Title

A critical review of Government workforce development initiatives, from a multistakeholder perspective.

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To my husband and family for their encouragement and support.

Declaration

I, Rosa Whitfield, declare that I am a student of the Masters in HRM at the National College of Ireland and that the information contained in this (my submission) is information pertaining to research I conducted for this dissertation. All information other than my own contribution will be fully referenced and listed in the reference and bibliography section.

Abstract

Purpose

The purpose of this dissertation is to critically review government workforce development initiatives from the perspectives of some of the main stakeholders in the scheme.

Methodology

The research was conducted using semi-structured interviews with those involved in developing the strategy behind the schemes and the views one provider of the programmes in the Dublin area.

Findings

The Springboard and ICT conversion skills programmes have been successful in returning people to jobs. Contributing factors to the success are the work-placements, career bridge modules and the collaborative aspect of the implementation of the programmes.

Implications

The findings indicate the continued need for these programmes over the coming years, with perhaps a different funding model being introduced at a later stage. A more cohesive approach from government departments could make the current schemes more effective and efficient.

Keywords

Workforce development; Labour Market Activation, Training and Development, Talent Management

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Glossary

CAO	Central Applications Office
CSO	Central Statistics Office
DES	Department of Education and Skills
DJEI	Department of Jobs, Enterprise and Innovation
DSP	Department of Social Protection
ESF	European Social Fund
EGFSN	Expert Group on Future Skills Needs
EU	European Union
EVP	Employee Value Proposition
FÁS	Irish National Training and Employment Authority
FDI	Foreign Direct Investment
GDP	Gross Domestic Product
HEA	Higher Education Authority
HR	Human Resources
HRD	Human Resource Development
HRM	Human Resource Management
HRPA	Human Resource Professional Association
ICT	Information and Communication Technologies
IBEC	Irish Businesses and Employers Confederation
ILO	International Labour Organisation

- IT Information Technology
- ITes Information Technology enabled services
- LMAF Labour Market Activation Fund
- MNCs Multi-National Corporations
- NFQ National Framework of Qualifications
- OCED Organisation for Economic Cooperation and Development
- PES Public Employment Service
- PLC Post-leaving Certificate
- RBV Resource Based View
- SHRM Strategic Human Resource Management
- SME Small to Medium Enterprise
- VTOS Vocational Training Opportunities Scheme

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Chapter 1. Introduction

The dissertation proposes to explore the literature, publications and theories around the national skills deficit in the information and communication technologies (ICT) sector and how government workforce development initiatives can play a part in re-skilling the unemployed population. It will critically review the government initiatives used to address the increase in long-term unemployment whilst closing the gap in the current skills deficit explicitly in the ICT sector in the Republic of Ireland from the perspective of the multi-stakeholders in the process.

It will also look at the major stakeholders; the government, state bodies, education providers, individuals enrolled on the programmes and industry to build a picture of the aims and objectives of these schemes.

As part of the global recession Ireland has seen huge job losses, particularly in the areas that were once booming during the Celtic Tiger such as construction and manufacturing. The economy has gone from periods of extraordinary growth to extraordinary contraction (Barrett and McGuinness, 2012). Despite a 0.1% increase in employment, the first rise that has been seen since 2008, the total number of people unemployed in Ireland is currently 292,000 (Quarterly National Household Survey, Quarter 1 2013). The average number of people unemployed in Ireland in 2012 was 316,000. Of these, long-term unemployed (those unemployed for 12 months or more) accounted for 59.9% of total unemployed in Q4 2012 and is showing signs of a decrease for the first time since 2007 (Quarterly National Household Survey). The 25 -34 age group is the largest unemployed cohort. Males account for the 65.7% of those unemployed and 73.4% of those long-term unemployed.

In terms of educational attainment the Household Survey highlights that the highest unemployment rates are with those holding the lowest levels of qualifications. Those with Leaving Certificate or post-leaving Certificate (PLC) qualifications account for 45.6% of the total unemployed in

comparison to 22.4% that hold a third level qualification with just 15.8% of them who are long-term unemployed. The crisis has hit the least qualified and the labour-intensive sectors hardest (Pina, 2011).

Several Government initiatives have been launched in recent years to allocate funding for part-time third level programmes to address the skills deficit and re-skill those that are unemployed as a result of the recession. These include Labour Market Activation Schemes and newer initiatives such as Springboard and ICT Skills.

The primary target participants are unemployed people who have lost their jobs as a result of the recession and who need to be re-skilled to get back to sustainable employment (Springboard, 2013). The ICT Skills initiative is also open to those in employment to give these people the opportunity to upskill or re-skill to an ICT area. The majority of these courses have a built in work experience element so the graduates are expected to have practical experiences to enable them to be industry ready.

"Ireland is currently in the grip of the most serious economic recession in its modern history which is having a profound effect on the Labour Market and on the management of human resources" (Roche, Teague, Coughlan & Fahy, 2011). As a result of the 2008 global financial crisis, governments were forced to introduce policies to boost their economies using fiscal measures to bailout banks in an effort to regain investor and consumer confidence (Hazelkorn & Massaro, 2011). These financial measures hit across all sectors and organisations and placed a new burden on the role of HR. Griffin and Smith (2010) observation of HR professionals in a recession are that they are more challenged and result in busier times for the function. They claim that many see the role of the HR function as that of "executioner's assistant". Many companies have made redundancies, frozen recruitment and cut training and development budgets. Finney (2010) found that these types of changes made a significant impact to the employee value proposition (EVP) which is what the employer expects of their employees and what they expect But the HR function should also see the recession as an in return.

opportunity to get smarter and help to get the organisation through the tough times by planning ahead, maintaining key relationships with managers and senior management and preparing for the future (Griffin & Smith, 2010, Roche, 2011). One way to plan ahead would be for organisations to adopt a more strategic approach to Talent Management, which has replaced the notion of succession planning as it is not only concerned with staff development but more broadly with recruitment and retention of first-class talent (Garavan, Hogan and Cahir-O'Donnell, 2009).

"The transformation needed to repair our shattered economy will not come through one big bang solution but through deliberate and determined action across all corners of Government and the private sector" (Richard Bruton, T.D. Minister for Jobs, Enterprise and Innovations, Action Plan for Jobs, 2013). The Expert Group on Future Skills Needs (EGFSN) is tasked at advising the Government on future skills requirements and labour market issues that affect employment and enterprise. They are made up of representatives of business, employees, Government departments, state agencies, education and training.

1.1 Aims of the research

The dissertation will critically review government workforce development initiatives, focusing on Springboard and ICT skills conversion initiatives by seeking the views of the main stakeholders in the process. While the literature to date has raised many questions and potential avenues for further research, the dissertation will focus on the following academic areas: Workforce Development, Talent Management and Learning & Development.

The outcomes of this dissertation will look at how these initiatives have impacted on stakeholders and the ICT skills deficiency in Ireland.

The significance of the dissertation will be to gain the perspective of each of the stakeholders in the process with a view to collating their experiences and views on the initiatives in order to obtain greater understanding and critically review them.

1.2 Research objectives

The objective of the dissertation is to determine the following:

- 1) Are the Government initiatives, fulfilling each stakeholders objectives?
- 2) Are Springboard and ICT Skills creating a talent pipeline for the ICT industry in Ireland?
- 3) Is the introduction of work-placements assisting participants to become "work ready" for roles in the ICT sector?
- 4) What is the future for workforce development initiatives in Ireland?

1.3 Structure of the dissertation

Throughout the following chapters the author will place the research issues in context and the population under study. A review of the literature surrounding the area of workforce development, talent management and dealing with skills deficits and the displacement of skills is discussed in relation to its findings. This section will justify the theoretical perspective for this researcher.

Chapter three will introduce how the research strategy was employed and how the data was analysed.

Chapter four discusses the findings of the results of the study, detailing the main issues and outcomes of the research. Initial findings will be detailed and discussed with reference to their relationship with the questions posed.

Chapter five will draw conclusions from the data gathered. The author will also issue recommendations for future consideration.

