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Can employability skills be assessed in Further Education students in Wales?

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Abstract

UK youth unemployment is still high, with 790,000 16-24 year olds identified as not in education, employment or training (NEET) ONS (2017). Many discussions that prevail today concerning the workforce eventually move onto the discussion of employability skills, many organizations consider that there are insufficient numbers of workers who possess employability or work ready skills Robinson (2000).

There have been attempts to create more opportunities for young people to develop the necessary skills and knowledge to assist them seek credible employment opportunities. Higher Education (HE) in the United Kingdom (UK) has undergone transformation over the last decade as participation has been widened to be more inclusive DBIS (2014), this is an ambition to generate a well-qualified and skilled workforce. But is HE the answer to creating graduates that are ready for successful employment?

There is ongoing discussion over whether HE institutions should develop and create the provision of employability skills within their curriculum Tymon (2013). With employers still reporting a disconnect between what employers want and what educational establishments are producing Cashian (2015), this raises several concerns and questions over the issues of employability. Is the problem that the education system is not generating what the workforce wants? or is the issue that employers cannot articulate what they actually require? Is there an agreed set of employability skills? If the latter is the problem, then how can it be possible to satisfy the needs of employers if it is employees or employers do not know how to articulate the skills they have or want respectively? Then the most pressing question is do students in further and higher education know how to demonstrate the employability

skills identified? and is it possible to measure employability skills? Is the measurement of these skills what the multiple stakeholders involved with the development and preparation of a workforce should be working towards?

These are the questions that this research will attempt to answer or at least identify an approach to begin to satisfy these questions through empirical research of Further Education students in Wales and through a literature review.

1 Introduction

According to Becker (2009), Human capital, (the workforce and the quality of the workforce is recognized as an intangible asset, it refers to the value created within the skills and abilities that an individual would apply in the workplace. Human capital is now appreciated as part of an organization's capital portfolio Bassi, Creelman and Lambert (2015), this notion is relatively new and it is difficult for organizations to articulate what they desire in human capital Stokey, (2014).

A challenge for all G20 countries is to ensure that education and training providers respond to changes required by the workforce. There needs to be sufficient progress in skills development. Training and skills are broad, education develops the potential and lays the foundations of employability, International Labour Organisation (ILO) (2010). Training provides core base skills and develops the competencies necessary to progress into the world of work. The development of skills enhances both capability and opportunity. However, knowing where and what skills to invest money and time in is difficult for governments, educational institutions and employees themselves; especially in changing economic environments, Volatile, Uncertain, Complex and Ambiguous (VUCA) environments, Morgan (2016).

As a result of the wider participation initiatives for HE, the graduate labour market has been altered both in terms of supply and the diversity of attainment, experience and skills. According to the Higher Education Statistics Agency (HESA) (2017) there were a total of 480,575 undergraduates in the academic year 2015/2016. By 2024, the estimation is that 54% of the employment workforce are anticipated to be qualified at a least Level 4 (www.gov.uk). The policies that are driving the need for wider participation in HE are designed to service the high skill competencies required of the knowledge economy OECD (2001), Klosters (2014), as well as increasing employment

and educational opportunities for the underrepresented groups in society, including those from state schools, specified socio economic classes, low participation areas and those in receipt of Disabled Students Allowance, HESA (2017). The aim therefore is to create a more skilled, able and diverse workforce. However, despite the clear drive towards creating more opportunities such as the development of higher apprenticeships, more vocational pathways as well as encouraging more HE participation, there is still a disconnect between education and employability CIMA (2007) Tymon (2013) Cashian (2015).

There is no consistency between the extent to which employability skills are developed as well as educational attainment. As early as 1997, the Dearing Report regarded the integration of employability into curriculum provision as important as well as the attainment of academic qualification. Whilst there is acknowledgment that employment prospects are enhanced through education, the Global Risk Report (2014) notes that although academic qualifications have been gained; graduates lack the technical and professional skills demanded by the changing job market World Economic Forum (WEF) (2014). Therefore, although over half the workforce are anticipated to be graduates in the future, (www.gov.uk) does being a graduate mean that an individual is automatically employable? 2016 saw 88% of graduates in employment, DfE (2017) and 82% in 2017 ONS (2017), demonstrating that a degree is still not a one hundred percent guarantee of obtaining employment. Further reflection on the employment of students will be discussed throughout this research.

There is a chance for intervention now with the next workforce. Students at Further Education stages are about to embark on their next career journey, whether they are selecting their career path through academic or vocational routes or seeking instant employment. It is important to ascertain if it possible to generate the next workforce

equipped with the necessary skills for employment and work towards reducing the NEET statistic, increasing employment rates and ensuring that these students are a work ready group; meeting their potential and more importantly and an understanding of what is required by employers other than a set of academic grades CIPD (2017).

This study will ascertain what is meant by the term employability as there are multiple definitions, for example according to Trought (2012) employability is deemed to be forever and is continuous and can be taken from job to job. There are ongoing dipartites between what the different stakeholders consider employability is and who has the responsibility for developing it and if indeed it is something that can be developed Archer and Davison (2008).

The study will attempt to identify what are considered employability skills? and if employability skills can be measured and rated? Whilst looking at measurability, the research will identify is the self-perception of students and their ability to rate their employability skills possible. Understanding student self-perception is integral to be able to develop and encourage students to be successful, it is important that “emotional competencies, such as self-awareness, self-control, compassion, co-operation, flexibility, and the ability to make judgments on the value of information serve students well in school and throughout their lives (OECD, 2002, p. 58).

In the UK many organisations and employers have made effort to develop the ‘key’, ‘core’, ‘transferable’ and/or ‘generic’ skills needed in many types of high-level employment (AGR, 1995; Universities UK, 2002; CBI 2009; CBI/Universities UK, 2010). The CBI released the findings of an employer survey which reported that 81% of 542 surveyed employers valued employability skills over degree subject and classification as the most important factor when recruiting employees, Čehić (2014).

The study will examine how stakeholders including government, employers and educational institutions perceive the importance of integrating employability skills as part of curriculum development and design and suggest recommendations as to how important employability skills, their delivery and the assessment of these skills through student self-perception and third parties can be made.

It is also important to understand how students make transitions between education and workforce, this is essential when trying to develop a tool for measuring employability skills. Understanding the process and the differential between why students are successful in obtaining employment or identifying why they seem to fail during this transition stage between education and employment can help to bridge any gaps and develop a more employable workforce. Such an understanding and a tool is creating an opportunity for intervention, as according to Altrawneh (2016) employability needs to be given more importance in education. Intervening at the earliest stage could potentially develop the best results.

1.1 Rationale

Further Education (FE) students are one of the hardest hit groups when it comes to entering and considering employment and future career. These are young adults, who are leaving education and training, struggling to take their first steps into employment; weighing up the option and financial burden of progressing to higher education and yet there is a paradox in the workforce. Employers are faced with difficulties in filling their vacancies, (Mindset, 2014). There is a young and willing workforce but employers are not prepared to take them on. However, the government recognizes the role FE plays in improving workforce productivity Smith (2016), therefore it is important to understand if employability skills assessments can support the development of work

ready workforce and how stakeholders can ensure that FE colleges are delivering what is required in order to achieve this.

This study aims through a primary research exercise of self-assessment to examine how students in FE in Wales perceive their employability skills and how the assessment of these skills affects their perception of employment opportunities. The study will also review how by having an understanding of their skill set, if it can assist in the development and enhancement of employability and an employability skill set. The researcher has an interest in the area as an FE Lecturer. Part of their responsibilities are associated with the university application processes and guiding and supporting students in their search for employment and apprenticeship opportunities post completion of their qualification. The researcher has concerns that restrictions of curriculum and the time scales of the academic year mean that that there are missed opportunities to enhance and develop the skills of these students to ensure their readiness for transition into work or higher education.

A study carried out by a Midwestern University in the USA developed a 360-degree analysis tool to test and measure employability skills (Griffiths, 2017). The research asked students to self-rate their skills and to have a peer rating for comparative reporting. This was intended to develop a measure of students' employability skills. The researcher gained access to this study and a peer review of the data will be conducted and an intention to use the tool in their own primary research to ascertain if it is possible to identify if and how employability skills can be measured.

The focus of the primary research is on FE students in Wales. The role of the FE college is one of preparation for progression, be that onto HE or employment, and to promote lifelong learning (www.wales.com, 2017). Therefore, understanding the

destination, direction and provision at FE level will ensure that FE colleges can develop the necessary skills development programmes to be able to support FE students' development into employable workers. If students are able to rate their own employability skills and understand what the benefits are in completing such an activity, this may go some way to answering the question can employability skills can be assessed?

1.2 Aims and objectives of research

In consideration of the question, ***Can employability skills be assessed in Further Education Students in Wales?*** This research is aiming to ascertain if indeed there is a need to assess employability to close the skills gap that reportedly exists CIMA (2007) to better prepare students and indeed an entire workforce with skills that are considered 'employability skills. Identify if these skills are measurable and can be rated? The research also aims to gauge a better understanding of the role of education institutions in preparing the next generation of workforce and to improve employability.

The objectives of the research question are:

- ❖ Identify what is considered a set of employability skills?
- ❖ Consider if it possible to measure and assess employability?
- ❖ Identify if FE students able to accurately rate their employability skills
- ❖ Identify if students perceive any benefits from self-rating their employability skills and identify steps to improve upon any identified weak areas?
- ❖ Using the resultant data, evaluate if this process could be used to develop students and help develop a better picture for prospective employees of what skills a potential employee actually possesses?

This research can be used to inform curriculum development and practice in FE and HE institutions. Should the outcomes of the research conclude that a concise set of employability skills exist or that they can be determined, then this will be an important step for stakeholders involved with the development of the future workforce. If no definitive list is derived from this research, but a consistent and common set of skills are identified as employability skills, then this could also be used to enable educational institutions and stakeholders to work towards developing a key set of skills.

The research will aim to assess if students are able to rate their own skill set. Should the research identify that this is possible, then recommendations can be made for steps to be taken to embed employability skills development in the curriculum and methods for assessment. This may also generate an opportunity for educational institutions to work with the business environment, to identify how they could make use of such information and how this can be used to develop a workforce with the skills necessary for employment LeGrange (2011).

2 Literature Review

Can employability skills be measured in Further Education students in Wales? Employability skills refer to a high order of mental complexity, (Bloom, 1956) suggesting that these skills are both active and reflective, therefore these are skills that can be developed and can be assessed. These skills are multi-dimensional, they are knowledge, analytical, communicative, practical and environment influenced. Therefore, these skills are about the individual as whole not only their achievement. Therefore is it up to the student/employee/graduate to self-assess and learn how to project themselves as employable? Considering Bloom's (1956) taxonomy a students' self-awareness is also a higher order skill that student need to be supported through their development.

2.1 What is meant by employability and employability skills?

Yorke (2006) identified that employability skills is a complex problem and as a concept seeks to explore and capture 'personal qualities, beliefs, understanding, skilful practices and the ability to reflect productively on experience, the identification of these skills is imperative. Hillage and Pollard (1998) consider that employability is about finding work and staying in employment. Gallagher (2013) identifies achievements, skills and attributes as employability and that these are most likely to enable graduates to gain employment. As is considered by LeGrange (2011), who held the view that the sum of knowledge, skill and talent that is possessed by the population is considered human capital, therefore it can be suggested that to be considered effective human capital it is necessary to possess employability skills.

Generally, employability is an ability to be in employment', UK Commission for Employment and Skills (UKCES, 2010). Fugate, Kinicki and Ashforth (2004) define

employability as the ability to obtain and sustain a job, however, Dearing (1997) linked employability to the acquisition of skills required not just for the workplace but for life and the skills to be developed should be the 'key to the future success of graduates whatever they intend to do in later life, Dearing (1997, p133), this is similar to that of Trough (2012) as highlighted earlier and therefore employability is about the whole person and is a continuous process of development and acquisition of a skill set.

What makes up employability skills is also not always clear, The Higher Education Academy (HEA, 2016) report that over the last twenty years, there have been multiple definitions of employability which have progressed from specific technical skills, to a set of attributes that are considered to be softer and more transferable skills. These skills are more knowledge and personal attributes and are reflective of the changes reflected in models and frameworks and as considered by industry, as the CBI (2009) identified, there is a growing consensus around the 'soft skills' the employability skills that are desired by employers.

The Pedagogy for Employability Group (2004) claim that graduates with work experience are most likely to secure employment, reinforced by Capelli (2015). This experience provides students with opportunities to develop work related skills, the skills that employers consider desirable. If students are able to understand the importance of these skills and indeed identify what they are, students and educational institutions can work to enhance levels of employability and students can also develop an understanding of their self-efficacy Bandura (1995).

The Pedagogy for Employability Group (2004) also developed a list developed based on over twenty five years of research and suggest that the softer skills that employers expect graduates in particularly to possess are imagination/creativity;

adaptability/flexibility; willingness to learn; independent working/autonomy; working in a team; ability to manage others; ability to work under pressure; good oral communication; communication in writing for varied purposes/audiences; numeracy; attention to detail; time management; assumption of responsibility and for making decisions; planning, coordinating and organizing ability and an ability to use new technologies. Littlemore, (2011) discuss how the Confederation of Business Industry (CBI) regard employability skills as not specific to one field or one specific job, the skills identified by the pedagogy group are examples of such skills.

There are a set of skills which include broadly, team working, problem solving, initiative, planning, numeracy, motivation, time management, communication and interpersonal skills (written and verbal), Chehic (2014) that appear consistently throughout the definitions and descriptors. In the 2016 Learning and Work event, Davies (2016) identified that that. ‘soft skills’, communication, problem solving, time management, teamwork, working well under pressure were the skills employers wanted in a client and what educators need to consider delivering. CIPD (2017) stated that the following skills Fig 1 were considered as lacking and hard to obtain from candidates, therefore there is a need for educators and industry to come to a consensus, to devise a clear program of developing agreed employability skills,

otherwise further education and higher education institutions cannot be expected to develop such skills in their students.

