said earlier I see a lot of value in critical friendship, which I personally get more out of. I think when I record written stuff, the act of it makes it artificial, whereas through a discussion where you can bounce ideas off I personally see as more valuable.

Me: and once you've had that discussion do you record the key points that came out of it?

Ian: No I generally find I don't need to, if it's poignant then it's stored anyway, if I was to write it down it might become lost in translation.

Ed: I find it's much more valuable to talk to someone about an experience as you are then both contributing a perspective to that one experience, then after in a professional context if it's necessary I'd tend to write things down just in case there's a message in there that I know or might forget, or something I think I'll find useful in future experiences. One thing I did do in Iceland was take pictures to act as trigger images so when I looked at the picture I could write a few words with it to describe what happened, but looking at the trigger image allowed me to go back to the place and recall a lot more of the information that we were gleaning from that situation. But outside of a professional context I would only ever record something personally if it was very poignant.

Me: Lastly, how or would you promote reflective practice in your professional context?

Ed: I would if it was a necessary tool for them to have promote it as a useful tool for them to have, so if I was in a setting of how to promote the usefulness of reflective practice to a centre worker, I would probably say from a legal standpoint it provides a lot more protection and make them see the usefulness of it. I feel it's a useful tool in professional contexts. But to get other people to see that would probably be the best way to take it up.

Me: Beyond your scope as a protection from legal ramifications is there anything else for professional learning, is that something you would help people to engage with?

Eliot: As well as the professional side of it, I also find it a nice sort of venting tool, so it's something I can write down and no one else will read, but for me in a professional manner that can sort of remove any angst you have such as a disagreement with a co-worker. If you can write down an argument or incident that they've caused then I've found it's quite useful to vent.
Ian: I think it has a lot of value, and it should be promoted, but at the same time you need to come to value of your own back as it were. So it might be a bit annoying you rattling on about RP all the time, instead tactfully suggest its value. But as much I didn't like it in the first year, having it forced upon me so I have to do it has been beneficial, so it's been a bit like pulling teeth sometimes you just need to get over the annoyance of it before you can see the value in it. It's probably been down to a bit of arrogance that I don't need to do this, I know how to reflect I'm not an idiot, retrospectively it's definitely a skill to learn and should definitely be promoted. It's just difficult to promote it in a way that will benefit everyone.

Tim: I agree with both points, personally it's been very valuable to myself and I'd explain that to anyone I'd talk to. In a professional setting from what I've learnt so far, it's really useful personally and if anyone was to confront you about anything that's happened on a day legally it's good, but I couldn't go up to a peer and say I'm reflecting like this, maybe you should think about doing the same thing. I could explain to someone how it has been useful to me, but the value to someone else they have to experience that themselves.

Me: do you think you would have found the value without doing the course?

Tim: No, the value has grown through the course.

Me: Ian, you were pretty certain you would have stumbled across it?

Ian: Yes, I don't think I would have labelled as such, but for people who have been in the outdoor industry for a long time, you can see the way the governing bodies, log books etc. are set up so that RP is inherent within the system and shows the value. All it is that I'm reflecting on this experience and taking this from it. It's valuable to have academic value behind it and give it a name, as it makes it easier to comprehend and perhaps shortens the journey but in the long term you would come to similar conclusions without having to focus directly on it.

Mark [employer voice]: I've appreciated what the boys have said here, my own interpretation partly as an academic but also as an experienced outdoor educator, is that RP is mangled in its transfer from theory into practice. The problem with a lot of RP is the fact the theories we have studied have been developed in education or social work or other professions that have a high staff/client ratio, the effectiveness of its meaning is lost when we try to put it into specific outdoor context which is a classroom that is far

more complex than the classrooms where traditional reflective practice have been developed. I don't think that the individual reflection is that beneficial because it would look at the way the majority of the way the outdoor industry is set up, the vast majority of reflection that we do is based around community based learning, the exchange of ideas in a safe, non threatening and non critical environment where the main problem with RP is that individuals tend to be their own worst critics, but when we reflect in a community, what happens is our own predisposition to be only critical with ourselves becomes challenged.