Chapter 2. Literature review

2.1 Introduction

Goldman Sachs International and BP Chairman Peter Sutherland recently said that Ireland's budget decisions are being applauded in financial circles (IDA Ireland, 2013). Across Europe Ireland was being held up as a model for how austerity can help a country emerge stronger from the crisis, with German Chancellor Angela Merkel saying Ireland was " a shining example" (Alderman and Jolly, 2013). In a visit to Ireland in January 2013, Bill Gates, founder of Microsoft, stated that Ireland had "a lot of strengths" including "basic quality of the workforce and the attractiveness as a place to live" (McGreevy, 2013). He also identified third level education as the best way for a company to be competitive.

But figures announced by the Central Statistics Office (CSO) at the end of June 2013 show that Ireland has slipped into its second recession in three years. This has been identified after the economy has had two consecutive quarter periods of declining gross domestic product (GDP).

To address the implications the recession has had on the jobs front and workforce development, focusing on certain government initiatives designed to address unemployment and skills gaps, the researcher has conducted the following review of literature in the subject area with a view to gaining a greater understanding of the topic.

2.2 Definitions

This chapter will look at the areas of workforce development, labour market activation initiatives in Ireland and preventative measures such as talent management and training and development. Below are definitions of the key terms and headings in this chapter.

Workforce development is the development of individuals to improve knowledge and skills that are needed, in a particular industry, of the workforce in order to deliver productivity and services. Their development will create a pool of skilled employees through training, gaining skills and experience, improving knowledge and adhering to legislation (Garavan, Costine and Heraty, 1997).

Talent Management is the management of activities such as the recruitment of new employees, retention of existing employees, the development of people and on occasion, the dismissal of others (Taylor, 2010).

CIPD (2001) define training and development – "the process of developing people involves the integration of learning and development processes, operations and relationships. Its most powerful outcomes for the business are to do with enhanced personal competence, ability and employability".

Labour market activation is the training of unemployed adults or the training of employed adults for labour market reasons (Martin and Grubb, 2001).

Knowledge-based economy means that organisations exist for the purpose of making and distributing knowledge (Taylor, 2010).

For the purpose of this study we will use the definition of workforce development as described by Garavan, Costine and Heraty (1997). This is useful as it highlights the creation of a pool of talent by means of education and training, which is a reflection of the purpose of the government initiatives this research will examine.

In order to review the literature with the stakeholders in mind, we will begin to look at the literature from a strategy and global policy perspective, moving to societal issues and finally from an organisational approach.

2.3 International Context

A Europe wide shortfall of 700,000 ICT professionals is predicted by 2015 (Dillon, 2013) with global unemployment sent to reach 208 million at that stage (World of Work Report, 2013). In reaction to this the European Commission for Digital Agenda has invested \notin 4.5 million in a "Grand Coalition for ICT Skills" with further funding promised. The initiative focuses on raising awareness of the job opportunities in the ICT sector and

bringing more awareness to specialised areas such as cyber security where the deficits are especially critical (Dillon, 2013). The EU Commission aims to tackle these problems by working with employers and educators to provide information, jobs, internships and third level courses. "European businesses need to be placed at the forefront of innovation to enhance Europe's business competitiveness; to enhance employability and professional prospects for students, workers and the unemployed" (Singh, 2012).

Some countries such as Canada, Australia and New Zealand have managed to recover some job losses while Europe is still struggling with the challenges of labour market deterioration (World of Work Report, 2013).

Despite Canada's current strong economy, the Human Resource Professional Association (HRPA) and Deloitte have recently undertaken a study to avoid making the same mistakes as some of its European counterparts. They examined economic prosperity, demographic shifts, technological adoption and sustainability. Even though their economy is performing well, there is a lack of growth in new tradable sectors and signs of a "have and have not" society emerging (Dobson, 2012). In what they have dubbed the "Northern Tiger" the study, which involved 50 CEO's, government representatives, economists and academics, have recommended five strategies that can place Canada in a sustainable foundation for prosperity gain and international status for excellence. The five strategies are:

- 1. Modernising education
- 2. Reforming immigration
- 3. Improving employment flexibility
- 4. Investing in industry excellence
- 5. Improving infrastructure for access to talent

(Dobson, 2012)

Through the course of this research strategies 3 to 5 will be examined in so far as they can promote ways to improve employment flexibility, how the programmes can contribute to excellence in the ICT industry and how they may improve the flow of talent in the sector.

The study also highlighted the role HR should play in making these elements come together as none of these would work in isolation, they would all have to work simultaneously. Dobson (2012) particularly outlined that HR function would concentrate on education and talent.

2.3.1 Role of Education

There is certainly a role for education institutes in the development of the workforce. In their 2009 Forum, the OECD called for greater global collaboration between industry and higher education institutes. They state that there will be a worldwide doubling of the numbers of international student enrolment by 2020 to five million and that institutes will need to develop their curriculum to reflect international viewpoints (Ischinger, 2009). "Education systems do not exist in social and economic isolation, but function to meet the particular needs of a particular society at a particular time" (Maclean and Ordonez, 2007).

As society and technology continue to change at a rapid pace, educational systems have not had such a parallel transformation and are struggling to keep up at an adequate pace (Maclean and Ordonez, 2007). This information age that we live in is transforming the world at such a fast pace that education has become a continuous process for most, with the philosophy of "life-long learning" emerging, people are now expected to have four to five careers in a lifetime (Stewart and Rigg, 2011, Maclean and Ordonez, 2007). For generations people have viewed work as a job/career for life but Bridges (1995) has claimed that every job in today's economy is temporary. Delors (1996) states "the concept of learning through life….emerges as one of the keys to the twenty-first century". Maclean and Ordonez (2007) agree that knowledge is the new capital to have and the "knowledge worker" is at the heart of the Information age. Knowledge is the driving force behind the growth and development of advanced economies and it is imperative that workers are equipped appropriately to promote this knowledge economy

(Turner & D'art, 2007). It is expected that the knowledge worker will possess logical-abstract thinking in order to diagnose problems, can research and apply knowledge with a view to proposing solutions. They could also design and implement those possible solutions. It is envisaged that these workers would be in a cycle of continuous learning to stay abreast with technological advances which will involve a mixture of academic and technical education (Maclean and Ordonez, 2007).

Since the global financial crisis has hit, American Colleges and Universities have been impacted much the same as Ireland in seeing public-sector funded establishments face severe financial cutbacks and embargo's on recruitment of staff. Students have also suffered due to their own loss of earnings and decreased availability of loans or employee development funds. El-Khawas (2011) looked into the past and lessons learned from previous times of economic and social turmoil in the USA such as the Great Depression of the 1930's, the World Wars and the last economic recession in the 1980's. She found that the Universities and Colleges that were able to adapt quickly, be innovative and open to collaboration stood the test of time. This posed plenty of challenges with diminished resources but they looked to Alumni and smaller local colleges to contribute to the effort. The flexibility of this approach helped and these forms of co-operation lead the way for continuing partnership efforts when the market changed for the better.

Rifkin (1994) looked to the future and predicted the phasing out of mass assembly line workers by 2020 due to sophisticated technologies being able to produce great outputs with very little labour involved. He claims that we will never see mass redundancies from the likes of Microsoft as previously happened in General Motors. Dolan (2013) compared a number of workforce competitiveness studies and concludes that the current approach in preparing college graduates for the workforce is "woefully inadequate in many areas and failing in most others". He goes on to conclude that 30 years ago, less than 30% of jobs in America required for candidates to have and education beyond high school. Now, the majority of roles require a degree or professional qualification.