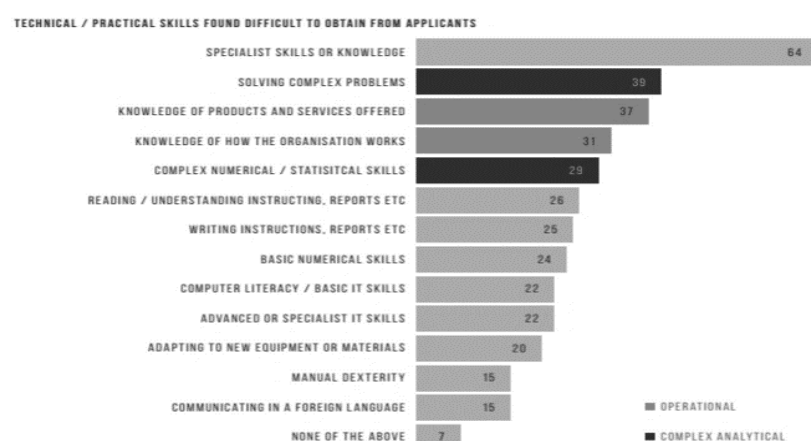


Figure 1

The most recent identification of what are considered desirable skills for the changing workforce was devised by WEF (2016). These were categorized into three groupings and a total of thirty-five skills were identified as part of employability, including critical thinking, problem solving and general abilities. The top ten skills identified in 2015 and what will be required in 2020 are highlighted Figure 2. There are many that are common between the two lists and this is demonstrative that with gaps in employment still prevailing and graduates and school leavers not being fit for employment, why has the development of these skills not been addressed? Some of these are the skills that will form the self-rater primary research and are the skills that the study in the USA for peer review evaluated. These are also skills similar to those identified by the pedagogy group and are the skills that Chehic (2014) and Davies (2016) refer to.

Top 10 skills

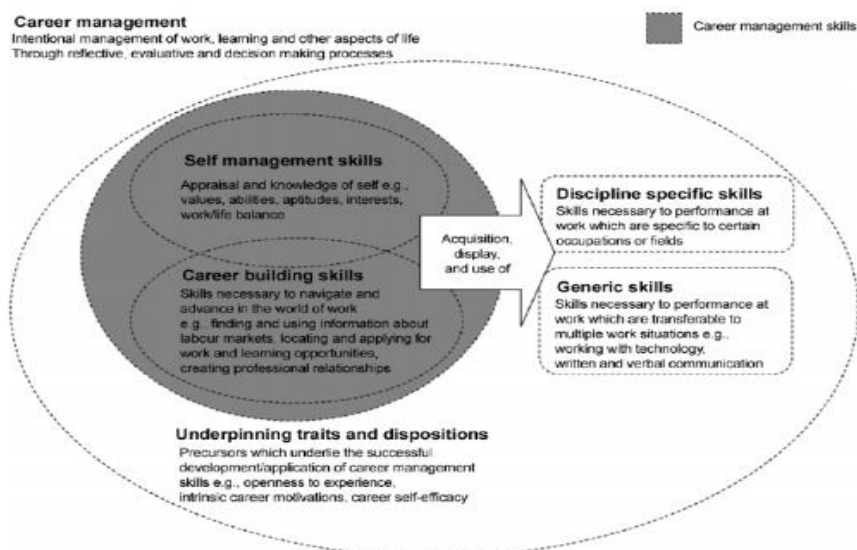
Figure 2

in 2020	in 2015
1. Complex Problem Solving	1. Complex Problem Solving
2. Critical Thinking	2. Coordinating with Others
3. Creativity	3. People Management
4. People Management	4. Critical Thinking
5. Coordinating with Others	5. Negotiation
6. Emotional Intelligence	6. Quality Control
7. Judgment and Decision Making	7. Service Orientation
8. Service Orientation	8. Judgment and Decision Making
9. Negotiation	9. Active Listening
10. Cognitive Flexibility	10. Creativity

Bridgstock's (2009) employability model argues that employability is more than just possession of the generic skills but that the management of these skills are as important and "Career management skills and knowledge are essential to employability in that they play a large part in determining which, to what extent, in what manner, when and where, generic and discipline-specific skills are learned, displayed (e.g. in applying for a job) and used." (p 36). Being able to manage these skills require identification of an individual's skills. Many students achieve these skills and qualifications, however their ability to communicate this and demonstrate where they have applied these is often difficult Chehic (2014), there is also difficulty in articulating

how these skills are transferable Divan & McBurney (2016). There is also the challenge that students still place the achievement of exam grade outcomes as the most important criteria for obtaining employment Kavanagh (2006).

Figure 3



2.2 Self-efficacy/self-perception in the assessment of employability skills

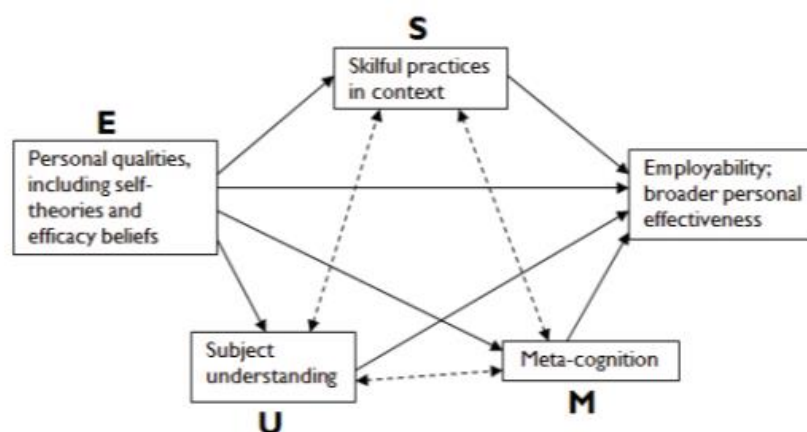
Due to their intangible nature, skills are considered hard to measure. Yorke and Knight (2004) identified that self-efficacy is imperative in the assessment of employability skills and the process of reflection. Self-efficacy is important, it includes evaluating how people feel, think and how they motivate themselves and act as discussed by Watts (2006) this self-perception should support students in becoming more employable and enable them to develop, manage and demonstrate the possession of skills that are considered employability skills. Understanding how to develop these skills and evaluate ability is important.

Despite the significant attention, priority and focus on employability of students and the discussion surrounding supporting students transition from education to the workplace (ILO, 2010); there have been a limited number of empirical studies

examining the effect and positive effect of a student's self-perception of employability and the impact on their employability performance and ability. A sense of self and a student's sense of identity is key to the student's ability to rate their employability and their ability to position themselves in the job market, (Rastogi, 2002). It is important that students are able to identify and rate their skills and competency (a quality) which is an opportunity for reflection and subsequent action to make changes and improvements Roegiers, (2016), Schlossberg, (1981).

Yorke and Knight (2004) identified the USEM approach, Understanding, Skills, Efficacy, and Metacognition, this form of pedagogy brings to the front and centre the learner and focuses upon the student development. The UKCES identified in their Employability challenge built in opportunities for reflection and 360° feedback, to allow learners to “own” what they have learnt and transfer one's skills) (UKCES, 2009).

Figure 4



(Knight & Yorke, 2004, p 37.)

This framework aims to prompt thinking as to how employability can be embedded, it acknowledges the needs of multiple stakeholders. This is also a reflective model and develops students' self-awareness Watts (2006) and metacognition and allows the

students to consider how to develop transferable and professional skills into practice. Whilst this is considered a strong model, Dacre Pool & Sewell (2007) suggest that its' weakness is that it is not accessible to non-academics and they developed a model in response.

The Career EDGE model of Graduate Employability aims to provide clarity, particularly for stakeholders such as parents and students as well as a form of measurement and the model can also be adapted to be used by different groups and different stage. This reiterates the need for a one consistent understanding of what employability is.

Figure 5



Dacre, Pool and Sewell (2007, p5).

The demonstration of 'employability assets (Hillage and Pollard, 1998) is important and awareness of these capabilities is imperative. Hillage and Pollard (1998) also stress that the ability to demonstrate and make the most of their assets depends upon externalities such as the state of the employment market and personal circumstances.

Foster (2006) stated that unless a student is able to identify where and how they can advertise their achievement, through successful development of CV's, application forms and interviews then there is not a complete approach to employability.

2.3 Student development theory

Chickering and Reisser (1993) suggest that developing competence and therefore student development theory is concerned with use of reasoning, interpersonal competencies, critical thinking, working with others and communication. These identified characteristics mirror the skills that employers identify are key employability skills and are the skills that qualification such as Deloitte's Employability skills program and the Welsh Baccalaureate in FE college education aim to enhance and develop. This is suggestive of some parity between what employers expect and where educators should be developing and delivering opportunities for students to develop and enhance these skills. There are a number of models that have been used to illustrate the importance of employability provision, a model or framework can be useful to support reflection or provide rationale for current provision (Cole and Tiby, 2015) but are not necessarily perspective approaches. Goodman, Schlossberg & Anderson (2006), consider that support and frameworks encourage students to be able to make a successful transition. The support enables students to reflect on their skills and any gaps, which means they are better placed to make a transition.

Chickering and Reisser (1993) developed the seven-vector student development theory, the vectors identified include Developing Competence, Managing Emotions Moving Through Autonomy Toward Interdependence, Developing Mature Interpersonal Relationships, Establishing Identity, Developing Purpose, Developing Integrity, Environmental Influences and The Admonitions. The key aspect of developing competence is essential, therefore developing and transitioning is

imperative to success. How successful a student's transition is according to Goodman, Schlossberg & Anderson (2006) depends upon factors such as the context, the environment, the significance and the likely impact of the transition on the student.

To ensure success, in the context of this and the definitions of employability, success is for a student to gain and retain employment. According to Goodman et al, (2006), any form of activity which enables a student to measure, change, enhance their skills and tackle any gaps can enhance the transition, suggesting that measurability of employability of some form is necessary.

Student development theory determines that there is a positive change that occurs within a student. This increase in self-awareness, or improvements in engagement Jones and Abel (2011). Rodgers (1990) suggest that it is about the development of the whole person. This is a key as this is really where individual development and awareness of ones' abilities is important; supported by Tomlinson (2007, 2012), who suggests that the way in which students engage in the work place is dependent on their self-perception Chickering (1993).

Understanding psychological attributes, cognitive abilities and personality can go some way to predicting job performance. However, employers are more interested in the social skills Chamorro-Premuzic and Furnham (2010). What is important however is the recognition that employability is not just about the preparation of students for work and enabling success at work, but it is about the preparation of these students to be citizens and contribute to society Bowden et al (2000). The starting place where this study intervenes is self-perception of one's own ability, a generation of a starting point, to close the clearly identified employability skills gap that prevails to develop a future proof workforce. It is important to develop programs in education that can

support and equip young people into the transition from education into employment, however qualifications rather than development of skills has been the key focus for the UK in recent years, CIPD (2017).

The HEA (2015) have identified a framework Figure 4, which draws upon existing pedagogical approaches' but moves towards a more higher order approach, with the emphasis of evaluation, looking at attributes and this is where the study will intervene at the auditing and mapping stage using the skills that are in the top ten requirements for the workforce as identified by WEF (2016).

Figure 6



The role of emotional intelligence is likely to be more prevalent in a future and knowledge-based economy Moynagh and Worsley (2005). More and more employment opportunities are in the tertiary and quaternary sector and more and more of these are customer facing opportunities whereby human interaction is central to the delivery of the job, these are where skills are also considered to be lacking, according to Archer and Davidson (2008), graduates appear to hold the qualifications but they

are lacking the softer skills and attributes that employers need in a customer focused environment. Therefore, the key identified employability skills are important to meet the needs of the changing workforce.

2.4 The challenge today

The World Economic Forum (WEF, 2016) identified that graduates lack the skills demanded by a changing jobs market. According to the BCC, 54% of employers consider that graduates are unprepared, these statistics are illustrative of a disconnect between what employers want and what the present talent pool is made up of McKinsey (2015) CIMA (2007).

Knight and Yorke (2002) discuss some of the research into the value placed by employers on generic skills in graduates and interpret the message from employers as that employers want motivated and smart graduates, with subject specific skills, knowledge and understanding and that skills that are specific to the job can be developed on top, but employers also want generic skills. Employers value the softer skills as well as academic qualification, Finch et al, (2003), Rosenberg et al (2012). As Morgan (2014) identified, research and reports continue to reinforce the gaps between graduate skills and employers' requirements. These gaps and technological advancements could be putting human capital at risk.

Drucker in 1994, 1997 referred to the twentieth century as the most transformational. With social and technological progress leading to a shift in the workforce progressing to a knowledge society. Research at that time indicated that the skills and jobs that workers entering knowledge driven economies would be doing were not traditional jobs (Arthur and Rousseau, 1996, Hall, 1996) It was also identified by Gioia and Herman, (2005) that the jobs that the future workforce would be doing did not

necessarily exist at that time of writing, reinforced by Schaeffer and Zalewski (2011). WEF (2016) refers to the Fourth Industrial revolution and therefore the threats that are posed also highlight that development of human skill and capability is not progressing sufficiently Kosbie et al (2017) to compete with advancing technologies. What is required to meet the needs of a competing world including the advancing ubiquitous technologies increasing in the workplace and the increased use of Artificial Intelligence (AI), is a high performing workforce, with skills equipped for success Overtoom, (2000).

If machines are going to continue to improve performance beyond human capacity and capability it is possible that jobs will be put at risk, a report by Price Waterhouse Cooper (2017) identified that according to their estimates that 30% of UK jobs are under threat and will become automated by 2030 and USA 38% of jobs. This challenge is not new, Keynes in the 1930s proposed the 'technological; unemployment theory' and whilst economies have successfully developed and coped with technological interference to the workforce. the current rapid advancements in AI are pertinent and are a real threat. Technology will replace jobs or the people doing those jobs and few industries will be unimpacted (Pistrui,2018). Knowledge workers will also be unimpacted recently the CEO of Deutsche Bank anticipated that fifty per cent of their employee's jobs could be replaced by robots, as cited by Pistrui (2018).