Where I think the advantage is we would all probably naturally develop a reflective skill, which is made apparent by the boys who clearly have an implicit understanding of RP, however as graduates in an industry dominated by outdoor education, the big advantage I perceive as an employer is that the students in this room are able to, and this is important "make explicit their implicit understanding", because if they are employed in a position as an educator, to be able to enhance and develop the education of others to be able to get people to connect with their reflections is quite important. However in the field, once again that would all be community based, I think once we introduce these concepts of journals we just mangle the idea of reflective practice and makes it quite alienating. I think it's this process that over the years will help to change the situation that we are currently in that by generating our own theory we will be able to create a volume of knowledge that is pracademically orientated to what we need rather than constantly borrowing stuff that is battering a round peg into a square hole.

Appendix 6

Tab.7 Study one thematic analysis of focus group 05/05/16

Purpose and value	Adds structure, meaning and intent to experiences.	Brings criticality to reports and logs
		Helps to expose a path of intent
		Strengthens academic rigour
Influences and methods	Naturally occurring and organic evaluation of experiences through discussions with others.	A natural occurrence
		The less structured the better
		Discussions better challenge preconceptions
Contextual transference	Cognitive dissonance weakens opportunities for transferring learning from one context to another.	How far to guide transference
		The placebo effect of success and failure
		Stems from a positive experience
Pedagogy	Heuristic traps and totalitarian egos serve as barriers to connecting with reflection.	I don't need to be taught a natural occurrence
		Finding a connection with reflection
		Making implicit understanding explicit

Appendix 7

Tab.8 Higher and lower order organisation of study one themes

Higher Order Themes	Lower Order Themes	Raw Data
Cognitive Dissonance	Arrogance Frustration Naivety Excuses Curiosity Motivation Identity	"*it's ... arrogance that I don't need to do this, I know how to reflect I'm not an idiot*"
		"*[it's an] artificial and laboured process looking for something that isn't there*"
Critical curiosity		My thinking 'should' be more sophisticated due to the degree.
		Stimulating the curiosity needed to engage with RP, enhances motivation to pursue.
Critical Friendship	Broadening perspective Reducing structure Less convoluted Naturally occurring Discussion based Autonomous Role clarification	"*additional people [bring] a different perspective ... [that] broaden[s] your horizons*"
		"*it's more valuable the less structured it is*"
Metacognitive strategies		Dialogue provides the freedom to bounce ideas around.
		Misunderstanding critical friendship.
Cognitive dissonance	Role incongruence Lack of understanding Misinterpreting Naivety Priorities	"*ensuring … enjoy[ment] is one of the most valuable asset[s] that one can have as an outdoor instructor*"
		"*it devalue[s] transference if they [the participants] don't [see the link] themselves*".

Transference	Comfort zones Assumptions	It is logical to infer that discomfort with 'intrapersonal' will result in discomfort with attempts at 'interpersonal'.
		Possessing the skill to make the implicit - explicit, ensures transference becomes a calculation not an assumption.
Heuristic traps	Initial reluctance to engage Challenging preconception Values Intrinsic inference Meaningful understanding Confusion	"*from what I've been told it's [RP] important…. employers seem to look for a certain level of reflection from their staff when recruiting*"
		"*having it forced upon me … has been beneficial, … you just need to get over the annoyance of it before you can see the value*"
Pedagogical strategies	Teaching styles	RP must be intrinsically inferred, but confusion surrounds how best to achieve this.
		Too much reflective 'freedom' may fail to guide novice learners through its difficult conceptualisation.