In a comparative study of Ireland and Australia's higher education role in economic recovery, (Hazelkorn and Massaro, 2011) found that although Australia managed to escape the full force of the global financial crisis, mainly due to its proximity to countries that are still experiencing growth, they failed to take advantage of this and invest in their education system which is a major pillar in their ability to sustain progress. The study found that when the global recession hit the government decided to commit to investing 46 billion Australian Dollars in a stimulus package to shield the economy. As a result of this, the budget allocated to Education faced "significant competition" and instead of implementing what the sector needed they only introduced what they could afford. Although Ireland was severely affected by the economic crisis, it's government is emphasising the importance of building world class excellence and focusing on developing policies and strategy's to enable this such as Building Ireland's Smart Economy (2008), Special group on Public Service Numbers and Expenditure programmes (2009), National Strategy for Higher Education to 2030 (2011) (Hazelkorn & Massaro, 2011). Marginson (2000) noted that in Australia, technical and professional workers are growing quicker in the industries that have gone through the most rapid technological changes and that due to the number of vacancies in ICT roles, jobs are being created on a large scale in this sector.

A Global Jobs Pact adopted by the International Labour Organisation (ILO) in 2009, identified that the crisis calls for both short-term recovery measures and long-term reforms to mend the fundamental disparities that lead to the crisis (World of Work Report, 2013). The Government initiatives can address the short-term recovery but we need to look at 3rd level education to address the longer terms reforms.

"High quality education needs high quality teachers" John Bangs, Assist Secretary, Education and Equal Opportunities, National Union of Teachers, UK (OECD Forum, 2009). Maclean and Ordonez (2007) note that a new paradigm is needed to re-think what the needs of today's learners are. They believe that education needs to be re-defined and pedagogical approaches and delivery mechanism should reflect today's societal needs. They too believe that teacher education has not taken this new reality into account. "The teacher of the future must realise that his or her students think and learn differently than he or she does, and will enter a future world he or she is not familiar with" (Maclean and Ordonez, 2007). Pina (2011) stated teacher training and weaknesses in assessment were problems that need to be addressed in Ireland. This research also advises third level institutes to examine how they deal with the cohort of learners that might take part in reskilling programmes as they may have been outside the education system for some time or may have only completed lower level programmes previous to this.

2.3.2 Knowledge workers

In OCED countries, 35% of 25–34 year olds have completed tertiary education compared with 20% of 55–64 year olds, but with the competition for jobs some people have ended up in jobs they are over qualified for (OCED Observer, January 2011) known as "occupational downgrading".

The ILO has observed in their Global Employment Trends Report 2013 that the mismatch of skills is deteriorating as a result of continuous high levels of unemployment. They noted that the roles currently available often require skills that the unemployed person does not have and "these skills mismatches make the labour market react more slowly to any acceleration in economic activity". In some cases occupational downgrading is the only answer where unemployed people take a job that is below their level of skill and knowledge in order to get back in the jobs market. A large number of studies have shown that over-education or over-skilling can cause a negative labour market outcome in the form of lower wages, low job-satisfaction and high labour turnover (Mavromaras, McGuinness, O'Leary, Sloane and Wei, 2013). Many of the people enrolling on the Springboard and ICT conversion skills courses already hold qualifications at the higher end of the National Framework of Qualifications (NFQ) and the research by Mavromaras et al (2013) suggests that there is a risk for these individuals being mismatched in their new roles in both education and skills. But they are quick to point out that some of the mismatch may be due to the choice the individual has taken to take the opportunity to return to employment and this may be a trade off against receiving lower wages than they previously earned. They may also have better intrinsic benefits such as work-life balance or increased social responsibility (Mavromaras et al, 2013). Sickerman and Galor (1990) supported this theory as they believed that once the individual has taken the decision to return to education to re-skill, there is a longer term probability that they will upgrade their occupation, so any mismatch can be seen as a form of investment in their training and the returns will be recouped in the future.

Bridges (1995) was surprised on reflection of this theory, by the levels of temporary work and context of work distribution (Maclean and Ordonez, 2007). He believed that new distribution of work makes the knowledge worker more like a contractor and he sees a shift away from large organisations to small clusters of companies, many of whom would be satellite working from home. Bridges (1995) envisages the emergence of "talent agencies" that would represent these contractors as companies no longer look for individuals to fill roles, they look for talent. "This means that skills development for employability and workforce education must change its orientation, in order to produce workers with the knowledge, skills and aptitudes that will be compatible with this reorganisation of the work process and workplaces" (Maclean and Ordonez, 2007).

What is evident from the literature on an international basis is that with advances in technology and the distribution of economic power around the globe, the war for talent has gone global (Altman, 2008).

2.4 ICT in Ireland

According to numerous sources, Ireland is home to 9 of the top 10 Global ICT companies including Intel and Dell and 9 of the top 10 global software companies including Microsoft and IBM (IDA Ireland), with many of them stating supply of an educated workforce as one of the reasons to do so (Mulligan, 2013). Maintaining a high quality of education is key to preserving this asset in human capital (Pina, 2011). Many of these companies which include some of the top global security and enterprise software companies (including Amazon, Google, SAP, Apple and Facebook) have announced expansion and or investment in Ireland in 2012 (IDA Ireland). In 2003 Google located is European, Middle East and Asia (EMEA) Headquarters in Dublin. They have stated that the benefits of locating in Ireland are based on the favourable labour market, strong ICT professionals, corporate tax rate, capital investment relief as well as access to EMEA and innovation and progressive Management. Their Vice-President of Engineering, Nelson Mattos, has said that "If the lights were to go out in California, Dublin would maintain Google worldwide" (IDA Ireland, 2012).

The ICT sector is strategically important to the Irish Economy in terms of its contribution to exports and the number of high-skilled professionals it employs. Employment in the Irish ICT sector grew by 7% in 2012. "IT's happening here" (www.itshappeninghere.ie) is an initiative set up with the support of Enterprise Ireland to showcase career opportunities in Irish owned software companies. The website states that there are thousands of vacancies in indigenous software companies, and the EGSFN Vacancy Overview (2012) shows that the IT sector accounted for 20% of all jobs advertised on The same study shows that 46% of all new irishjobs.ie last year. employment permits issued in 2012 were for people filling vacancies in IT roles. By using the Irish diaspora and through engagement with immigrant communities in Ireland we can gain valuable insight in the global market and strengthens links and networks in emerging markets (Pina, 2011). The growth in ICT employment continues to rise with a 4.5% increase in the first three quarters of 2012 (IBEC, 2013) with a forecast of 7.6% over the next decade (<u>www.djei.ie</u>). According to John Kennedy (2009) at Silicon Republic, the elite of Silicon Valley believe that Ireland has the fundamental qualities for investment.

A recent survey of 38 major international corporations and small to medium enterprises (SME's) employing over 25,000 people in Ireland, identified 4,500 immediate vacancies in Ireland's ICT sector. The study by Fastrack to IT (FIT) claims that these vacancies exist across a range of positions from entry level to expert, but they mainly require intermediate level skills that are not being filled as candidates do not have the necessary skills (Burke, 2013). The skills set available from the industries that have high levels of long-term unemployment such as construction, retail, manufacturing do not naturally lend themselves to the areas of predicted growth such as pharmaceuticals and information technology (Nacherla, 2010). This is where the skills and talent mismatch occurs (Peiker, 2010). Peiker (2010) describes how, when looking for the best candidate to fill a role, HR professionals should be looking for QAI's - qualified, available and interested parties. There are plenty of interested and available people to fill the roles; it is the qualified part that poses the problem. Looking for the transferrable skills is the key to linking the two careers. For example a construction worker will most likely have good team working and communication skills from working on big sites. A senior construction worker will probably have a lot of supervisory skills which could include training and performance management (Nancherla, 2010).

Ireland's response to the skills gap is to aim to have the highest percentage of computing graduates by 2018, of all tertiary graduates, so that the country can become internationally known as a location with the appropriate level and supply of skills and talent in this area (Action Plan for Jobs, 2013). This is an ambitious goal to which the Government plan to achieve through:

a) increasing places on these third level courses,

b) encourage reskilling by providing funding for conversion courses and

c) through the targeted migration of key skills groups.

The dot-com crash in early 2000's saw a cyclical downturn in those opting to take college places in the ICT areas. But by 2012, technology courses accounted for 20% of all honours degree level first preference applications through the Central Applications Office (CAO) (Dail written answers, Minister Bruton, May 2013). The Minister also stated that the demand for technology courses has been shown by students in a 50% increase in first preference applications for computing in the past 5 years which he sees as a very positive step towards building a supply of ICT graduates in the future.