2.5 The role of a knowledge worker in a knowledge economy

White collar, high skilled jobs drive employment growth OECD, (2001). In knowledge economies where strategy, creativity and innovation are required, WEF, (2016) there are increasing demands on the skills of those that are considered knowledge workers. However, knowledge workers are working in knowledge rich jobs and they possess skills beyond those that are obtained through academia and are significant and

recognized in the knowledge economy, (OCED, 2001). Drucker (1994) identified that the knowledge economy would be a more competitive economy. With the increasing amount of AI use in business, the effect on jobs will increase competition, it is therefore important that steps are taken to generate a workforce to survive and succeed from the threat of AI, to generate an employable workforce. A knowledgeable workforce is important but a skilled one is essential.

2.6 Skills and the present workforce

The skills required and the skills being developed are not necessarily cohesive as according to the British Chamber of Commerce (BCC, 2015), 88% of businesses believe that school leavers are unprepared for the workplace. The survey also identified that 27% of firms did not recruit young people between 16-24 years old due to 'fears' around their readiness for work, BCC, (2015). This is further echoed by the Office for National Statistics (ONS, 2016) findings which identified that UK youth unemployment is still at a high level, with 857,000 16-24-year olds identified as a not in education or employment a (NEET) statistic.

It is considered that a degree is an indication of a readiness to work, (Selingo, 2016), Rosenberg et al (2012) concluded that students expect to gain employment in the field through the acquisition of the necessary skills to acquire their chosen job. Yorke (2006) commented that graduate employability was made up of achievements, skills, understandings and attributes, meaning graduates are more likely to gain employment and be successful in the careers. However, as discussed earlier, being a graduate does not guarantee employment. In 2017 the graduate employment rate in the UK was 82% in comparison to the numbers educated to A Level standard which was 78% and GCSE 72% ONS (2017). Whilst the number of employed graduates is higher, in respect of their time and financial commitments and subsequent difference between

the two figures (graduate and A Level) it is not a significant enough gap based on the commitment and financial investment university students make, this could illustrate that being a graduate does not necessarily mean being employed. The Chartered Management Institute (CMI, 2016), identified that 33% of employed university graduates were either in low paid jobs, underemployed or both and not always in their degree discipline, this could also indicate that graduates are not always able to secure the employment they desire.

The inactivity rate for the two groups for neither employed nor unemployed is 15% for graduates and A Level 19% respectively, again the gap is small thus it can be suggested that being a graduate does not prevent economic inactivity. Therefore, there needs to be some exploration as to why this may be the case, why does investment in Higher Education not always convert into employment or employability? There are also questions over the percentage of A Level students who are also unemployed on completion of their qualifications. This echoes the indicators that students are not employable and do not possess the skills required. According to a Burning Glass Survey (2015), job advertisements that required a bachelor's degree listed more softer skills than technical skills as part of the job description, thus suggesting that a degree may get an interview but is not necessarily demonstrative of an ability to do a job.

In 2012, the CBI released the findings of an employer survey which reported that 81% of 542 surveyed employers valued employability skills over degree subject and classification as the most important factor when recruiting employees, Čehić (2014). Holmes (2013) suggested that graduates must possess these employability skills and perceive themselves worthy of employment. McQuaid et al (2006) defined an individual's ability to be employable grouped under three headings, individual factors,

personal circumstances, and demand factors. According to McQuaid et al (2006), all of these factors need to be considered when assessing an individual's employability.

2.7 Current approaches to employability skills development

The major pedagogical approaches used in relation to employability relevant skills tend toward experiential and action learning methods in all the educational settings. Social constructivist pedagogies such as active learning as an example support the development of students' and their employability skills, Rutt et al (2013). Current approaches to employability are underpinned Vygotskyian-based approaches of social constructivism, (Graham, 2002) with the teacher being more of an interventionist, as opposed to the notion of scaffolding to support the higher order approach and student autonomy. There is more of a need of action learning and reflection. The notion of employability is now moving away from the demand-led skills towards personal attributes (Yorke, 2006, Gallagher, 2013) and is situated more in reflective learning.

However, the emphasis in FE is action and experiential learning and predominantly focused on longer work placements and classroom-based practice with more practical activity in vocational qualifications Nunn et al (2008). In the FE sector barriers to promoting employability skills are considered at fault with teaching staff Nunn et al (2008). The teaching of employability is not seen generally as a high-status activity within the system, with the result that relatively small numbers of motivated individuals take forward the employer engagement, enterprise, employability and related agendas.

The Wilson Review (2012), identified a need for the recording of employability and entrepreneurial skills, presently there is no evidence of a cohesive approach amongst educators in the UK tertiary education sector Archer and Davidson (2008). With the

Wilson Review (2012) still calling for this to form part of education programmes, the findings of Archer and Davidson (2008) still stand. The Dearing Report (1997) made recommendations for the imbedding of employability education and workforce again a key UK government target (Wild and Wood, 2013), therefore the problem still persists, employability is not being addressed. The number of students has more than doubled since 1991, leading to an over-supply of graduates who are not able to start their careers, Branine (2008). The development of skills in the workplace and skills that make young people employable are not necessarily being delivered. Being able to identify, assess and develop a student's employability skills is a challenge for educators

2.8 Future of employability skills and assessment

Employability should be consistent across all groups, the same skills and characteristics and development should apply whether student or graduate, employed or unemployed and a mechanism for developing, assessing and demonstrating the skills should be available, otherwise it is impossible to demonstrate investment into human capital and where and if it is necessary Wilson (2012).

The Centre for Employability (CfE) has developed solutions to enhance student's prospects and the theory that underpins this approach is the DOTS model (Law and Watts, 1977), which consists of planned experiences designed to facilitate the development of decision making skills, identifying work opportunities, and including the development of self-presenting skills and self-awareness Watts (2006).

There is insufficient evidence available on the long-term consequences of specific vocational education as a pathway to employability or the education of generic employability skills rather than placing an emphasis on self-evaluation and higher

order thinking (Gibbs, 2010). There is also consideration that skills are more likely to be developed in a workplace than in a classroom (Brumm, Hanneman & Mickelson, 2006) and Fertig (2003) suggested that there is no substitution for real workplace learning.

Consensus should be established by what is considered generic competence or employability skills. Rychen & Salganik (2001), identified four elements in generic competencies, employability skills are multi-functional, meeting a range of daily needs and therefore they are also, relevant across many fields and this means that these are not job specific skills, they are transferable. This also reinforces the notion of the development of a portfolio and an ongoing development and measure of employability, Thorely (2014).

The challenges experienced by FE and HE institutions all centre around a shift from delivering subject centred learning and the attainments on such courses to the acquisition of employability skills, (Yorke, 2006) or competencies and the ability to reflect upon the achievements and acquisition of these skills Roegiers (2016) and the application of the skills in a work environment (Artess, Hooley & Mellors-Bourne, 2017).

Whilst it can be argued that 'embedding' employability in the curriculum or delivering standalone qualifications are essential in the delivering and promotion of employability Embedding employability is complex Knight and Yorke (2003), in FE, the UKCES employability skills definition is found in mainstream provision, in apprenticeship and vocational qualification frameworks and most recently in Wales through the Welsh Baccalaureate qualification, the new qualification has been developed with combined

approach to learner subject qualification and the skills that employers consider desirable Wales Government (2017).

Wilson (2012) states that support for career development and employability should be a continuous and ongoing activity whereas it is often towards the end of the academic cycle often by which time it is too late that the need to develop these skills are identified, employability should and is being considered more throughout an academic cycle, Wild and Wood (2013) and not just a standalone qualification.

VUCA markets make it necessary to continuously to develop and as Watts (2006) discussed for individuals' to be self-aware and develop continuously, Wilson (2012) also identified that in education employability support should be part of the overall student journey and not just during the latter stages of their qualification achievements. Therefore, with consensus and an agreement that students need to be able to demonstrate their employability then development of a tool to develop, monitor and promote is a necessary step.

The research has also identified that an awareness of identify is imperative if the skills gaps are to be closed It is essential that students' become engaged as soon as possible with employability, this will help to create a culture of lifelong learning and the long-term success of a student will depend on the ability to recognize their own personal, academic and career needs (Cole and Tiby, 2016).

The expectation of these courses is that students' will be employable on completion. but this is not necessarily the case. The onus of employability should be on students, to develop and assess their own skills, however educators have a responsibility to build and teach the toolkit in the first instance, once developed students should then take the responsibility to review and assess their own employability and address any

gaps and identify ways to present the information, e portfolio have been considered a pragmatic way to develop this Business, Industry and Higher Education Collaboration Council (2007), E-Learning (2005), these portfolios and any tools can be used as 'instruments to embed transferable skills, Simatele (2015).

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3 Research Methodology

Research is a process of enquiry and a collection of information Saunders et al (2009). The research method is a system for the collation and analysis of data. Research comprises of two parts, primary and secondary research. Primary new research generated by the researcher for the subject of the student and secondary research for the purpose of analysis of relevant data. The literature review is comprised of secondary research and the peer review of secondary data is also an integral part of this research. This research is about the collection of information and not disproving of theory. An appropriate reflection of the highlighted issue must ensue (Bailey, 2014). The purpose of the research is to ascertain whether a set of employability skills can be identified, measured and understood? The aim is to ascertain if a form of measurability can be used to develop an employable workforce and if it is possible for students to self-rate their employability skills? Initially the purpose is to identify if this is possible in FE students as these will form the next workforce. As employability skills acquisition according to the literature should be ongoing Thorely (2014), can a method of measurability be used to track students' through their careers. The following objectives have been identified in order to ensure that the research is achievable.

The objectives of the research question are:

- ❖ Identify what is considered a set of employability skills?
- ❖ Consider if it possible to measure and assess employability?
- ❖ Identify if FE students able to accurately rate their employability skills
- ❖ Identify if students perceive any benefits from self-rating their employability skills and identify steps to improve upon any identified weak areas?

- ❖ Using the resultant data, evaluate if this process could be used to develop students and help develop a better picture for prospective employees of what skills a potential employee actually possesses?

For the purpose of the research a non-bias approach must be adopted for the research paradigm. The researcher must not influence the results based on personal experience as an FE lecturer. A suitable paradigm must be selected for the purpose of identifying applicable information. Any primary research undertaken should not influence or be influenced in any way due to the researcher's own views relating to the research subject (Naoum, 2006).

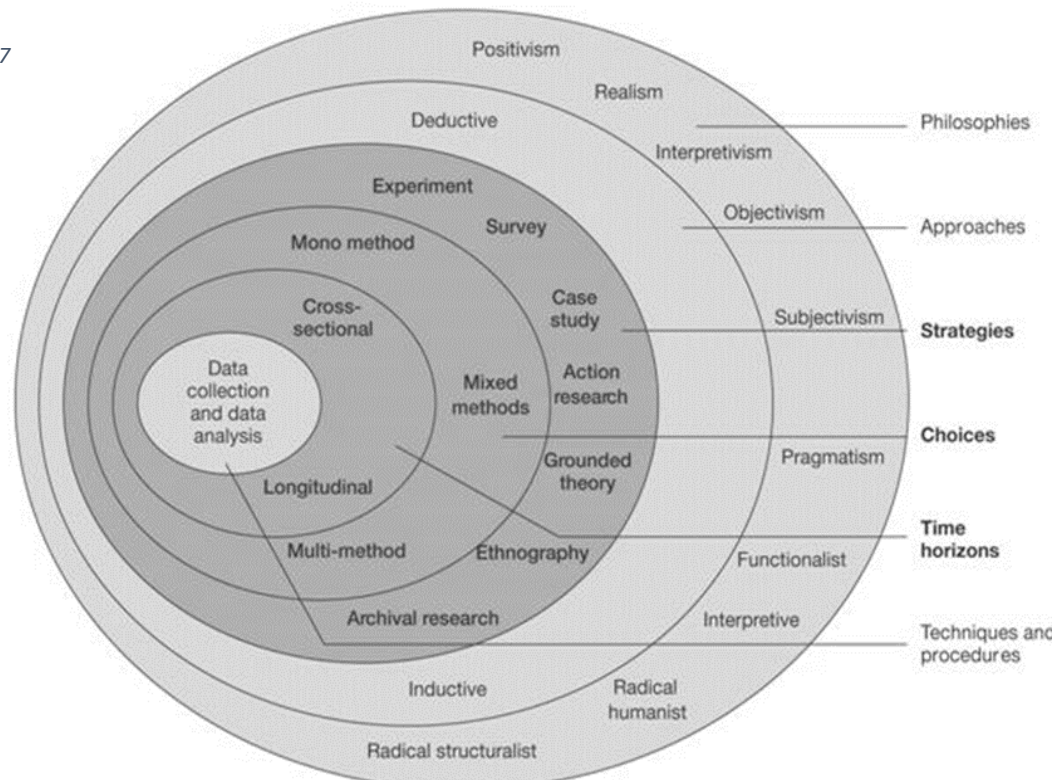
The research onion, figure 7 depicts the strategic approach to research including methods of data collection. The researcher's choices are selected based upon the method that suits the data required for the study and the time frame available for conducting the research. The research in this case is cross sectional due to the time consistent with the academic year, both for the researcher and the subjects. The availability of the pre-existing tool from the previously identified research conducted in the USA had a limited time to run before planned further development was initiated and therefore this also had an influence on the research selection.

A detailed literature review identified concerns over the extent to which employability skills are identified and developed in education as well as prevailing concerns over the lack of soft skills or employability skills that those entering the workforce possess expressed by multiple stakeholders, there are also notable faults in the absence of the ability to measure and demonstrate employability skills.

The research philosophy is the justification as to how the research will be conducted. The research onion depicts methods of data collection and analysis that will be used.

Working through the layers of the research onion for the purposes of this project, in this study the research is cross-sectional, carried out during a specific period, in the case it was mainly determined by the time constraints of the academic year.