Appendix 8

Tab.9 Critical friend's assessment of study one themes

Higher-order Themes	CF1	CF2
Critical curiosity	Dealt with through metacognitive strategies	You can't teach this, it's about being motivated and able to engage.
Critical Friendship	Critical friendship is vital as … an external check on your own reflection. [With experience] it becomes something that happens more frequently less formally.	It is important to learn from people challenging you and you know how to challenge others perspective professionally. That is the real world.
Metacognitive strategies	The students would need to learn techniques as to how to do this and draw them out. That is not a skillset that people will arrive with at University from School.	Being able to process and negotiate thinking is key to teaching and learning. Establishing logical thinking is essential to managing the outdoors.
Cognitive dissonance	If you are talking about making [RP] a professional standard .... you have got to deal head on with the fact there are people that don't buy into it.	If you don't deal with barriers, you allow them to exist.
Transference	Dealt with through metacognitive strategies	This needs to be explicit and is a specialist skill to transfer learning from one area to another.
Heuristic traps	Dealt with in cognitive dissonance	Dealt with in cognitive dissonance
Pedagogical strategies	Need to implement the structures in order to start [and] if we want reflective practitioners there has to be a standardised framework or measurement [as to] how good they are as reflective practitioners. Arguably the only way of truly testing if they do it in practice is to observe them in practice.	It's about ensuring that they have 1) the experiences to reflect on, 2) something to reflect with and 3) people to discuss what they learnt with.

Appendix 9 Interview transcription with employer

Interview question: What skills must facilitators develop in order for learners to infer meaning from a diverse range of 'outdoor' experiences?

We need leaders to have an understanding of the educative process and the transfer of learning, being able to create learning opportunities within the context of an expedition setting which could be multifaceted in the sense that there could be learning in any part of that, whether it's the travelling in, the getting up early, the personal admin, all the studying the community work, or whatever they are doing on the expedition, as well as the adventurous stuff, I suppose we traditionally understand that there is transfer of learning from adventure, because we have done some work on it, it is about the leaders having the skills to transfer learning from other areas. Personal admin is a massive one, if they can learn these skills of personal admin they take that home with them, then we get emails from parents saying how organised they are as a result of the expedition as the expedition was key to that. It's the skill of having an understanding about the learning process and creating the opportunities for learning. I will probably bang on about reflection also, as someone who has done the APIOL and LPIOL route I am a big fan of personal reflective practice for expeditions and for outdoor education as a whole. So I think reflective practice is key and a crucial element of any leadership position. I think the usual suite of communication and listening skills also.

Interview question: How is cohesion with reflective practice promoted and its conceptual barriers clarified amongst industry stakeholders?

Reflective practice means different things to different people, then you also have people who are in a position to guide others also not sure of their own, there is no cohesion at the top level, i think what we are seeing at the moment, particularly with the IOL scheme is the people that set up the scheme have moved on and there is now a new generation there who are now trying to rethink it. There is now an agenda around outdoor learning to make reflective practice about professional accreditation and chartered institute status. I still think reflective practice personally is right and we probably should get to a common area with it, as I don't think everyone understands it very well. So when I ask leaders to reflect, I get a whole range of responses coming back. I am the course director of a trainee scheme within British exploring we provide the participants with a reflective journal for their expedition phase, which is basically undertaking some tasks and then reflecting on by writing, I think the facilitators that oversee the trainees, struggle also with reflective practice so it becomes self-fulfilling, no one really gets it. One of things we've done is change the course, not for next year, but the year after because of the lead in time, to spend more time looking at reflective practice in the first weekend, so they are set up rather than trying to pick it up later in the course

Do you think the IOL scheme has merit to underpin where we go?

I suppose to a certain extent. It's in the right area. Trying to come up with a professional accreditation scheme within the outdoor sector is always going to be tough, as there is

no consistency with staff, people dip in and dip out it's really tricky, focusing on a commonality across the board and develop outdoor leaders I think the IOL scheme works. It certainly did for me as the reflective processes in that I hadn't come across before helped me and I benefited the most from. I'm now a coach for it, and I'm coaching someone for it who doesn't come from an outdoor background, but the lessons are there if she can draw them out and meet them the standards required to become accredited, so i think it definitely has value within the sector.