2.5 Government initiatives

Over the last number of years, and since the last recession in Ireland in the 1980's, the Irish Government has launched a number of initiatives and schemes to tackle unemployment and development issues. These include, Jobmatch, Joblink, Local – IT, Core Skills, alongside training and educational initiatives such as Vocational Training Opportunities Scheme (VTOS) and the Irish National Training and Employment Authority (Fás).

The most recent initiatives include, JobBridge, Skillsnet, Springboard, ICT skills conversion and Solas, which all come under a new banner of "Skills Plus".

In 2013, the Department of Education and Skills will fund over 430,000 parttime and full-time education and training places, with 51,000 in the provision of places specifically targeted at the long-term unemployed (Dáil written answers, 29/05/13).

The table below illustrates the initiatives the Minister referred to and a synopsis of what each scheme delivers:

Fromth on Educo ti	Easthan Education and Training and (C. 1)
Further Education provision	Further Education and Training awards offered by the Vocational Educational Committees
	-
	including full-time programme for early school
	leavers, Post Leaving Cert (PLC); Vocational
	Training Opportunities Scheme (VTOS). They
	also supply adult literacy courses and back to
	education programmes on a part-time basis.
Fás/SOLAS training services	Facilitating unemployed people through training
	and skilling in industry specific skills.
	Individuals can gain a qualification with
	progression options for further study or access to
	job opportunities.
Redundant Apprentice	Introduced to provide redundant apprentices with
Placement Scheme (RAPS)	the opportunity to complete on the job training to
	gain their full award.
Skillnets	Provides companies the opportunity to develop
	relevant and effective answers to their training
	needs. Target for 2013 is set at 40,000 people,
	8,000 of which will be unemployed.
Momentum	Provides targeted interventions to tackle skills
	shortages in particular sectors with vacancies. It
	has so far provided 6,500 places for the long-term
	unemployed with a specific target of young
	unemployed people. This is also co-funded by
	the European Social Fund (ESF).
National Strategy for Higher	Has been put in place to ensure that the system
Education	continues to be responsive to industry needs by
	maintaining interaction with employers and
	conducting surveys with them. Increasing work
	placement opportunities and a renewed focus on
	generic skills.
Springboard	Introduced in 2011 to address the specific skills
	needs of enterprise and support job-seekers in
	reskilling in areas of known employment
	opportunities. To date 10,000 unemployed
	people have participated on programmes with a
	further 5,000 in 2013.
ICT Skills	In response to identified ICT skills shortages and
	joint Government & Industry ICT Action plan
	was developed to build the domestic supply of
	ICT graduates.

 Table 1: Pathways to Work Initiatives

A large portion of the Government welfare bill is being spent on Public Employment Service (PES) - O Connell et al (2012) investigated the implementation of statistical profiling in order to customise the service a person receives based on the likelihood of them entering long-term unemployment and to deliver the services earlier in the process before they reached this milestone. The model would allow PES to assess the factors that influence a person's unemployment spell and identify those that need immediate attention and re-employment. "Prolonged unemployment is associated with lower morale, some psychological debilitation, strained family and social relationships, withdrawal from social life and often a very marked sense of self-dislike and in the long run it can gradually reach to a level of clinical depressions" from the report into the proceedings of a National Conference exploring 'Life without work' (1985). Long spells of joblessness increase the probability of permanent skill loss and exit from the labour force (OECD, 2012).

Profile modelling has been used successful in America and Australia since the 1990's with Denmark and Germany following by 2005. The model differs from country to country. In Australia the claimants are weighted against 18 risk factors and then provided with the most appropriate form of support for re-employment. In Germany claimants are classified into one of four categories and then assigned a tailor-made action programme. But what they do have in common is that they gather data to enable them effectively channel people towards the appropriate labour market activation programme and they can have little impact unless there is an effective range of programmes available to the claimant (O Connell et al, 2012).

For the purposes of this research, we will look specifically at the Springboard and ICT conversion skills as labour market activation programmes in Ireland.

2.5.1 Springboard

Following the introduction of a specific Labour Market Activation (LMA) Scheme in 2010, the Springboard initiative was launched in 2011. Its aim was to strategically target funding on part-time programmes from Level 6 (Certificate) to Level 9 (Masters) for unemployed or previously selfemployed people in areas of known labour market skills shortages or other employment opportunities. It is run and administered by the Higher Education Authority (HEA) although it still comes under the banner of the three main Government Department stakeholders namely; Department of Education and Skills (DES); Department of Jobs, Enterprise and Innovation (DJEI) and the Department of Social Protection (DSP). Since launching, the programme has supported more than 10,000 unemployed people in the scheme in the areas such as ICT, Pharmachem and International Financial Services (Dáil written answers, 25/06/13). Over 2,000 job-seekers have successfully returned to work in the past year on completion of a Springboard course.

Speaking at the launch of Springboard 2013, Minister Ruairi Quinn said: "Springboard is providing a dynamic pipeline of job-ready graduates, with up-to-the-minute skills and valuable qualifications for sectors of the Irish economy that are expanding and recruiting. This practical initiative, which is part of the Government's Action Plan for Jobs, is tailored to labour-market needs and designed to stimulate economic growth. "

Springboard's partnership with an expert panel, that identifies the expertise required in the economy as well as guidance on course content, is key to this programmes success. By starting first with industry needs the HEA Chairman, John Hennessy, believes that Springboard approach is transforming how we prepare people for the jobs market (Speaking at the Springboard launch 21/06/13).

The following information is collated from HEA publication of their Evaluation of Springboard 2011, stage 1.

Categories	Details	
Number of enrolled on courses	4,956	
Number of long-term unemployed	2,896	
Age profile	70% between ages of 25 & 44	
	20% of these between 30 & 34	
Number enrolled on ICT	1,821, 37% of all numbers. Highest	
programme	percentage enrollment	
Gender profile	74% were male	
Level of prior educational	Highest percentage had level 8 -	
attainment	33%	
Overall cost of ICT programmes	€6,306,273	
T-hl. 2. C	1	

 Table 2: Springboard evaluation 2011

In the third year of the Springboard programme, there is a greater focus on delivering the skills required by growing industries through the content and design of the courses being offered to jobseekers. Over 80 per cent of courses will also offer a work placement for participants.

2.5.2 ICT Skills conversion

ICT skills conversion courses were launched in January 2012 as a direct response to the specific skills shortages at the higher level of the ICT sector. It is a joint government and Industry ICT Action plan and its aim is to build the supply of high-level ICT graduates. The programmes are short 1 year conversion courses aimed at graduates of other skills areas to up-skill or reskill into a core computing area such as programming, software or data analytics. "The plan outlines a range of short, medium and long term measures to develop a sustainable domestic supply of high quality ICT graduates to support the further expansion and development of ICT sector and support innovation and growth across other sectors of the economy" (www.hea.ie/ictskills).

700 places were offered at level 8 on the NQF in higher diploma conversion courses in ICT skills. The entry criteria on these programmes was different to other workforce development initiatives as they were open to applicants from the live register but also those in employment or self-employed. The programmes were free of charge to all participants and they included a 6 month work-placement to be completed at the end of the academic programme. Owing to this work placement and the close industry involvement in the design of these programmes, it is envisaged that these programmes will leave the graduates "work ready".

According to the HEA, who run the initiative, the initial evaluation was very positive with strong industry endorsement and a second phase of the programmes is currently being rolled out.

2.6 How can IT organisations overcome these issues?

This is not the first time Ireland has suffered from a recession and cyclical downturn in sectors. In the late 1990's and early 2000's Ireland recruited more than 3,800 nurses from the Philippines but by the time the nursing classes of 2011 were graduating they were having to look abroad for employment opportunities (Dillon, 2013). What can be done to predict and prevent this skills shortage happening again?