Figure 7



According to Saunders et al (2009) there are three philosophies to research Positivism, Realism and Interpretivism. An interpretivist approach would consist of a smaller participant group, that would be required to share more personal accounts and experiences. A positivist approach is more rigorous and research from a larger participant group would be undertaken. There would be a more data driven approach and the development of a hypothesis would be devised. A common problem with research according to Saunders et al (2009), is that it is often difficult to place research into one area.

Khan (2008) suggests that there are two principal data sources, quantitative and qualitative. Crewswell (2014) notes that quantitative research permits collection of statistical information and qualitative research furthers a deeper understanding of the

subject of the research, qualitative research can be used to find motivations and reason behind actions and perceptions (Marks, 2000). Positivism promotes the use of qualitative data and the Saunders et al (2007, p.132) analysis of the data as part of research.

Whilst quantitative data can be useful to illustrate and identify trends, there is not an opportunity to conduct in-depth analysis. However, as the key question is can employability skills be measured in FE students in Wales? a qualitative method approach is necessary as part of the research. Quantitative data would not permit in depth analysis of the information. The data in this research will be based on personal experiences and of individuals. Students have varied experiences, therefore quantitative data would be ineffective (Scarbrough & Tanenbaum, 2003). This research will be predominantly focused on qualitative data. Interpretivism consists of the examination of a smaller group of participants, detailing their individual experiences and provides a deeper analysis. This approach does generate opportunity for the subjective details to be exposed. Due to the nature of this research and the nature of the information that is to be generated, a phenomenological approach Saunders (2016) is the main approach as the information is personal perspective. The phenomenological approach is used when there is little in-depth data available but the data that makes up this study is based on opinion and perspective which is the approach for this study.

Generally, as part of the primary research and also whilst conducting a peer review of secondary information the source data is also self-perspective, either as self rater or peer rater. The information therefore is inductive as it is looking to identify themes from the information. An inductive method is associated with qualitative research and as the primary and secondary data research is questionnaire and interview based with

the intention of examining patterns then an inductive approach will also be employed (Khan, 2008). A deductive approach attempts to develop a hypothesis and creates assumptions which could impact on the research, the research is based upon questionnaires and interviews and therefore an inductive approach is best suited.

3.1.1 Research design

Multiple research methods can provide opportunities to answer research questions and creating better opportunities to make inference from research Tashakkori and Teddlie (2003). Multiple research methods can be used for different purposes.

3.1.2 Primary research

Primary research will take the form of an online questionnaire tool and structured interviews with students and an Employability Skills Manager in an FE college to generate the desired data. Saunders et al (2007) identify numerous strategies to acquire information for research purposes, a survey in the form of an online questionnaire tool was selected. The questionnaire was a pre-existing tool, the same questions were utilised to enable a comparative study between previously conducted research by a university in the USA. The questions that were generated within this tool are also directly related to the identified skills in the WEF (2016) report and therefore bring a consistency and credibility to the research questions. The online questionnaire is simple to administer and understand and therefore should generate reliable data that can be interpreted by the researcher. The data will be largely quantitative and possibly the chance to identify relationships and trends between data.

The online questionnaire was a previously utilised tool by a Midwestern University in the USA. The questionnaire makes use of a 360-degree feedback process. It enabled the generation of data collection from self and peer rater. A Midwestern university

conducted the research evaluating six employability competencies. The tool was used for self and multi rater feedback. The data is available to the research to infer any common theme or trends in the data. The questionnaire is developed using a rating, Likert scale, which allows for the scaling of positive or negative, high or low responses.

A Likert scale is widely utilised for measuring perception and attitudes and in the case of this research and the nature of the Likert scale, asks for the respondents to identify their level of agreement with the series of statements and measures levels of positivity and negativity. This data collated should generate a series of indicators. The scale is used to measure how respondents feel about an issue. The tool is a previously utilized 360-degree feedback tool, and although Bracken et al (2016) suggests that this can inhibit research, this will give measurable data and will allow for a comparative feedback study. There are five questions to be proposed to the respondents for each of the six competencies.

Due to the nature of the research subject, these questions can be responded to away from the presence of the researcher. This limits the opportunity to gain deeper understanding Bell (2010) therefore there are opportunities for additional details to be added in an open question form to gain more information. Focus groups were rejected as it would not be possible to gain a deeper understanding of each participants' experiences. A group scenario may generate wider and fresher perspectives; however, peer and group influence may affect the detail and validity of the information and therefore the information required by the researcher would not be thorough enough Clarke (2015). Therefore, it has been decided that interviews with several of the respondents will be undertaken.

3.1.2.1 Interviews

Interviews were scheduled post completion of the questionnaire ensuring information could be gained to provide an insight into current student perception of employability. Two interview forms will be undertaken. One with several of the participating respondents and another with an Employability Skills Manager at the FE college.

A set of predetermined questions will be generated to gain a wider understanding from another stakeholder in the process of developing employability skills as well as participants in the online survey. Drever, (1995) identified that developing predetermined and planned questions is an advantage, it ensures that the interview will be focussed and addressing the key requirements of the research. The questions will permit a wide and detailed response. The formal nature should permit a reliable response to the interview. Informal and non-formal approaches enable the ability to conduct further investigation.

A positive of the structure interview prevents digression into personal recount, which whilst for further research could prove useful, in the case of the research it is more of generating a gateway to further develop more research and to identify the core components of future research as a semi structured approach can permit some digression. There have been many opportunities for the researcher to identify opportunities to determine questions, these questions should create opportunities for full and detailed responses. However as pointed out by Darawsheh, (2014), reality is subjective and therefore the formalised structured approach should enhance the reliability of the response (Collis & Hussey, 2009). Through adopting the semi structured approach to question development, it permits flexibility and allows detailed responses from participants (Murray, 1997). This approach means that it is possible

to deviate from the rigid questions and this can help enhance the quality of the primary data obtained. This flexibility will ensure that the interviews can stay within the topic.

Usually this type of approach would be reserved for positivist paradigm, but it is possible that this can be modified so that it can fit the purpose of a phenomenological approach to have more open questions and flexibility. This ensures that the researcher is able to access personal perspective which is paramount to the study.

3.1.3 Secondary Research

To gather initial assumptions and an understanding of the present situation a qualitative literature review was undertaken and to generate primary research. The literature review also identified that human capital is a new asset and there are constraints that restrict the development of human capital, the restrictions were associated with training and education.

This review generated the identification of a previous study that allowed the researcher to gain access and permission to the online tool that would be used for primary research process with a new sample. This then permitted a correlative evaluation between both sets of the data.

3.1.3.1 *Peer review case study on primary data*

The sample for the Midwestern university was a response rate of 115 students completing self rater, a total of 54 multi rater responses. The multi raters were invited but with categories of four types of raters, academic staff, community leaders, peers and work. The sample is not necessarily representative of the size of the midwestern university but it should generate information and trends to be able to generate future research and identify any opportunities to find a consensus among the sample group with similar experiences and education.

3.1.4 *Research Quality*

Validity and reliability are essential considerations. Genuine data is imperative for a true comparative study to be consulted. Collins and Hussey (2009), suggested that reliability is imperative and a way to assure this is the process is repeated would the same results present. As this is a replication of a tool with a new sample, the researcher must ensure that the same tool and information is presented to the research subjects.

Saunders et al (2007) refer to validity of research is that the research is whether the findings are really about what the research appears to be about. The questions therefore are relevant to the research. The main objective of the research however is the subjective experience from the perspectives of the subjective of the research, perspective and opinion are the factors of the research. When conducting research with a phenomenological paradigm approach there is always the presence of subjectivity.

The researcher is working in the organisation where the primary research will be conducted. This is an advantage for expediency and access and knowledge of the sector and the organisation which ensures that the researcher has an understanding of the complexity of the employability skills challenge. There is disadvantage however, there is a danger that the researcher can make assumptions and presumptions and it could prevent the exploration of other areas or issues that may have pertinence to the research. There is a danger of participant bias, the familiarity of students and the interviewees and participants may respond based upon they are given a set of responses that they think the researcher may want to hear. It is important that researchers are aware of the and it is important to proceed with caution when analysing data to ensure that the data is being analysed for what it presents but not

what the researcher wants it to be. Gaining access to the information can be restricted by the gatekeepers. They can set expectations and conditions on the access of research. They are in a position to prevent progress of the research or hamper the progress of research.

Mertens (2012) suggest that reliability must remain fluid and that Collis and Hussey (2009) claim that reliability is a concern and that research is considered reliable if the study could be conducted again that the results would be repeated. Through the employment of a phenomenological paradigm, the research findings are open to a degree of subjectivism, therefore it is essential that the researcher ensures that the data is not open to editing in anyway. Through the preparation of a thorough research design will restrict the opportunities for bias Saunders (2009). The sample can have an impact upon the research and can affect the reliability of the data obtained.

3.1.4.1 Sample

Dunnn (2002) stress the importance of identifying a representative sample relevant to the demographic related to the research. The sampling technique most appropriate for this research is purposive. This particular sampling technique is a non-probability approach.

The sample is integral to the research and must truly reflect the demographic of the subject of the research question Dunn (2002). The primary UK sample will be a cohort and class of FE students in a local FE college. It is a purposive sample, with the aim of obtaining general findings and it is the onus on the researcher to identify the relevant subjects for the purpose of data collection Cottrell (2011). Purposive sampling means that judgement can be used for the researcher to select a sample that will be suitable to meet the research objectives. It is a sample most suited for a small sample and

case study research approach. This sample enables the research to build a typical situation that is representative of the subjects of the research. For the primary UK research, students will be invited to participate therefore self-selection sampling will occur allowing individuals to express their own desire to participate. The core sample will be obtained through a convenience sampling method. This is the easiest method to obtain a sample, in the case of this sample, the students of the FE college where the researcher is based will be the source.

The research for the Primary UK study is opened to a limited research base, this has been restricted due the ability of the tool to be used to replicate the study. The sample for the primary research study is also restricted by gatekeepers in the organisation ensuring that participation in the research is not interfering with progression of students. This has an impact on the number of students available to participate, widening the research would be desirable.

3.1.5 Ethics

It is important to remain impartial throughout the research process. It is important that consent is obtained from all participants, email templates are prepared for the multi raters and a letter requesting consent was issued to the participants in the primary study. Anonymity of response will also be protected in the presentation of data in the appendices and throughout the data analysis. The data is primarily opinion based, there is a requirement for some personal information, including gender and age and assurance that the participants want their data safe or they will be unwilling to share.

4 Data Analysis

This section will analyse the results from the primary UK research as well as the summary of findings in the secondary research which will evaluate the importance of employability skills identified by multiple stakeholders and the perception of whether students are in possession of these skills. The aim of this research was to analyse Can employability skills be measured in Further Education students in Wales? Through a literature review, issues surrounding the identification of employability skills, the key skills required by employers were identified and the delivery and acquisition and the demonstration of employability skills were analysed and were used to generate questions for an interview with the Employability Skills Manager at an FE college in Wales. These created a context to review the findings of the Mid-Western University data. The tool used in the USA study was used in a primary research study with FE students and the secondary research and the results of the online survey were used to generate questions for interviews with a small set of respondents.

All sources of information were qualitative, allowing correlation on a small scale between the two research groups. The research is not to prove or disprove a hypothesis but to gain a deeper understanding a gauge of the employability skills situation and the environment. The research undertaken involved using the same online questionnaire tool and interviews.

This section will analyse and discuss the results from the research conducted by the Midwestern university the original users of the questionnaire tool, the research conducted by the research and the interview. The data will primarily focus for the purpose of this research on the self rater responses of the subjects of both studies

and this has more relevance to the present research question for this research at this time.

4.1.1 Peer review

See Appendix A for results. The responses to the questions are easy to analyse as they are ratable on a Likert scale approach and are closed questions. A Midwest university in the USA was selected for research. The research was to look at how the university could enhance employability skills the research focussed on six skills. The employability skills were assessed using a 360-degree tool, it was programmed with competency descriptors and developed with the ability for students to self-rate and invite multi rater from peers to compare employability skills competency. A total of thirty rating questions and six open ended questions made up the research. The tool used a five-point Likert scale with the rating options, scale (never; almost never; sometimes; almost always; always as well as an option to select “NA” (not applicable) this is when the respondent could not confidently feel they could rate their level of competency. There are limitations with a Likert scale as identified with Bracken et al (2016) as such scales can restrict responses.

The subjects of the research were students of the university business school. The research required students to rate their own competency level and send the questionnaire for peer review to ascertain if it is possible for others to rate their level of competency, the peer raters were grouped under academic staff, community leaders, family members or peers, and work experience. To ensure that the peer raters understood the requirements, emails were sent detailing how the responses would be used and assurances that their responses would be confidential. 115 students participated in the research and 54 had multi rater responses.

The research indicated that multi raters rated students higher than the self-rating scores that the students gave themselves. Generally, students across all the competency that students were more likely to award themselves a score of 1 – 3, moving between (never) and (sometimes), whereas multi raters were more likely to rate level 4 (almost always) and 5 (always). Community leaders tend to score high on the scale than any of the other rater groups. Self-raters are more self-critical, or it could be considered more realistic and reflective of their stage pre-transition. This could also be demonstrative of the fact that students are not aware of how to measure and assess employability.

The research identified that higher order skills as a challenge, with students rating themselves that they only sometimes or almost/never demonstrate this competency the multi rater data supported this figure rating that 38% considered that students sometimes or almost/never demonstrate the competency.

Academic staff did not use the never or almost never scale scoring students at the highest end of the scales. This could mean that the opinions are influenced by the academic and controlled setting, where scenarios actually enable students to display and deliver experiences that are higher level skills, which would influence the rating. This could also be influenced by any employability skills or programme delivery at the institution and the assumption that these skills are being developed.

4.1.2 Criticisms of research

To enhance reliability in the future of the research tools as this is something that can be repeated. Increasing and widening the sample for the studies across other disciplines and not just business students, these courses at any level tend to deliver a little more employability and enterprise skills and opportunities to develop the softer

skills than other courses, therefore this could be a bias for the research also. Students when selecting their multi raters should think about who they invite to complete the multi rater option and that they should select participants that would provide accurate and honest feedback.