Interview question: It has been identified that critical friendship plays a crucial role within reflective practice. How should critical friendships be promoted and supported within the industry?

I agree that the idea of coaches and mentors providing that critical friendship is crucial, I do also that their experience should be 'giving back' having mentors that are willing to give back, and I think that organisations who are thinking that way, certainly with British exploring we are trying to approach in terms of developing leaders for the future so we can take people that have potentially been participant's, right the way through to senior management positions, volunteer senior managers on the actual expeditions so it has to be encouraged and supported by an organisation.

Do you think it would work to train people as critical friends?

Yes, but I say that because when people hear the word training they have mixed reactions, how much time will this take and will it add to my job etc., but I think it needs to be embedded into practice right through into a senior position. Think of it from a centre or school point of view its actually part of the process of development within NGBs. Now that adventure sports coaches are become more embedded and coaching is a word we are becoming more and more used to so I don't think there is a problem embedding it in careers almost at every level. So when you are senior instructor you are ready for it.

Do you think it is something that you could be trained to do at undergraduate level, or do you think you would need to have that level of level of experience before you can put it into practice effectively?

I don't think there is any harm in starting the process at undergrad level. I think one of the biggest things about undergraduate learning in outdoor leadership, adventure sports coaching degrees is it is all about portfolio building, you build a career based on your experience as much as you build your NGB's and your theoretical standpoint. The criticism of degree courses is that you have a 21 year old leaving with a great degree and theoretical background, but no experience. I don't have a problem with degrees in anyway, I think they are great, so having it embedded in the course and understanding that they will probably be in a position at some point where they will be giving critical friendship or even mentoring someone else at uni.

Interview question: How and by what means could the reflective practice of practitioners be assessed in industry as part of their continued professional development?

It's a tricky one, my gut feeling is we shouldn't be assessing it to hit educative levels, but I think there is an element of working with people to help develop it over a period of time, I don't think it's something we can assess straight away against levels. An 18 or 19 year old attending a degree programme for the first time, their idea of what they are going to do with their degree in their career at 18 will be different when they get to 26 or 28. It's a bit like the old 11+ trying to assess their future academic ability based on the age of being 11. There are probably benchmarks that can be assessed against, but not in a formal sense.

What are these benchmarks of assessment?

I think possibly the initial part of that is probably around personal ability to reflect and the depth and context of their reflection, would be one area and then how they consider using that to help them get into the idea of being a critical friend later on is also another marker. Definitely a tricky one trying to formalise it into a tick box. Maybe peer assessment and feedback on how peers feel being coached or mentored as well as course leaders assessment on how they think they are going.

Anything else?

I think this is a very interesting area that hopes to add academic rigour to back up practice. It is about the questions that facilitators ask and feel confident asking to deepen and widen thinking. I started out in youth work originally which was all about deepening conversation. So you could utilize a pool table as an educative tool rather than just an activity, I think if we can get outdoor instructors to think, well we have an activity but there are other things we need to bolt into it, that your ability and professionalism as a practitioner can turn that into something much deeper and not allow it to just happen on one plane through challenging questions.

Do you think the role of the outdoor instructor is changing?

Possibly, possibly the way it is being looked at, lots of people becoming very commercial or very focused in particular areas, outdoor learning is just one part of a much broader industry in some ways. You can guide tourists who just want to go up a mountain and have an experience. But on the other hand you could be doing exactly the same activity with a group of young people but turning it into a learning experience. So you need to have the flexibility to be able to be able to switch between. But I think that maybe the degree programmes that have risen in prominence since I have been in the sector, when I left school there was no degree in outdoor learning, so we have had to develop through the industry, hence why I'm doing my degree now at UCLan at 40 years old.