There is a role for HR professionals in their organisations in terms of planning, staff development and talent planning to ensure a qualified and skilled market force for the future. The emergence of the resourced-based view (RBV) has moved the emphasis in strategic human resource management (SHRM) away from external sources to the internal staff as a source of competitive advantage. Wright, Dunford & Snell (2001) refer to the "stock of employee skills that exist within a firm at any given point in time" as the human capital pool. This pool can then be developed with the skills needed for the future growth of the firm. The stock can and will change over time, but the skills should stay aligned to the needs of the organisation. Ed Boswell, US Leader for People and Change at PriceWaterhouseCoopers (PWC) claims that there is an opportunity for Ireland to address the global skills shortage if it can act quickly and rise to the challenge. He believes that human resources managers play a large part in strategic foreign direct investment (FDI) decisions and an enabling role in the organisation. On a recent visit to Dublin he said "HR directors can play a huge role if they can articulate and use research to substantiate that Ireland has a highly educated workforce with the appropriate skills base and work ethic" (Dillon, 2013). But this also depends on the employees themselves to embrace this concept as Wright et all (2001) acknowledge employee behaviour as an important element in SHRM. They recognise individuals as "cognitive and emotional beings who possess free will" which they can choose at their own discretion to use to their own or the organisations advantage. If the human capital pool decides to engage in behaviour that benefits the organisation, they are more likely to achieve competitive advantage (Wright et al, 2001).

2.6.1 Building the supply of talent

To address the issues that ICT organisations are currently facing, we could look to Romans & Lardner (2005) "Human Capital Pipeline" which shows the phases involved in recruiting the right person for a role and maps their development and lifecycle through the organisation as follows:

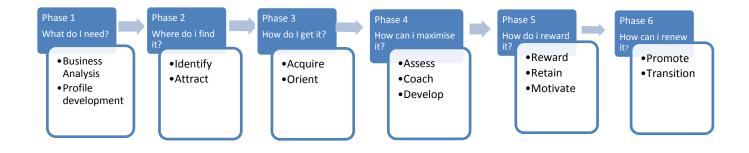


Figure 1: Romans & Lardner (2005) Human Capital Pipeline

Talent management is discussed a lot in human research management (HRM) and human resource development (HRD) terms and is seen as the practices adopted by organisations to attract, select and manage employees in a cohesive and strategic way (Garavan, Carbery and Rock, 2012). "Talent Management is simply a matter of anticipating the need for human capital and then setting out a plan to meet it" (Cappelli, 2008). As a result of the

recession, it is a difficult time to recruit top talent into what are considered to be good roles, as they are reluctant to leave secure jobs (Griffin and Smith, 2010), so looking to the internal pool for succession of both current and future needs is a logical approach to take and can have significant advantages (Garavan et al, 2012).

Garavan et al (2012) found that most organisations adapt their own mixed approach to how they deal with talent. Some focus on just developing managers and leaders while others go for an inclusive approach to focus on the potential of each employee. Thorne and Pellant (2007) argue that all employees should be developed and believe it is wrong to focus on one element of your resources as part of a talent development strategy. They stress the need to recognise the individuals needs and their aptitude and inherent abilities as people are talented in different ways. Romans and Lardner (2005) take a holistic approach to talent management and see each phase as distinct but they can take place simultaneously. When applied to his own organisation, Becton, Dickinson and Company (BD), they tripled productivity and revenues rose more than 200% in five years. They achieved this through systematically fulfilling each of the phases, starting with developing a team of leaders from within the organisation who then worked on where they were going and how they would get there. They developed talent profiles which focused on the abilities a person needed to fulfil their role rather than on their job experience. Getting the right people is essential to this process. When talent is scarce it is a challenge for recruiters to find the right people to fill the roles, and to further complicate things some IT skills are scarcer than others. Siemens have developed a framework for reaching out to candidates to source IT talent over the last 20 years, it is called Finding IT Talent (FIT) which has two core dimensions; scarcity and timescale (Weitzel Eckhardt and Laumer, 2009). They found that the recruitment process had become impersonal due to the majority of application processes happening online and the market being active rather than passive. There are a lot of variables to Weitzel et al (2009) research in the terms of the skills required, some are standard roles needed on a shortterm basis which can be recruited via the normal channels and methods of communication. On the other hand the scarcer skills may require long-term focus and effort has to go into building relationships with a particular group of people that have these skills. Alternatively they can take potential candidates at an early stage and binding them into the organisational pool to bring them up to the level they require through internal training and development programmes (Weitzel et al, 2009).

The table below is the perspectives on talent depending the market, the individual capability, the viewpoints of the organisation, whether it be niche or widespread focus, and how they are influenced by the availability of talent (Steward and Rigg, 2011). These practices and intercessions vary across organisations.

Individual focus			
Talent as	Stars High flyers Organisation process to attract, nurture and keep exceptionally talented people for future top positions	L & D and HR process to maximise everyone's potential Ensure right person in right job	Talantas
a scarce resource	Succession planning – integrated organisation processes to nurture supply of future managers/leaders	Interventions to develop talent pool across the workforce	Talent as plentiful
	for key positions Configuration of organisation resources to enable talented people to achieve full potential	Developing collective organisation capacity	
Organisation focus			

Figure 1: Perspectives on talent and talent management (Stewart and Rigg, 2011)

When skills and expertise are in scarce supply, they need a more tailored approach to vacancies than the standard recruitment methods (Weitzel et al, 2009). When resources are scarce, they also need to focus on the areas where their impact will be highest (Singh, 2012).

While much is being done in Ireland to provide education programmes for the unemployed and increase conversion of skills into ICT roles, there is little evidence of how organisations are approaching talent in Ireland. In a recent study Shanks, O'Neill and O'Mahony (2012) surveyed 1,000 individuals and 100 employers in Ireland with a view to gaining information on the skills gap and the steps that could be taken to help close it. They came up with a concept of talent flow to encourage the movement of people and skills in a way that supports the strategic direction of the organisation. They believed that Irish organisations can close their skills gaps and open up new opportunities to re-enter the jobs market for those who are unemployed. To mobilise this talent flow they identified the following levers:

- Identify your organisation's skills gaps now and in the future through rigorous skills analysis
- Clearly define career paths and succession plans to manage and mine talent within the organisation
- Create a learning and development strategy that underpins and supports your growth strategy
- Tap into learning innovations such as employee swapping, academies and collaboration
- 5) Help line managers become effective talent managers
- 6) Engage with 3rd level proivders and seek academic awards as well as your own in-house training solutions

(Shanks et al, 2012)

Whatever the organisational strategy is when it comes to talent, many agree that it needs attention to make it happen and it must be a priority from the top of the organisation (Thorne and Pellant, 2007, Altman, 2008). It will not happen if it is just the remit of one person in the organisation, it needs to be part of the strategy, have support and buy in from CEO, the executive team and through to the line managers. Managers are key to developing their team and spotting and nurturing talent (Altman, 2008). They are also now

typically a vital part of the recruitment process in any organisation and a critical element to talent management is to attract the right people.

With the exceptional branding and known perks and benefits of working in many of the top 10 IT firms, it is hard to fathom that they too can suffer from a lack of talent pipeline. But when skills are in short supply, particularly in ICT roles, possibly as a result of the dot-com burst and the retirement of the baby-boomer generation, they must look outside the organisation for talent (Romans, Frost and Ford, 2006, Weitzel et al, 2009). The lure of an organisation that is known to practise talent management is sometimes enough to attract recruits across all levels (Altman, 2008).

At the end of the day the individual needs to feel they are respected and valued and that they are making a contribution to the organisation (Altman, 2008). Garavan et al, (2011) believe that organisations will develop activities so that talented employees can have the skill and competencies they need to contribute and successfully benefit the business. "Generic competencies" are a range of qualities and capabilities such as - problem solving and analytical skills, teamwork, communication skills – that are important in any workplace. Garavan et al, (2012) consider these competencies as important for potential and career development. "Identifying core capabilities has value in several areas because it enables you to identify key people that the organisation may not be able to afford to lose" (Griffin and Smith, 2010).