Taking the self rater scores and looking at the categories and questions. Each category has five questions, the questions move the students to consider their skills from low skill level to higher and more complex as the questions in each section progresses from question 1 to 5 in each competency section. In each competency section, the students rate themselves higher up the Likert rating scale as the skill difficulty increases, with a clear comfort and tendency to rate at 4 almost always.

These high levels of rating from the self raters and the students are not reflective of the issues identified in the literature. These figures imply that students are comfortable and feel able to rate themselves. However, if this is the first opportunity such an exercise has been presented to the students, they may be concerned that if they do not rate themselves highly enough this could imply that they are unemployable. Developing a confidence to be willing to accurately and honestly assess the ability and if a mechanism for tracking and identifying progress is possible, then this could provoke more honesty and reflective results.

This study indicates that multi raters are also reticent to indicate a low level, perhaps there is scope for development to indicate what can be done to close the gap if a more honest and reflective rating is made. Family is always likely to have a bias, in the case of students if often the student is the first in the family to progress through education, this can also skew a perception of an individual's competency.

4.1.2.1 Primary UK Study

The study was opened up to a class and cohort of 22 FE business students. These subjects were known to the researcher but the researcher had no influence over the completion of the survey. The majority of the students' completed the entire research Appendix B Results. There was a low rate of response for the multi rater section, this is important but for this present research the focus was upon student self-perception.

The ideal scenario would be to have a wider response, the responses however are not being used to make generalisations across the demographic they are to make observations as is the phenomenological approach and develop indicators and sign posts.

When evaluating the competencies, often entrepreneurial skill and employability skills themselves are seen as interchangeable. The graphs illustrate how across the five questions students perceive their entrepreneurial skills. Again, there could be some rationale behind the bias as on a business-based course students are encouraged to be entrepreneurial and to consider business skills. There is a wider spread of responses across this question, Appendix B for tabulated data of all competency responses. With this lower order skill this supports those who have responded who may question more or are a little more creative.

Whilst examining the individual competencies there are some interesting observations. Communication where the average amount of students self-rating as 5 was 6.8, Leadership at 5.4, Relationship Building at 4.4, Cultural Empathy at 7.4 and Entrepreneurial mind-set at 4.8. There is a definite need for this skill set needed to be improved on by educators as this is clearly an employability skill WEF (2016) and must be understood and measured and demonstrable.

Critical Thinking, this is a skill that is considered important and covers skills around problem solving. Through this study, no one perceives themselves to be completely lacking in critical thinking skills. The majority of students perceive themselves to be in the 'mid-range' when they self-rate their critical thinking skills. An average of 2.8 students rate themselves as 'High' for critical thinking across the competency. For the individual questions, there is a more balanced result for Critical Thinking question 3 compared to other Critical Thinking questions. Generally, as is the case in the USA study, students will rate themselves at a level 4, an average of 9.6 students would give themselves a rating of 4 compared to the second most popular rating in this skill set of 3 with an average of 8.2 falling in to this score. This skill set potentially could be considered the least accurate out of all competencies measured, it could be regarded as the most difficult skill set to understand or the skill set that students may find most difficult to execute day to day, therefore this is difficult to understand where and if this skills has been acquired and demonstrated, this is reinforced by the fact that this skill set is the lowest scoring skill set for students with (2.8) students putting themselves as High (5) compared to that of the skills competency.

Communication, this second highest scoring competency. This Communication question 1 along with Communication question 3 saw the second highest ratings, this could be attributable to the familiarity of this skillset and the ability to see where and how effective this skill is demonstrated. Also on entry to this FE college, students are required to take a communication and literacy test as a measure of their level of ability and therefore the students are potentially more aware of what is involved in this skills set, they may be already influenced as they have had a form of assessment and may consider themselves better placed to rate themselves. This goes some way to illustrating the efficacy of some form of assessment and how once students are

encouraged to assess, they are confident to assess themselves in other scenarios. In particular, what is worth noting is that the cohort consider their communication is stronger and better in smaller groups than to a larger audience, on examination of the Communication Skills questions 1, 3, in comparison to 2,4,5.

In general results suggest that this cohort of students overall are confident communicators with only 7 of the 21/22 scoring themselves in the lower end (1/2) of the skill set. This is to be expected as the research and gives a little confidence to the data for this question. More mid to low scoring result for Communication Skills question 5 mirroring the result for Communication Skills question 1 which would suggest this cohort are confident in communicating what they want to but are not confident in coaching others how to do it. This is a key skill for being successful in the workplace and essential should these students acquire employment requiring some form of management. This rating also indicates a level of competitiveness amongst the cohort which may contribute to results under entrepreneurial mind-set which are quite favourable at the higher end of the rater scale.

Figure 3

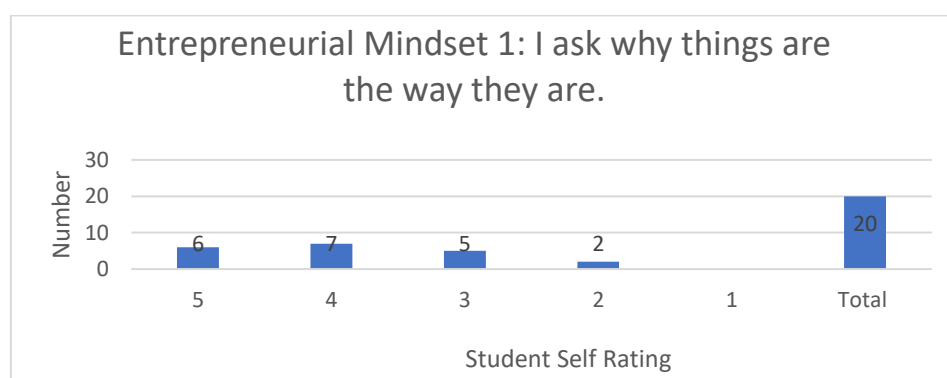
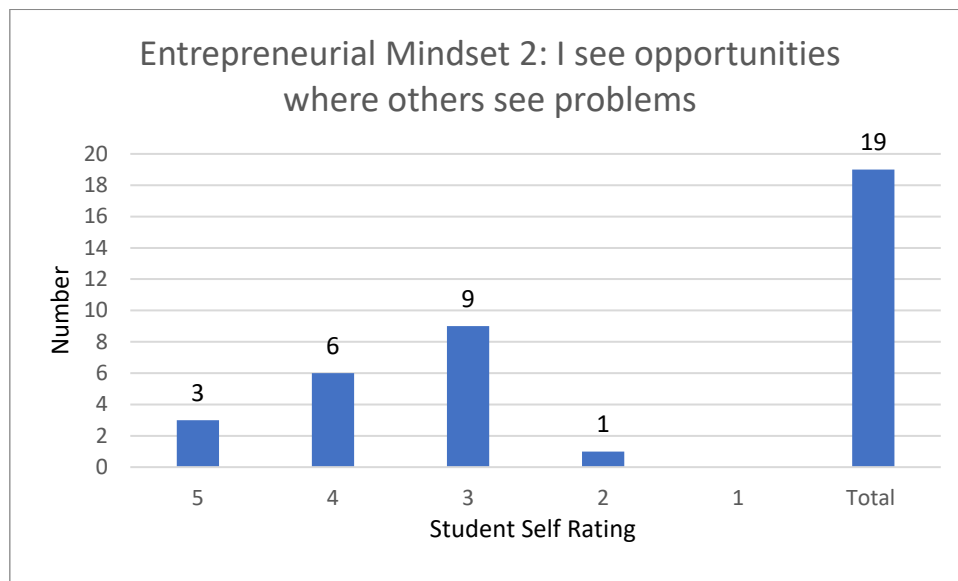
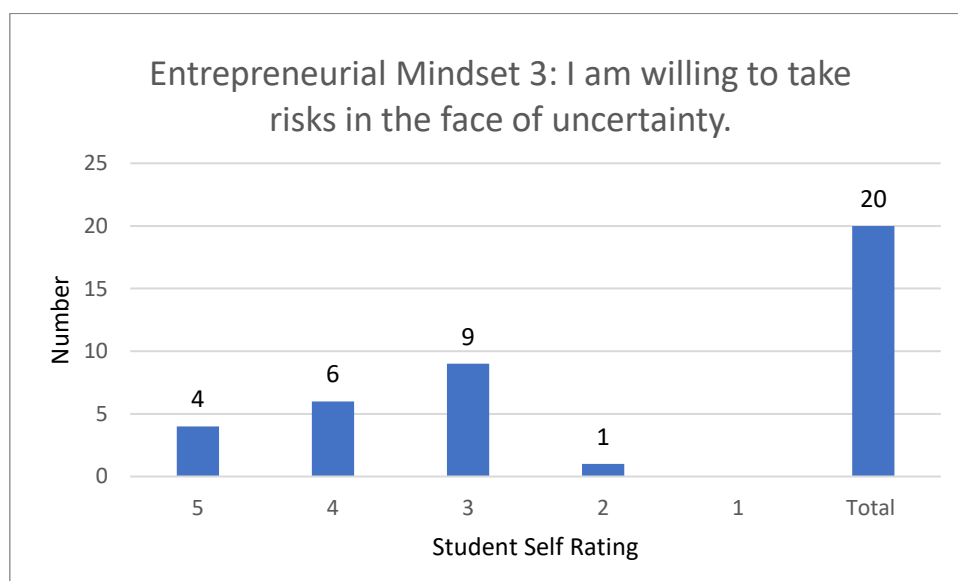


Figure 4



There is a more middle ground representation here where the majority have responded at a rating of 3, the sometimes category. It is difficult to note when in the confined to a curriculum have the students been afforded the opportunity to solve problems? to access the higher ratings, without having the guidance and support of a teacher.

Figure 5



The researcher anticipated the responses to be a lower as there is possibly little opportunity that the students have had to take risks, therefore this highlights the need to have more justification or possibly examples to help support and guide the assessment process.

Figure 6

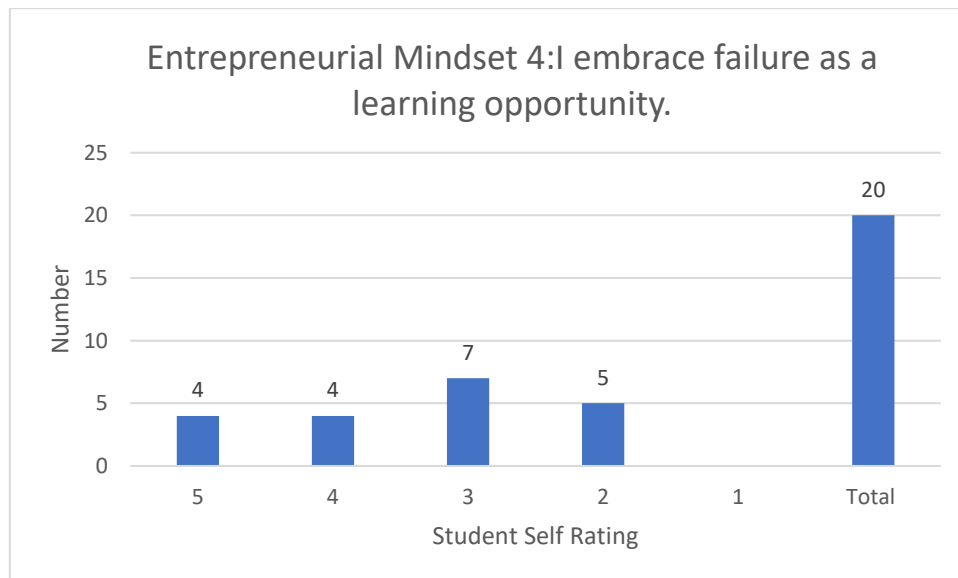
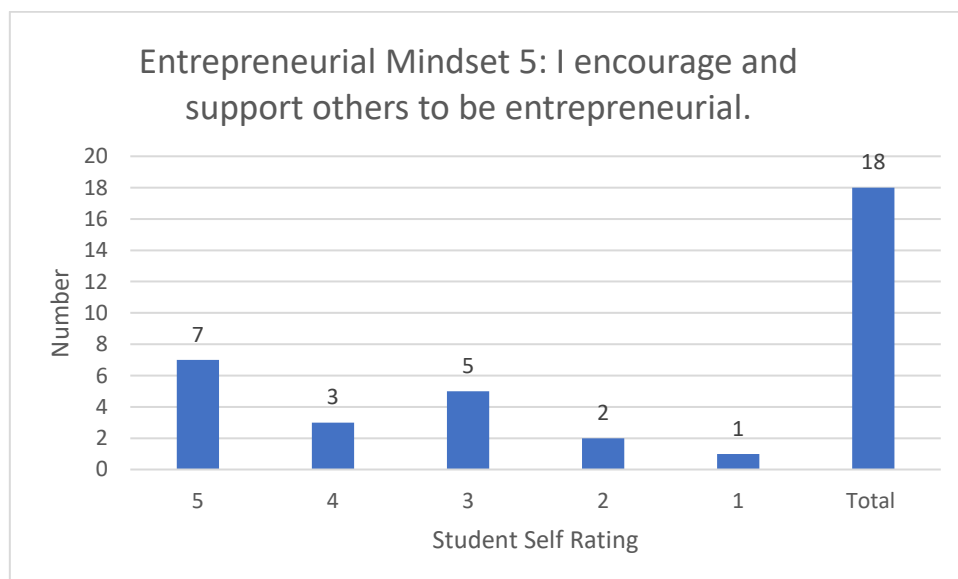


Figure 7



There is query here over where the respondent understands themselves what being entrepreneurial is and therefore knowing how to motivate and manage to inspire the skill in others is less likely than this rating would suggest, again this is in the confines of FE and curriculum.