Once you have attracted and recruited the right person, Roman and Lardner's model moves to develop and train the individual. CIPD (2009) recommend that especially during these hard times that it is important for organisations to focus on developing their employee's skills and capabilities in order for them to remain ready and prepared for the upturn when it comes. Garavan et al, (2012) found that investment in talent development is a "potential source of competitive advantage when it results in valuable, rare, inimitable and non-substitutional human resources".

2.6.2 Training and Development

The rise in the number of multi-national corporations (MNC's) operating in Ireland has contributed to the focus of Human Resource Development (HRD) in a global context (Garavan, Carberry and Rock, 2012). The impact of the economic downturn for MNC's has encouraged them to move the HR function to centre stage and "act as a principal delivery agent of changes in management practice" (Gunnigle, Lavelle and Monaghan, 2013). Gunnigle et al (2013) noted that even the MNC's have suffered substantial cuts to their Training and Development budgets as priorities have changed to organisational survival. What they did find was the level of investment had become more targeted and more focused on management and leadership training. Garavan et al (2012) concluded that employee development it is not a one size fits approach but a process that should support talent development.

"In some organisations learning and development is still viewed as something that is provided as a form of reward when conditions are good, and is then taken away in recession" (Griffin and Smith, 2010). Rao (2009) argues that organisations money is better invested in corporate training than redundancies. He believes it enhances the employee's commitment to the organisation and their energy, in turn, will result in increased profits and potential to gain competitive advantage. Griffin and Smith (2010) and Brum (2007) agree that there are more organisations recognising learning and development as an investment which also makes a valued contribution to employee performance and productivity. So what are the learning and development needs that facilitate talent development?

Matathia and Salzman (1999) stated that companies are beginning to look to their existing employees and increasing their value to the organisation. They believe that it is far more expensive to recruit a new employee, induct and train them than to maximise the potential of their existing workforce. In a process they call "headlighting", they ask organisations to look at their medium and long-term strategies, list in advance which roles are in jeopardy and what skills they might need in the future. Employees are then re-trained or re-skilled to meet the new role requirements. The employees most likely to succeed in the future are those that recognise that their skills need continuous upgrading and training in order to remain competitive (Matathia and Salzman, 1999).

Companies are less likely to invest in training and developing staff if there is a high occurrence of employee turnover, as they will lose their investment once the employee leaves (Brum, 2007). He believes that a committed employee is more likely to stay with the organisation and this commitment has a positive impact on performance and retention. "When organisations seek to foster a philosophy of commitment, then the likelihood of an employee searching for employment elsewhere is lowered" (Brum, 2007).

The economic crisis has changed the job market of the future. People will be required to work longer (extended retirement ages) and will have to constantly improve their skills for their employer to remain competitive and responsive to industry and technological changes (OECD Observer, Jan 2011). "There is real risk that this economic crisis will turn into a social crisis. We must act – and act decisively – now", Barbara Ischinger, Director of Education, Organisational for Economic Cooperation and Development (OECD Observer, 2009).

2.7 Summary

The literature explores the topic from an international perspective and looks to what other countries are doing to address unemployment and the skills deficit in ICT. The literature highlights that Ireland is no different to other EU countries and the current Irish Government is allocating a lot of funds and resources to address these issues. The aim is to re-skill people from areas of high unemployment to sustainable sectors and build a pipeline of talent for the ICT in Ireland. The literature looks at the effects of unemployment, the benefits of workforce development initiatives, the importance of education and training and the impact that talent development can make. It also explores the effective on the individual and the organisation from a HR perspective.

Chapter 3. **Research Methodology**

3.1 Introduction

In this chapter the data collection and analysis is set forth.

The researcher has chosen this topic as it is one that is very prominent in light in the financial situation not only in Ireland but across globe and the European Union. It is also quite prevalent in the media with more and more initiatives to get the unemployed back into the work force being announced on a regular basis. Since the introduction of Labour Market Activation Schemes, a lot of people have been through the third level education system in an effort to get them back into sustainable jobs, yet the numbers on the live register remain high.

There is still very little cohesive data on the impact of these schemes and without a benchmark or publicised target to work from it is difficult to determine if they are successful or not. This research will seek to critically review the initiatives by delving into the knowledge and experiences to date of some of the stakeholders to gain some insights into what is influencing these initiatives and what is realistically being implemented at ground level. It will look at the initiatives from some of the perspectives of the stakeholders who include the strategists (Government Departments, HEA), providers (a third level provider in the sector and work placement company), industry (a work placement company, ICT sector body representative) and the course participants themselves. From the information collated, it is the researcher's intent to critically review these schemes from a multistakeholder perspective to gain a better understanding of the impact they are having on the ICT jobs front, the benefits to the participants and the challenges facing the providers and strategists.

The chapter will address the use of interviews, the sample used and ethical considerations of the research. The purpose of the chapter is to give the reasons behind the "what" and "why" elements or the purpose and process elements of the research conducted. This chapter will provide explicit

information on who, what, where, and why issues to the point where the reader could replicate the research if they so wished to (Biggam, 2008). At the end of this chapter the reader will be clear on:

- The research being undertaken
- The rationale for choosing the research strategy and methodology
- The details around the methods used.

3.2 Purpose of the research

"Research is a systematic and methodical process of enquiry and investigation with a view to increasing knowledge" (Collis and Hussey, 2009). The purpose is to critically review Springboard and ICT conversion programmes in ICT subject areas by gaining the perspective of a sample of the multi-stakeholders in the scheme.

The research will definitively acquire information, using qualitative techniques, from the strategists behind the scheme to gain an insight into what their level of success looks like. It will also explore current practices within a third level provider to analyse how they prepare the candidates for employment and how industry focused the programmes are. To achieve this, the researcher must undertake research.

3.3 Research strategy

This refers to the process adopted by the researcher and refers to the types of methods that may be used to collect the research data (Easterby-Smith, Thorpe and Jackson, 2008). The research strategy that will be adopted is to critically review and will use a qualitative approach to collect the data. There has been quite a bit of quantitative data already collated and published by the HEA and the third level provider involved in the study and this data will be used as secondary data to the views of the interviewees.

Quantitative research involves measuring or quantifying a research strategy. It most common research designs are in surveys and experiments and the outputs are typically numeric and statistical data. It forms a deductive theory approach, where the research question is formulated in advance and rarely deviates from this. The sample used in quantitative research tends to be large and uses a positivistic paradigm where the researcher is a detached observer. (Saunders et al, 2007).

Qualitative research on the other hand requires its research subjects to communicate, recollect and provide data in the form of words. It is an inductive approach as theory emerges from the data. It is seeking to find the samples interpretation of their truth or facts to 'flesh out' the researchers understanding of the topic. (Saunders et al, 2007). This method can allow the researcher to be more involved with the research sample and take a membership role in field research (Adler and Adler, 1987).

Adler and Adler (1987), describe a member researcher as someone that can interact with the sample as an insider or someone who can affiliate with them. They do not treat the sample from a detached outsider perspective. They advocate that researchers can participate actively with the subjects but can remain objective and detached in their role as analyst. This is opposed to the field researcher who remains detached and observes the sample in a brief, formal interaction with no intention of developing a more enduring relationship with them (Adler and Adler, 1987).

The author has analysed these distinctions between quantitative and qualitative research methodologies and in doing so has chosen a qualitative approach to best fulfil the aims and objectives of this study. This will allow for more general interpretations on the subject matter than specific details. The data collected is in the form of words, based on observations and discussions to establish patterns and with subjective views that allow the researcher to get a feeling for what is going on in the subject area from the perspective of the experts or those closest to it. The collection of data via this method will allow for more rich data to be collected by the experts and instigators of the programmes. In-depth conversations, in a semi-structured interview format, will allow flexibility for the interviewee to express areas that are not covered in the questions. Interviewing is more than recording

and collecting words. From meeting people face to face you can also pick up on their non-verbal communication leads, such as body language which will give the researcher clues to how comfortable or uncomfortable they are about the line of questioning. As a member researcher, this allows the interviewees and interviewer to feel comfortable about talking about the subject. They can go into greater detail as they are aware of the level of knowledge of the subject area by the researcher. They are more likely to be relaxed and open and honest as they know the researcher's objectives are well intended.

A quantitative analysis from the student body involved in the Springboard and ICT programmes was considered and investigated. The researcher believed that the insight and experiences of the participants on these programme would provide strong evidence of the success and final outcomes of the initiatives and give further information on the careers and jobs that they went on to do. On further investigation the researcher opted not to pursue this methodology for the following reasons:

- Access to the participants. It would be impossible to contact every single participant of theses schemes as volume alone would be an issue. In the last two years there have been more than 10,000 people enrolled on these programmes.
- 2. The researcher explored conducting a quantitative piece with a smaller sample of participants. The researcher had contacts in a third level institute that has had hundreds of these students through their ICT programmes in recent years. The College were willing to help in whatever way they could but there are of course Data Protection issues to be thoughtful of and the researcher has therefore decided against contacted these students.
- 3. Another reason that was taken against conducting qualitative research with this cohort, is the fact that they have been extensively surveyed throughtout the course of the studies and afterwards. They are monitored by their education provider and followed up on with HEA. The researcher was afraid of survey fatigue on behalf of the

participants and with some of them completing their studies up to two years ago it was anticipated that there would be a very low return to any similar survey they may designed and distributed at this stage.

3.4 Population and sample

A population is a precisely defined body of people or objects under consideration for statistical purposes (Collis and Hussy, 2009). In this chapter we will begin to introduce the stakeholders in the initiatives. The diagram below outlines who they are, what their role and aims are and their relationship with one another.

In order for the researcher to gain a multi-stakeholder insight in the schemes, it was planned to gain the perspectives of the schemes from the policy makers (HEA, Department of Education and Forfás) and the providers (Third level Education providers). To obtain this information, the researcher has therefore looked to interview these participants in the form of semi-structured and in-depth expert interviews, which is primarily inductive, to gain qualitative data. Qualitative research involves studying "things in their natural settings, attempting to make sense of, or interpret, phenomena in terms of the meanings people bring to them" (Denzin and Lincoln, 2000). In a semi-structured interview the interviewer starts with a set of themes and they are prepared to alter the order in which they ask the questions based on the flow of the conversation on the day. In an in-depth or unstructured interview there may still be themes but there is no pre-determined list of questions (Saunders et al, 2007). As the researcher has developed a list of questions, a semi-structured interview technique will be followed.

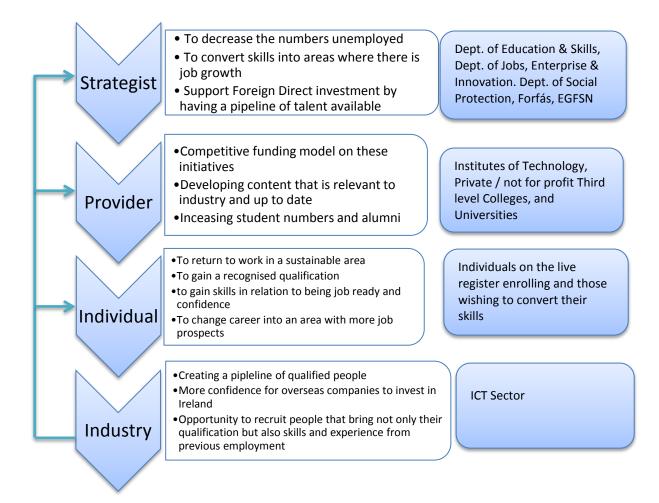


Figure 2: Stakeholders

Some of the interviewees were known in a professional capacity to the researcher so the initial contact was made in person, for example, after a meeting. This sampling is best described as convenience sampling as they are easily obtained by the author as a member researcher. Saunders et al (2007) describe this type of sampling as haphazard and prone to bias. The researcher has deemed that it is the best approach to take as there is a very small population pool when it comes to the strategists and the researcher believes that they can gain access to the people closest to the topic through direct contact. The researcher believed that a face-to-face approach was best particularly as they were known to them and that this would eliminate any barriers or mis-communication of the research by e-mail or telephone. The responses to any direct requests were met favourably, with interviewees

more than happy to participate. The researcher followed up with these individuals with a follow up e-mail to request the meeting.

To address the other strategic members in the field, the researcher wanted to gain information from the Department of Education and Skills and the Department of Enterprise, Jobs and Innovation and Enterprise as they both featured heavily in the literature review. Through investigation into a contact name of a possible suitable candidate, the researcher consulted with a former colleague and they both agreed on an expert that was an employee of the Department of Education and Skills but also on the Expert Panel of Future Skills Needs. An e-mail address was obtained for this contact and an explanatory and introductory e-mail was sent. Almost immediately, a positive response was received and an interview scheduled.

It is the author's intention to interview people behind the strategy at Government level and those involved in the implementation of the scheme. For the purpose of this study, the researcher will focus on the views and experiences of participants and staff from one education provider in the Dublin region who has been involved in both of the stated initiatives since they first began. The reason for choosing this one provider is that the researcher has access to the people and students as they are an employee of the College. Another reason for choosing one provider is the size of the sample, if you were to include all 38 providers, it would be too large for the purpose of this study and would be extremely time consuming to conduct. As this is a review of the schemes, and exploratory in nature, any findings could be replicated with other providers, at a later date, as part of a larger sample. All of the providers have taken part in the HEA evaluation piece that will also feature as secondary data in this study so their views will be express to a certain extent.

For the purpose of this research, the author has not directly sought the views of the participants in this sample. It is not the researcher's intention to repeat the collection of data or waste a participant's time. On the basis that these students have already taken part in numerous surveys by the HEA and education providers, it was deemed unnecessary to repeat this process now. A lot of data has already been collected and collated by the HEA and made available to the public in detailed reports and will be used to supplement the data collected. The information is already available is published and can be relied upon.

Convenience sampling has allowed the researcher identify key people in each of the areas who are known stakeholders in the initiatives.

The Sample population

Strategists:

To full-fill this objective, interviews will be held with the policy makers and implementers of these government schemes within the HEA. They are the main point of information on this area and they have collated information from all providers of Springboard and ICT skills programmes. From these interviews the researcher should be able to obtain information on:

- a) The outcomes of the initiatives to date
- b) They challenges they have faced along they way
- c) What their definiation of success is
- d) What factor workplacements has had on the outcomes

Participant 1	Senior Officer in the Department and also a			
Department of Education	member of the Expert Panel on Future Skills			
and Skills	Needs and has contributed to the Action Plan for			
	Jobs.			
Participant 2	Springboard Manager and Head of National			
Higher Education Authority	Access at the HEA. They are responsible for the			
	implementation of the initiative, co-ordination of			
	the scheme and the providers, communication,			
	marketing, on-going analysis and evaluation.			
Participant 3	Senior Policy advisor with Forfás. They are also a			
Forfás	member of the Expert Panel on Future Skills			
	Needs.			

Table 3: Interviewees from the Strategists perspective

Providers:

Similar questions in terms of challenges and experiences to date will be asked of the interviewees who are trying to implement the scheme and have regular engagement with the participants.

Participant 4	Careers Officer in a third level institute offering				
Careers Officer	the Springboard and ICT conversion skills				
	programmes. They have worked with the				
	participants on this course as part of their Career				
	bridge modules. Their team won an award in 2013				
	for the work that had done with these students in				
	preparing them for employment.				
Participant 5	Work placement Officer with the same College				
Work placement Officer	and has worked closely with the participants in the				
	last year to gain relevant and appropriate work				
	placements for them.				
Participant 6	Vice-Dean in the School of Computing with the				
Vice Dean of the School of	College. The School is the largest IT school in the				
Computing	country. They work closely with faculty and				
	industry to make the programmes relevant and				
	suitable for these schemes.				
Participant 7	This interviewee has taken a number of				
Work-placement	Springboard and ICT conversion skills students as				
organisation representative	interns this year. They run a small ICT				
Samouton representative					
	consultancy company that provides IT and media				
	solutions in the education area.				