Leadership overall was the third highest scoring skillset. There is some parity to be observed between this skillset and that of communicators. Often the best communicators have the strongest leadership styles. The scores are very similar here for both sets these competencies, the average number of students rating themselves as 4 over each question within the competency for communication is 6.8 and for leadership is the average is 7. Similarly, the average number of students rating themselves as 3 for communications is 6.6 and leadership is 6.4, furthermore the average number of students rating themselves as 2 for communications is 1.2 and for leadership 1. It could be inferred that the students have been required to work in group scenarios whereby their communication skills and therefore their team and leadership skills have been tested. There are not many opportunities other than such scenarios where the members of this cohort would have been able to work in a leadership capacity.

Cultural Empathy is potentially the standout skill for results that the researcher would not have considered students in the cohort were high self-rating. However there had been an initiative in the institution promoting the need for tolerance, diversity and associated consideration, this could therefore have some influence on the student's self-perception of their skill set at the time of the research being undertaken and therefore may go some way to explain why students were much more confident in the self-perception of this skill set. According Rust (2016), an ability to articulate this skill set is an integral facet of being employable.

This competency recorded the highest number of students scoring 5 (12 students) and as per question 3 Cultural Empathy could be attributed to cultural awareness probably at its peak in current times and reinforced with the in-house initiatives and drivers such as the government PREVENT strategy.

It is possible that the students as business students are slightly better placed to self-rate certain skills and they may have more opportunity to recognise their skills and where they have demonstrated them Pollard and Wilson (2014) state that enterprise education 'fosters' employability attributes particularly in Business Studies O'Leary (2012). Henry (2014) raises the point that perhaps there is too much expected from enterprise education to develop employability.

There was a poor return on the multi rater response, this could be attributed to the tighter timescales for completion of the existing survey and as identified in the USA study, due to the selection of multi raters.

This has identified that it is possible to use a mechanism to measure employability, it is also suggestable that allowing students to measure their abilities, whilst an initial assessment may prove to not be as realistic in the first instance it can certainly act as a platform to measure a progression journey and identify skills gaps. Reflection in education is consistent, reflecting upon learning experiences, Kolb (1984) suggested the benefits of using experiential learning for reflection and development. Some simplification of the questions may be necessary to enable a better success rate and a more accurate response. There was a general positivity around the research with one student stating when asked how they felt about the research during the interview one student said "I didn't even know that these were employability skills, I really think

that this will help me now try and work out what I can do when I apply for jobs”, Appendix E.

4.1.2.2 Interviews

The first interview obtained data from an expert in employability and therefore is subjective based on their opinions, their role and experience, but it does provide an insight into the issues facing the present and future workforce. The interviewee is the middle ground, between the self rater (student) and the researcher. The interview gave a more detailed understanding around the issue and is a picture built upon the view of the respondent White and Rayner (2014).

The FE college is implementing a new Employability skills initiative the researcher arranged for a formalised set of questions to be given to the staff member responsible for overseeing the initiative the full responses to the question are in Appendix C and an outline of the scheme in Appendix D.

The general findings from the interview are as follows.

Whilst employability has been identified as a key target for the college to address, when asked who the target was for the programme the response was

“Our target market for the first stage of the strategy is those nearest, and/or already within, the labour market. The programme will specifically target: the short-term (less than 12 months) unemployed, both pre and post-25; the underemployed; and women in low-paid, low-skilled employment.”

As the literature inferred there is a need to address the gap, but employability skills should be the same for anyone whether they are already in employment, education or whether they are a NEET statistic. If as the literature review identified that employability should be ongoing and traceable Thorley (2014) Wilson (2012) should it

not be that all students and indeed everyone who is of working age is having access to the same skills initiatives, if employability is such a consistent proposition.

One of the areas discussed in the literature review centred around responsibility for employability skills, the question was put to the interviewee who suggested:

“Clearly, the education system has a responsibility to equip individuals with the basic (core) employability skills but I believe parents/families/society as a whole also have a fundamental role to play in setting standards/expectations and acting as role models”.

This implies that employability skills are a “collective responsibility” stressing that this is more than an issue for educators, the interesting point to note is that the interviewee refers to role models and standards which reinforces the notion that employability skills are not necessarily measurable in terms of educational attainment, but are softer skills and behaviours, Yorke (2004, 2006).

Being able to implement such a programme will face barriers the literature found that barriers around skill sets of teaching staff for example, but a barrier that is the crux of the ‘employability problem’ is knowing what people want, in addressing this the interview considered that *“A more holistic approach, which looks at an employer’s wider workforce and recruitment needs and challenges, and then responds to those specific needs, would address this.”* Again, the findings and conclusions of the literature review identified that there is a need for consistency in the approach to employability Bowden et al (2000).

What was interesting is that whilst employability skills are wider issues, and the findings from WEF (2016) identified 25 skills, the interviewee stated that whilst there are the core skills as to be expected and echoing those in the literature the interviewee stated:

“also the wider circumstances which enable an individual to gain and sustain work, such as being motivated to work, the ability to effectively manage health conditions or disabilities, having access to housing, transport, childcare/care provision, being able to manage work and life challenges and commitments, financial literacy or overcoming other barriers such as a history of offending or substance misuse etc”

Are these employability skills or life skills? Are these skills exclusive to only potentially the NEET group where the key focus is of this college’s initiative and is reactive in this case to a group and therefore there is a lack of clarity once again over what is are employability skills. Again, are these not skills that are required by all and not just those identified groups and again the need for a wider and consistent provision. Does this illustrate that there is still no definitive understanding of what is an employability skill? or actually is this correct, is being an effective employee about managing these life considerations also? Brigstock (2009).

The core of this research is can employability skills be assessed with then consideration as to whether it should be. The interviewee agreed that “Yes. Employability is a very individual concept and therefore needs to be assessed on an individual basis (as opposed to being pre-determined through a cohort-driven approach e.g. by age, length of unemployment etc)”. This stresses the important of a need for self-perception and an ability to conduct and understand ones’ own ability Watts (2006). The interviewee also stated:

“an individual assessment of the client’s employability is essential in order to determine their relative distance from the labour market, their individual barriers and what mix of support they will therefore need to move closer to employment.”

Therefore, any tool needs to be live, it needs to be a tool that is updated and needs to have purpose to identify a path to becoming employable. The interviewee also

considers that the assessment had to be holistic and review all factors, as discussed by Rychen & Salganik (2001), but the assessment should not be standalone that the assessment should be people based, therefore input from others would be more purposeful.

4.1.2.3 Participant interviews

In order to identify how successful a self-assessment exercise of employability skills was, interviews with five participants was undertaken. The purpose was for the students to reflect on what they gained from the self-perception exercise and to ascertain some more detailed information on the assessment of the employability skills.

The questions asked were formed around six key questions which allowed for a free discussion. The findings identified that the students appeared to be more enlightened and informed. The students generally found the exercise useful and purposeful. With comments suggesting that this type of exercise adds value to their college experience and that they can see the value in undertaking such an exercise see Appendix E.

One student made the observation when asked what they got from the research

“I suppose I never really thought about my skills and if I had them but it makes sense now when you see job skills on adverts and things why the more you know and the more knowledge of what people in companies want you to have the better chance you have of getting a job once you can show you have the skills or a plan or a way of getting or improving them.”

This is an echo of the findings of Roegiers, (2016), Schlossberg, (1981), therefore the sense of self perception of ability is essential and key to students understanding their own employability and that of the OECD, (2002) where raising awareness help students make judgements on their future.

As Wilson (2012) embedding employability and the ability to assess employability can go a long way to improving a future workforce, the value of such an activity was commented during the interviews when asked if students would rate and track their measurability they responded:

"I would because if you can see what skills you have it makes you see improvements and if you keep adding skills and getting better at something then you have better chance of getting a job and if you always track it like in jobs or uni then it means its like your CV isn't but with the skills always showing I would do it."

"Yeah because if I knew what people wanted me to do or show when I get a job or apply for a job an the college knows then I could have targets and then I could see if I have done anything to get this skill or that skill and then if not I could find out ways to get it and it would help applying for any job like part time ones also."

Generally the research did give students the ability to gain a better understanding of what employability skills are, which in itself is important as the interview revealed that initially they were unsure as to what they were although they had heard the term referred to with a student commenting:

"They are skills that you can develop all the time and they are important as these skills can help you get a job to begin with."

The survey participation did raise understanding of what the skills were and students did express during the interview that once they had an understanding of what the skills were that they could consider ways and how they had developed or if they did possess them. A general consensus was agreed that educators need to do more to ensure employability is being addressed and that if it was part of curriculum then students would embrace it and expect it.

"I think we should have a chance to learn skills and see where we have the chance to get them and maybe we should be told when we are doing something that its an employment skill. We get told communications skills or number skills but maybe more on job skills that way when we apply for jobs we can see if we have the skills or not and know how to say if we have"

The overall interview reflected positively on participation of the survey although concerns which may have affected the rating over the language and some of the questions was expressed. Should a tool be developed then language that is accessible to all should be considered as employability skills are for the acquisition of all of the future workforce.

5 Conclusion

The research has identified gaps. Gaps in what is considered to a set of employability skills, gaps in approaches to developing employability skills or competency and gaps in the ability or even a lacking a facility to measure employability. The research has also identified that there is a need for all of the above, the students participating in the UK study interviews and the employability interviews confirm what has been expressed in the literature Cashian (2015) Tymon (2013).

There are challenges that prevail when supporting students through the move (transition) into employment or HE is significant for FE colleges. There are wider sets of stakeholders' and their individual priorities that have to be taken into consideration. The issue from the literature is that there is an uncertainty to know what employers want, which is the ultimate destination no matter how long the path or by which direction these students get there Mckinsey (2015).

The studies have presented the issue that there is a difficulty around the accuracy of self-perception of ability and attainment in respect of employability skills and that of other stakeholders. It is clear that an identifiable and consistent set of competences must be agreed on for any educational initiative to be successfully implemented and actually what this research indicates and reinforces from the literature is that this form of measurability is not only significant it is imperative Cole and Tibby (2013).

The value of understanding one's employability is clear from the research and from the participants', this is the first opportunity to consider what is employable. If such initiatives with measurability were implemented earlier in education and linked to development strategies in order to close any skills gaps then this makes such an exercise more useful and indeed essential Altrawneh (2016).

Not completing this as a standalone activity, using is a tool to help chart development will deliver more purpose. The research identified that as the higher-level abilities were presented in each competency there were notable gaps in student's perception of their abilities. This research has identified that there is a need for a consistent approach to delivering not necessarily employability skills and not necessarily as qualifications, but the consistency should come in the form of a framework Watts (2006) to measure competency. What was noted during the research in terms of responses to the online survey and the subsequent interviews Appendix E is that there are successful approaches to business students and the acquisition of employability skills but not necessarily consistent across all areas, again this is subjective research but perception is someone's reality.

"I think we have done things and probably in a business course we have done more than other college students or for those of us that have jobs as well we do things but I think it could be difficult for some to say if they have done these things in A levels maybe or if they don't work because well we didn't realize they were these type of skills but now we sort of understand we know we do them, those students may not know what they do or not do it and definitely won't know what the skills are."

There are gaps in government policy and at institutional levels. There is a disconnect between education and industry but government also CIMA (2007). There needs to be a common consensus that is purposeful for all stakeholders, Knight & Yorke (2004) with measures that are understood by all stakeholders. If the ultimate aim is employment then it is clear that to ensure readiness for the next industrial revolution WEF (2016), then FE institutions need to know now what is it that employers want and how do they want students to acquire these skills? what is meaningful to industry?. A competency measure should be developed that can be used to diarise skills

development, to justify levels of competence and to use this as catalyst to develop and close any identified gaps.

Employability is an important agenda, and is about supporting individual development and ongoing development, this was highlighted in the interview conducted during the course of the research Appendix C. There is a need to discuss the relationship between employability skills and employment outcomes. If a consistent programme of employability can be developed then measuring the success rate of obtaining employment following such a programme could be an economic indicator. More importantly any measures should seek to ensure students' can connect the outcomes of any employability assessment, with outcomes and development of strategies for development. It is also important that the self-reflection is supported and ensuring those responsible are able to support the students through their assessment Wilson (2012).

In summary and consideration of the aims and objectives of the research and the overall research question Can employability skills be assessed in Further Education students in Wales? Then this is an entirely possible prospect. This research demonstrates that it can be done and meaningful information can be derived from it. It reinforces the need for consistency in the approach and clear examples from all stakeholders concerned to identify key employability concepts, but it is a step that can be taken and should be considered as part of FE curriculum provision as was highlighted by Dearing (1997) and Wilson (2012), and with pressing changes in this VUCA Morgan (2014) there is more of a need than ever to develop a skilled and responsive workforce. There are recommendations that should be considered when undertaking the development of such a tool and research in the future and more

exploratory research is required in the ability of students to rate their own abilities for this to generate even more meaningful data and outcomes.

6 Recommendations

- ❖ Further research with a wider cohort could be beneficial to identify if those who are not in business-based subjects consider their employability skills in the same way. This will then analyse if business students have a natural bias and actually a better standard of competency and understanding of employability due to the nature of their subject. Business students were the cohort sampled during this research.
- ❖ Identify a consistent set of employability skills from all agencies and government reports and multiple stakeholder input.
- ❖ Develop a new tool to pilot based on the refined competencies and use it with students on entry to FE colleges. This tool should be used to develop a program of development that has input from a number of agencies and should be updated regularly and tracked into employment and HE. Consideration on the use of language and accessibility should be made.
- ❖ Create meaningful reports from such tool that allows educators, employers and the students themselves to have a meaningful summary of what level their competency is. Time should be taken to educate participants on the fact that this should be considered a development tool and not a tool to highlight inadequacy.

The researcher has a plan to further conduct more in-depth research, considering wider issues, more work on self-perception and developing confidence in the ability to rate oneself without feeling as though the subject is exposed. The researcher has plans as how this tool can be developed as an ongoing digital passport and will explore this in future research.

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7.1 Appendix A – Midwestern university data

DG error data: section bias

	Critical	Comms	Lead	Cultural	Relation	Entrep	Total
Academic	2	2	4	5	6	3	22
Community	11	15	15	21	20	12	94
Family	60	51	59	87	99	57	413
Work exp	35	31	38	44	51	29	228
Total	108	99	116	157	176	101	757

leadership 1 (I recognize my own emotions and the impact of those emotions on myself and my relationships with others)

	5	4	3	2	1	Total
Academic	3	8	2	0	0	13
Community	5	18	9	2	0	34
Family	38	121	68	3	1	231
Work exp	25	42	22	2	1	92
Total	71	189	101	7	2	370
Student	21	56	37	7	0	123

leadership 2 (I model leadership, and am respected, trusted, and sought out by others)

	5	4	3	2	1	Total
Academic	5	7	1	0	0	13
Community	15	14	5	0	0	34
Family	109	92	29	3	1	234
Work exp	56	31	6	3	0	96
Total	185	144	41	6	1	377
Student	9	61	45	7	0	122

leadership 3 (I control my emotions in the face of conflict)

	5	4	3	2	1	Total
Academic	7	7	0	0	0	14
Community	12	11	8	3	0	34
Family	56	106	62	7	1	232
Work exp	35	44	13	1	1	94
Total	110	168	83	11	2	374
Student	16	62	36	9	0	123

leadership 4 (I consistently demonstrate a willingness to serve others)

	5	4	3	2	1	Total
Academic	6	8	0	0	0	14
Community	17	14	2	1	0	34
Family	105	98	30	2	0	235
Work exp	58	37	1	0	0	96
Total	186	157	33	3	0	379
Student	23	55	41	4	0	123

leadership 5 (I adapt my personal behavior according to the changing needs of others)

	5	4	3	2	1	Total
Academic	3	5	1	0	0	9
Community	8	18	6	1	33	66
Family	55	112	55	11	0	233
Work exp	30	46	14	2	1	93
Total	96	181	76	14	34	401
Student	10	61	42	8	2	123

relationship 1 (I use my network to enhance personal or professional development)

	5	4	3	2	1	Total
Academic	3	5	1	0	0	9
Community	16	10	4	2	0	32
Family	84	94	47	4	2	231
Work exp	46	32	11	0	0	89
Total	149	141	63	6	2	361
Student	12	35	53	18	0	118

relationship 2 (I seek to build my network to enhance personal or professional development)

	5	4	3	2	1	Total
Academic	6	3	2	0	0	11
Community	14	10	7	1	0	32
Family	93	96	35	5	1	230
Work exp	51	36	5	0	0	92
Total	164	145	49	6	1	365
Student	13	48	40	18	0	119

relationship 3 (I monitor and evaluate my network for opportunities to improve)

	5	4	3	2	1	Total
Academic	3	3	2	0	0	8
Community	9	14	6	3	0	32
Family	74	86	54	8	2	224
Work exp	33	36	11	0	0	80
Total	119	139	73	11	2	344
Student	7	29	49	32	2	119

relationship 4 (I connect individuals within my network to enhance their personal or professional development)

	5	4	3	2	1	Total
Academic	2	2	1	0	0	5
Community	9	10	10	1	0	30
Family	65	86	55	11	2	219
Work exp	27	37	12	1	0	77
Total	103	135	78	13	2	331
Student	6	26	45	38	3	118

relationship 5 (I am aware of the need for a personal and professional network)

	5	4	3	2	1	Total
Academic	7	5	2	0	0	14
Community	18	10	4	1	0	33
Family	120	90	20	1	2	233
Work exp	59	32	2	0	0	93
Total	204	137	28	2	2	373
Student	45	50	23	1	0	119

Entrepreneurship 1 (I see opportunities where others see problems)

	5	4	3	2	1	Total
Academic	3	4	1	0	0	8
Community	8	80	18	0	0	106
Family	34	111	78	9	2	234
Work exp	17	51	26	1	0	95
Total	62	246	123	10	2	443
Student	9	29	60	18	1	117

Entrepreneurship 2 (I encourage and support others to be entrepreneurial) How can you do this if you do not see opps (ent 1)

	5	4	3	2	1	Total
Academic	2	4	0	0	0	6
Community	8	16	5	1	0	30
Family	69	87	55	9	1	221
Work exp	26	39	12	4	0	81
Total	105	146	72	14	1	338
Student	15	31	43	25	0	114

Entrepreneurship 3 (I embrace failure as a learning opportunity)

	5	4	3	2	1	Total
Community	6	18	8	2	0	34
Family	43	88	83	15	5	234
Work exp	26	45	20	1	1	93
Total	78	156	113	18	6	371
Student	18	31	49	15	4	117

Entrepreneurship 4 (I ask why things are the way they are)

	5	4	3	2	1	Total
Academic	4	4	3	0	0	11
Community	9	16	5	3	0	33
Family	61	91	68	12	1	233
Work exp	33	36	21	4	1	95
Total	107	147	97	19	2	372
Student	21	41	44	9	2	117

Entrepreneurship 5 (I am willing to take risks in the face of uncertainty)

	5	4	3	2	1	Total
Academic	4	4	2	0	0	10
Community	12	10	11	1	0	34
Family	41	97	76	19	4	237
Work exp	21	40	23	5	1	90
Total	78	151	112	25	5	371
Student	8	25	56	23	5	117

Cultural empathy 1 (I respect the differences identified by working with cultures other than my own)

	5	4	3	2	1	Total
Academic	6	2	1	0	0	9
Community	16	12	3	0	0	31
Family	78	93	40	2	1	214
Work exp	35	27	7	1	0	70
Total	135	134	51	3	1	324
Student	28	49	35	7	0	119

Cultural empathy 2 (I embrace opportunities to engage with cultures other than my own)

	5	4	3	2	1	Total
Academic	4	2	1	0	0	7
Community	14	12	6	1	0	33
Family	61	91	55	9	1	217
Work exp	32	24	14	3	0	73
Total	111	129	76	13	1	330
Student	21	35	37	23	2	118

Cultural empathy 3 (I create opportunities for others to work with cultures other than their own)

	5	4	3	2	1	Total
Academic	2	1	3	0	0	6
Community	6	10	8	1	0	23
Family	33	60	82	16	2	193
Work exp	13	31	13	3	1	61
Total	54	102	104	20	3	283
Student	7	7	53	33	15	115

Cultural empathy 4 (I am aware of the benefits of working with cultures other than my own)

	5	4	3	2	1	Total
Academic	6	3	0	0	0	9
Community	18	10	3	0	0	31
Family	69	95	46	6	2	218
Work exp	36	27	11	0	1	75
Total	129	135	60	6	3	333
Student	32	37	41	8	1	119

Cultural empathy 5 (I adapt my actions and decisions to effectively work with cultures other than my own)

	5	4	3	2	1	Total
Academic	5	1	1	0	0	7
Community	13	11	3	1	0	28
Family	65	91	49	6	0	211
Work exp	24	32	12	1	0	69
Total	107	135	65	8	0	315
Student	12	34	55	15	2	118

Communications 1 (I encourage discussion through empathy and sensitivity, unheard voice into the conversation)

	5	4	3	2	1	Total
Academic	4	6	1	0	0	11
Community	10	9	9	4	0	32
Family	39	98	73	21	2	233
Work exp	21	42	23	3	1	90
Total	74	155	106	28	3	366
Student	16	39	45	28	0	128

Communications 2 (I effectively communicate complex information with the audience in mind)

	5	4	3	2	1	Total
Academic	6	6	0	0	0	12
Community	8	17	8	1	0	34
Family	38	115	66	6	1	226
Work exp	27	23	17	2	0	69
Total	79	161	91	9	1	341
Student	3	27	77	20	1	128

Communications 3 (I demonstrate the ability to coach others in terms of oral and written communication)

	5	4	3	2	1	Total
Academic	2	7	3	0	0	12
Community	11	10	11	2	0	34
Family	51	97	65	8	1	222
Work exp	24	40	17	3	0	84
Total	88	154	96	13	1	352
Student	10	39	52	24	3	126

Communications 4 (I am able to communicate orally and in writing, using clear and articulate language)

	5	4	3	2	1	Total
Academic	8	4	3	0	0	15
Community	15	17	2	0	0	34
Family	82	103	48	2	0	235
Work exp	38	47	9	1	0	95
Total	143	171	62	3	0	379
Student	13	73	35	6	0	127

Communications 5 (I am able to communicate in small groups, knowing when to contribute and when to listen)

	5	4	3	2	1	Total
Academic	7	7	0	0	0	14
Community	13	15	5	0	1	34
Family	85	111	35	2	2	235
Work exp	36	43	9	1	0	89
Total	141	176	49	3	3	372
Student	28	67	32	1	0	128

Critical Thinking 1 (I act as an advocate for critical thinking among peers)

	5	4	3	2	1	Total
Academic	4	5	5	0	0	14
Community	7	17	8	2	0	34
Family	69	82	69	9	2	231
Work exp	27	53	15	1	0	96
Total	107	157	97	12	2	375
Student	7	40	60	27	1	135

Critical Thinking 2 (I analyze available information and clearly state potential consequences for actions)

	5	4	3	2	1	Total
Academic	5	8	3	0	0	16
Community	9	21	5	1	0	36
Family	63	127	40	1	2	233
Work exp	24	57	16	1	0	98
Total	101	213	64	3	2	383
Student	17	66	47	4	1	135

Critical Thinking 3 (I develop a plan to implement the best solution when faced with a given problem)

	5	4	3	2	1	Total
Academic	4	11	0	0	0	15
Community	7	19	9	0	0	35
Family	71	117	42	5	0	235
Work exp	28	56	11	1	0	96
	5	4	3	2	1	Total
Total	110	203	62	6	0	381
Student	25	66	39	4	1	135

Critical Thinking 4 (I develop and bring attention to all potential solutions related to a given problem)

	5	4	3	2	1	Total
Academic	4	8	3	0	0	15
Community	8	15	11	1	0	35
Family	43	120	66	3	1	233
Work exp	14	62	20	0	1	97
Total	69	205	100	4	2	380
Student	9	43	75	7	1	135

Critical Thinking 5 (I identify and bring attention to problems, questions, and conflicting views)

	5	4	3	2	1	Total
Academic	3	12	0	0	0	15
Community	8	22	5	1	0	36
Family	64	122	42	6	0	234
Work exp	31	54	13	1	0	99
Total	106	210	60	8	0	384
Student	10	56	63	5	1	135

7.2 Appendix B – FE College study

Communication Skills 1: I am able to communicate orally and in writing, using clear and articulate language						
Rater	5	4	3	2	1	Total
Student Self Rating	11	8	3			22

Communication Skills 2: I encourage discussion through empathy and sensitivity, by working to bring the unheard voice into the conversation						
Rater	5	4	3	2	1	Total
Student Self Rating	4	9	7	2		22

Leadership 1: I recognize my own emotions and the impact of those emotions on myself and my relationships with others.						
Rater	5	4	3	2	1	Total
Student Self Rating	7	8	3	2		20

Leadership 2: I control my emotions in the face of conflict.						
Rater	5	4	3	2	1	Total
Student Self Rating	5	2	12	1		20

Leadership 3: I adapt my personal behavior according to the changing needs of others.						
Rater	5	4	3	2	1	Total
Student Self Rating	7	8	5			20

Cultural Empathy 1: I am aware of the benefits of working with cultures other than my own.						
Rater	5	4	3	2	1	Total
Student Self Rating	9	7	4			20

Cultural Empathy 2: I embrace opportunities to engage with cultures other than my own.						
Rater	5	4	3	2	1	Total
Student Self Rating	9	7	4			20

Cultural Empathy 3: I respect the differences identified by working with cultures other than my own.						
Rater	5	4	3	2	1	Total
Student Self Rating	12	7	1			20

Communication Skills 3: I am able to communicate in small groups, knowing when to contribute and when to listen.						
Rater	5	4	3	2	1	Total
Student Self Rating	11	7	3			21

Communication Skills 4: I effectively communicate complex information with the audience in mind.						
Rater	5	4	3	2	1	Total
Student Self Rating	3	5	11	2		21

Communication Skills 5: I demonstrate the ability to coach others in terms of oral and written communication.						
Rater	5	4	3	2	1	Total
Student Self Rating	5	6	8	2	1	22

Leadership 4: I consistently demonstrate a willingness to serve others						
Rater	5	4	3	2	1	Total
Student Self Rating	4	10	5	1		20

Leadership 5: I model leadership, and am respected, trusted, and sought out by others.						
Rater	5	4	3	2	1	Total
Student Self Rating	4	6	8	1		19

Cultural Empathy 4: I adapt my actions and decisions to effectively work with cultures other than my own.						
Rater	5	4	3	2	1	Total
Student Self Rating	5	10	2	2		19

Cultural Empathy 5: I create opportunities for others to work with cultures other than their own.						
Rater	5	4	3	2	1	Total
Student Self Rating	2	5	2	2	3	14

Relationship Building 1: I am aware of the need for a personal and professional network.						
Rater	5	4	3	2	1	Total
Student Self Rating	10	9			2	21

Relationship Building 2: I seek to build my network to enhance personal or professional development.						
Rater	5	4	3	2	1	Total
Student Self Rating	6	9	2	1		18

Relationship Building 3: I use my network to enhance personal or professional development.						
Rater	5	4	3	2	1	Total
Student Self Rating	2	8	4	1	1	16

Relationship Building 4: I monitor and evaluate my network for opportunities to improve.						
Rater	5	4	3	2	1	Total
Student Self Rating	1	8	5	1	1	16

Relationship Building 5: I connect individuals within my network to enhance their personal or professional development.						
Rater	5	4	3	2	1	Total
Student Self Rating	3	5	9		3	20

Entrepreneurial Mindset 1: I ask why things are the way they are.						
Rater	5	4	3	2	1	Total
Student Self Rating	6	7	5	2		20

Entrepreneurial Mindset 2: I see opportunities where others see problems.						
Rater	5	4	3	2	1	Total
Student Self Rating	3	6	9	1		19

Entrepreneurial Mindset 3: I am willing to take risks in the face of uncertainty.						
Rater	5	4	3	2	1	Total
Student Self Rating	4	6	9	1		20

Entrepreneurial Mindset 4: I embrace failure as a learning opportunity.						
Rater	5	4	3	2	1	Total
Student Self Rating	4	4	7	5		20

Entrepreneurial Mindset 5: I encourage and support others to be entrepreneurial.						
Rater	5	4	3	2	1	Total
Student Self Rating	7	3	5	2	1	18

7.3 Appendix C – Interview responses

1. Could you summarise your role and the employability initiatives that the college is implementing?

My role is to develop and implement an employability strategy for the college. The first stage of that strategy is to quickly build capacity, capability and credibility within the college through the delivery of four new EU-funded projects, which will be delivered as a single employability programme 'Better Jobs, Better Futures'.

[A summary of the programme is attached] Appendix D

2. Who do you see are your target market? Who is the programme serving?

Our target market for the first stage of the strategy is those nearest, and/or already within, the labour market. The programme will specifically target: the short-term (less than 12 months) unemployed, both pre and post-25; the underemployed; and women in low-paid, low-skilled employment.

[See attached summary doc for more details]. Appendix D

3. What do you consider are the core employability skills?

I believe that employability needs to be viewed and assessed holistically, taking into account not only what many view as core employability *skills* (such as literacy, numeracy and ICT, problem-solving skills, communication skills, interpersonal skills and more practical skills such as timekeeping), but also the wider circumstances which enable an individual to gain and sustain work, such as being motivated to work, the ability to effectively manage health conditions or disabilities, having access to housing, transport, childcare/care provision, being able to manage work and life challenges and commitments, financial literacy or overcoming other barriers such as a history of offending or substance misuse etc.

4. Can in your opinion, employability skills be assessed?

Yes, but it requires a high level of skill and needs to be a holistic assessment (taking into account the full range of factors/barriers outlined above). Standardised diagnostic/profiling tools are useful, but not just as a standalone assessment they need to be supplemented by a people-based assessment also.

5. Should employability skills be assessed?

Yes. Employability is a very individual concept and therefore needs to be assessed on an individual basis (as opposed to being pre-determined through a cohort-driven approach e.g. by age, length of unemployment etc) if interventions are to be truly successful. So an individual assessment of the client's employability is essential in order to determine their relative distance from the labour market, their individual barriers and what mix of support they will therefore need to move closer to employment.

6. What challenges do you think employers and potential employees, graduates, school leavers, NEETs for example face?

As above, I think it's difficult to describe the challenges faced by cohorts, given the individual nature of employability. I've outlined a range of barriers in my response to question 3, all of which could apply to individuals within these various cohorts. From an employer perspective, I think the challenge is similar, in having to accept that individuals will bring differing levels of employability (as, of course, skills more generally) but support still tends to be cohort-driven and inflexible, and therefore doesn't necessarily cater for individual needs. A more holistic approach, which looks at an employer's wider workforce and recruitment needs and challenges, and then responds to those specific needs, would address this. This is the approach we're taking through the Better Jobs, Better Futures programme.

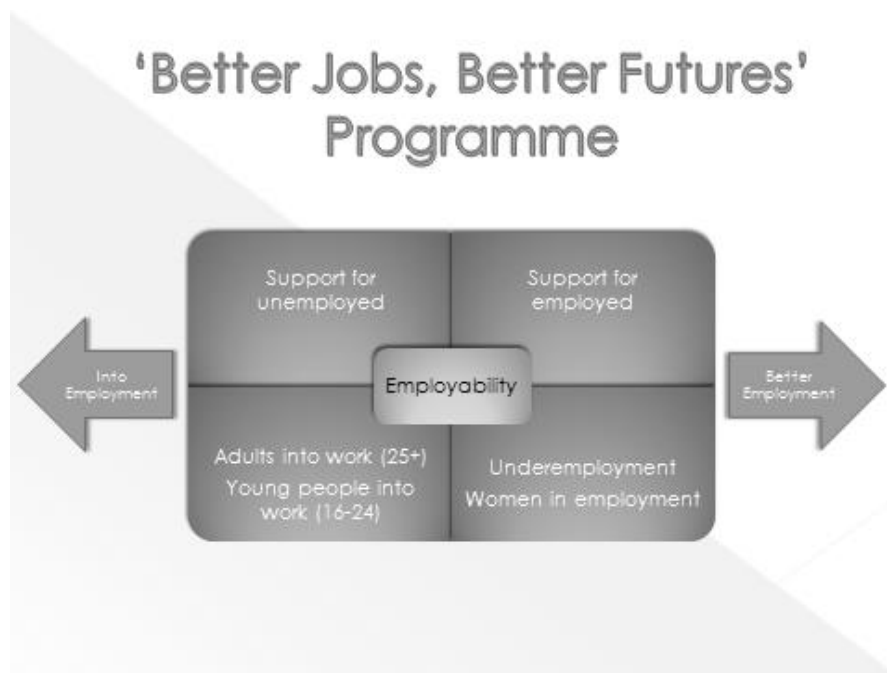
7. Who is responsible for developing employability skills?

Tough question! Clearly, the education system has a responsibility to equip individuals with the basic (core) employability skills but I believe parents/families/society as a whole also have a fundamental role to play in setting standards/expectations and acting as role models, so that young people grow up with a realistic and positive sense of what being employable means. Post-16 employment and skills providers clearly also have a role to play in supporting the continued development of these skills/behaviours where individuals require this. Then there are the wider aspects of employability, such as those I mention in Q3, which require a much broader collective responsibility across a range of public (and other) services such as health and social services, probation services, housing etc. So I think it's far beyond one single sector or organisation's responsibility, it's a collective one.

8. If there was a generic method of assessing employability skills that could be used by educators, employers and students as a measure do you consider this would be valuable?

Yes, hugely valuable but, as mentioned above, this would still require a high level of skill and collective input to provide a truly meaningful assessment.

7.4 Appendix D – FE college employability initiative



The 'Better Jobs, Better Futures' employability programme will operate alongside the college's workforce upskilling programmes to deliver a 'pipeline' approach to supporting people to gain, retain and progress within sustained employment. The 'pipeline' will aim to effectively match labour supply and demand through analysis of local, regional and national LMI and the delivery of: targeted recruitment and training; more intensive and continuous 'into work' support; and a twin-track approach to working with employees and employers to improve career advancement and workplace productivity/potential. Through this integrated approach the programme will aim to maximise opportunities for in-work progression ('moving people up') in order to free-up entry level job opportunities for those seeking work ('moving people in').

'Better Jobs, Better Futures' will encompass a suite of four EU-funded projects to be delivered over a three-year period, targeting the groups set out below:

- **Adults into work (25+)** - The project will target short-term unemployed participants¹ with low/no skills or a work limiting health condition or disability.
- **Young people into work (16-24)** - The project will target young people aged 16 to 24 who are not in employment, education or training, who are seeking employment and who are either job-ready, or likely to be job ready with a short, targeted intervention.
- **Underemployment²** - The project will target those newly entering employment, and those already in employment, who are at risk of disengaging or not fully engaging with the labour market either due to their skills being underutilised in their current job, due to part-time or 'fragile' employment, or due to other barriers such as health,

¹ Less than 12 months unemployed. This will include those who are and who are not claiming benefits.

² 'Underemployment' includes those who are not working as many hours as they would wish and/or those whose skills/productivity are being under-utilised in their current job

7.5 Appendix E – Primary research participant Interviews

Question 1 Since completing the questionnaire, are you more aware of what a set of employability skills are?

Student 1: To be honest I didn't know what employability skills were. I have heard them being talked about in my course, but I didn't really think that they were skills anything other than communication or team working.

Student 3: Yes me to. I thought it was about being a good communicator and I just thought on application forms and things like that you would just say where you have used good communication skills.

Student 5: Team working I guessed was a skill needed for work, but I didn't really think of these as employability skills. To be truthful employability skills I thought that they were about getting a job.

Student 1: They are about getting a job.

Student 4: I didn't even know that these were employability skills, I really think that this will help me now try and work out what I can do when I apply for jobs.

Student 5: I know that but I didn't think that they were skills you could really assess or work on I just thought you got them by working or volunteer work or something and that as you got more jobs you got more skills.

Student 2: Yeah they are actually skills you can develop all the time and we are gaining them all the time. So I suppose yes I know what skills for employment are now and what skills you need to get a job. They are different to just getting qualifications.

Question 1b: Do you have an understanding of what employability skills are?

Student 2: They are skills that make you able to do a job and they are not for any specific job, so communication is one but something like problem solving is also one.

Student 3: They are things that mean you are able to do a job or be better in a job.

Student 1: They are skills that you can develop all the time and they are important as these skills can help you get a job to begin with.

Question 2 What employability skills do you think you lack presently?

Student 4: I didn't really know what they are but based on the survey we did I think the critical thinking part I found difficult to understand. I know it is about trying to think differently but it was difficult to understand what it was until the parts of the question were broken down. Also, cultural empathy, that was confusing but I get it is about being better around people and understanding people and in any job you need to be good around people because you have to work with them or serve them as customers and things like that.

Student 1: I thought entrepreneurial skills were about being in business then when I started to answer the question it is about being in any job isn't you have to think and be creative and plan and all of that is part of being like a business entrepreneurs. It isn't just about running a business, but the skills you need to run a business are also skills you need to work in one.

Student 3: I didn't really consider the ideas of relationship building as important but I get now that it is about managing people and supporting people and working with people so the better you are at that the better you will be in your job and also asking for help and if you want to be a manager in the future you need to know how to have relationships with people.

Question 3 Have you completed any tasks/work/projects that you think can help you demonstrate employability skills?

Student 5: I do lots of these things but we don't have them as headings in my part time job so I have some things like we mentor new starters and we have team days and we also have booklets where we have to try and do different skills and earn customer recognition and things like that. In college because the course is business we do come up with ideas to solve problems like creating new product ideas or we do a teams module and that helps us work and lead a team.

Student 4: I think on business we are lucky that we get the chance to do lots of these things and our lecturers always say this is like what goes on in the industry and places of work and it is If this survey is saying these are the skills you need to get a job.

Student 1: I think we have done things and probably in a business course we have done more than other college students or for those of us that have jobs as well we do things but I think it could be difficult for some to say if they have done these things in A levels maybe or if they don't work because well we didn't realize they were these type of skills but now we sort of understand we know we do them, those students may not know what they do or not do it and definitely won't know what the skills are.

Student 3: Sometimes I think college means we are focused on our exams or assignments and our grades you don't really think about getting a job, you know a proper job after college unless you are getting an apprenticeship. You may think about getting a part time job but I think it is about getting qualifications really.

Question 4 Do you consider it is important to be aware of what employability skills are and why? And based on what you just said do you

think the college or colleges should do more with getting you ready for work?

Student 3: Yeah I think so now. I mean I suppose work experience gets you really ready but not everyone can get that not everyone has a job not everyone has work experience on the course, exams don't really need skills other than revision so these aren't work really are they. But we have said that on business we see and know now we do some of these and if we really asked our lecturers they could show us probably where we do most of them maybe all of them and we don't know. So maybe they are getting us work ready.

Student 4: Yeah I agree but not on all courses and I do think again as we are business it's different as we are doing business tasks and getting business skills. Most of the time we are focused on UCAS and applying to uni and that is grades and qualifications not jobs.

Student 5: Yeah college should get us ready as not everyone is going to uni and when I was deciding whether to apply to uni or not or apprenticeship the applications for apprenticeships were hard as they were asking for me to say where I had certain skills and I found it difficult to think or say.

Student 2: I think we should have a chance to learn skills and see where we have the chance to get them and maybe we should be told when we are doing something that its and employment skill. We get told communications skills or number skills but maybe more on job skills that way when we apply for jobs we can see if we have the skills or not and know how to say if we have.

Question 5 If you were able to continuously document and assess your employability skills would you do so?

Student 3: So you mean if we kept reports or records like grades. Yeah because if I knew what people wanted me to do or show when I get a job or apply for a job an the college knows then I could have targets and then I could see if I have done anything to get this skill or that skill and then if not I could find out ways to get it and it would help applying for any job like part time ones also.

Student 1: Is that a bit like career planning in business we have an assignment that asks us to look at our skills and then see what skills our job needs and we need to see if we have them, we did it a bit for Welsh Baccalaureate as well. Yeah that was useful in the end because I thought being an accountant was just getting degree and then the AAT or something whereas this showed other things as well.

Student 5: I would because if you can see what skills you have it makes you see improvements and if you keep adding skills and getting better at something then you have better chance of getting a job and if you always track it like in jobs or uni then it means its like your CV isn't but with the skills always showing I would do it.

Question 6; Do you have an opinion on whether employability skills should be taught or part of everyone's education and time in college and how and why?

Student 5: Yes everyone should be able to understand what is needed to get a job. That is the point of all courses and uni at the end of the day. College is supposed to get you ready for work and then we need to know what we are supposed to do to be ready for work.

Student 1: Tutorial really is the best place not just general stuff like time management and stress but what and how to get a job. What employers want is important

Student 3: Employers should tell colleges what they want so that colleges can get students ready and find ways to get them ready.

Questions 7: What did you get from participating in this research?

Student 4: I know what employability skills means and I know what types of skills they are and I also now know why I need to think about what skills I have. If I know I can improve.

Student 5: Yeah its like with grades, you need to know what your current mark is so you can get better so we should know what skills we have and if we need to improve them. So this survey has made me think that I need to start thinking about what I can and have done that shows I can be good in jobs.

Student 1: I suppose I never really thought about my skills and if I had them but it makes sense now when you see job skills on adverts and things why the more you know and the more knowledge of what people in companies want you to have the better chance you have of getting a job once you can show you have the skills or a plan or a way of getting or improving them.

Student 3: I agree with the others but I also got to learn what some things meant like critical thinking not perfect but I sort of get it now – some of the wording in the questions was a bit confusing and I think it could be made a bit easier to understand and then it would be better and students might do it then.

Student 2: I wasn't sure of some of the questions but I get the idea of rating how good you are at something and it doesn't mean its negative or bad it just means its like a target to improve.