3.5 Research methodology

The chosen approach for this research is to use semi-structured interviews to collect the research and the questions will be prepared in advance. A list of themes in areas for questioning was derived from the literature review. The table below lists the common themes but each stakeholder was asked a

Theme	Strategy	Provider	Industry	Individual/ Student
Are they successful?	What does success look like?	Success stories Services offered	Awareness of scheme	Experience on government funded course
Challenges/ issues	Achieving aims and objectives?	Challenges encountered	Dealing with interns	Length of time unemployed
Collaboration /Engagement	Skills gaps	Engagement with students/ Industry	Engagement with providers	Previous employment
Workforce Development	Conversion of skills	Programmes	Are they "work ready"?	Benefits of work- placement
Future	What does the future of the schemes look like?	What does the future of the schemes look like?	What more can be done?	Have they gained employment?

variation of questions across these themes as each area warranted a slightly different approach.

Table 5: Interviewing Themes

The interviews will take a semi-structured approach in so far as the researcher will prepare a selection of 10 - 15 relevant questions that can be used. During the course of questioning the researcher is prepared to the change the course of the interview if the line of questions goes down a route that is of interest but not specifically covered in the set questions. This will allow the researcher capture information that may not specifically answer the questions but is of interest from the interviewees perspective.

It is clearly stated to all the people taking part in the research that they will be taking part in the process on a voluntary and confidential basis and can withdraw from the process at any stage.

3.6 Data collection method

The primary data collection method for the purpose of this research will be in the form of interviews which will be recorded on an iphone and transcribed at a later date. This will help the research to more accurately recall and examine the data collected. The researcher will ask the permission of each participant to record the meeting. If anyone objects, the researcher will be prepared to just take notes.

3.6.1 Interviews

An interview is a purposeful discussion between two or more people (Kahn and Cannell, 1957). The interviews will be semi-structured and have a general interview guide approach. It is intended that the same general areas, drawn from the review of literature in Chapter 2, are addressed with each group but it allows a more conversational approach which give the researcher greater freedom to adapt and change their questioning in order to get more information from the interviewee (Mc Namara, 2010). The aim of the interview is to probe the interviewees asking open questions.

Each of the in-depth expert interviews will last approximately 45 minutes and is introduced with an overview of the dissertation matter and that the purpose of the interview is to inform the research and not for any other purpose. Following each interview the researcher will initially makes notes on how the interview went and any other observations made at the time. They will also take note of any clear findings and key points of each interview.

3.7 Outcome of the research

Both the strategists and providers of the initiative have a vested interest in the success of the scheme and were more than willing to take part in the interviews, with many stating that they were very interested in the outcomes of the research. As an interpretative piece of research, the researcher believed that there were many valid versions and interpretations of reality and that these were time and context dependent (Biggam, 2008). The choice to carry out interviews with these individuals is to gain an understanding of their perceptions in that context and to gather their thoughts, experiences and feelings to find answers to the research objectives.

Preparation is the key to the successful collection of data. There is a lot to be achieved by efficient organisation of the interviews, researching suitable themes and questions to ask the interviewees, to implementing the collection of the data and allowing time for reflection and analysis.

The researcher must first conduct their primary research in the review of current academic literature with a view to being able to draw on this information in the interview. This will add to the credibility of the researcher, especially when interview subject experts. This will also encourage the interviewee to offer a more detailed account of the topic (Saunders et al, 2007). This credibility is also helped when the researcher is able to provide information in advance of the meeting, in relation to the areas that they will want to explore. By arranging the data that is needed to be collected into themes and relaying this to the interviews in advance also gave them the time to consider the information being requested and allow them time to prepare (Saunders et al, 2007). In order to ensure the interviewees were not inconvenienced in any way the researcher has accommodated the interviewees' requests in relation to the time and venue to meet. This is to ensure that they are relaxed and in a familiar environment to allow for open discussion. This method also allows for less disruption and time out of their busy working day. The drawback of this method is that the researcher has no idea until they arrive for the interview, exactly where the meeting will be taking place. Outside influences and circumstances are essentially out of their control such as interruptions by 3rd parties while the interview is taking place, or phones ringing in an office where the interview is being held.

3.8 Ethical Considerations

According to Coolican (1992) "it is difficult to conduct much research at all without running into ethical arguments". Blumberg et al (2005), define ethics as the "moral principles, norms or standards of behaviour that guide moral choices about our behaviour and our relationships with others". Research ethics therefore relates to questions about how we formulate and clarify our research topic, design our research and gain access, collect data, process and store data, analyse data and write up our research findings in a moral and responsible way (Saunders et al, 2007).

The researcher has approached the interviewees and sought their time and permission to take part in the research. It will be made clear to the research population that they take part in the interview purely on a voluntary basis and given an estimate of the amount of time it will take to participate in the study. They will also be reassured that their contribution will be treated with the strictest confidentiality. The researcher has ensured they have been professional and in control of the process throughout. Even if the research subject has been known to the researcher, everyone has been treated the same and all interviews were conducted in a professional and objective manner.

3.9 Limitiations

This sample represents the views and experience of the staff involved with the delivery and supports services to Springboard students at one education provider. It also takes into account the findings and evaluation undertaken by the careers office of students that have participated on these programmes. The views were not sought of the students directly as it posed ethical issues and issues under the Protection of Data Act and are therefore not directly represented. The research will also not take into account that these programmes are offered over a number of third-level institutes including Universities, Institutes of Technology and private colleges and their views and experiences were not sought or compared to this study.

The researcher made a conscious decision not to survey or approach companies in the ICT sector to provide information towards the study. Many of the big 10 ICT companies are notoriously private and it is widely known that they do not take part in research of this nature due to the inherent secrecy of the industry.

This research is concerned with Government initiatives namely Springboard and ICT Conversions Skills and not with any of the other mentioned schemes that target unemployed. It will concentrate on current initiatives and critically review them from the perspective of the main stakeholders. The author will clearly state the reasons for the research in an attempt to develop trust. By assuring their confidentiality the respondents need not fear of repercussions to the answers or being quoted directly for purposes outside of this research. The author has previously met and interacted with the majority of the population or has provided them with a profile of the research under investigation and details of the author such as the programme of study and their employment history. It is hoped that this relationship and openness will help put them at ease as to the motives for the research.

Bias in research is any inaccuracy in data which comes from the characteristics of the process used in the creation, collection, manipulation, and presentation of data, or due to a fault in the design of the collection method (Biggam, 2008). There can also be bias in interviews in the comments, tone and also non-verbal communication, while you may also "attempt to impose your own beliefs and frame of reference through the questions that you ask" (Saunders et al, 2007).

There can also be observer bias where the researcher, particularly as a member researcher, finds it difficult to detach themselves from the study or "avoid relying on our common sense knowledge and life experiences when we try to interpret it" (Saunders et al, 2007). What we can acknowledge is that it is hard to avoid but by being aware of it and its threat to the reliability of the research, the researcher must do their best to control it.

The author is aware of subject or participant bias and by ensuring confidentiality and the genuine interest and intention of the researcher, it is hoped that this will help to eliminate its impact on the research. To help eliminate bias in the questioning of the research sample, the researcher sought the opinion of an impartial third party on the questions before they commenced their research.

3.10 Data analysis

Data analysis is the process of evaluating data using analytical and logical reasoning to examine each component of the data provided. This form of

analysis is just one of the many steps that must be completed when conducting a research experiment. Data from various sources is gathered, reviewed, and then analysed to form some sort of finding or conclusion.

The method of data analysis of the qualitative data will be less structured and will involve more interpretation and will begin inductively without predetermination. The author will attempt to categories the responses in order to group common responses and highlight threads or themes to them.

The researcher will then reflect on the information in the literature view section (Chapter 2) and help to gain a better understanding of the subject area by identifying the key areas the research has uncovered and interpret them within the framework of the stated objectives (Chapter 1).

3.11 Summary

In this chapter, the research methodology and instrumentation used in the study are discussed. The discussions in the first part of this chapter centred on the aims and objectives of this, quantitative and qualitative research methodologies and the selection of a research approach. The latter part of the chapter discussed the sample, interviews, issues of reliability, validity and ethical issues, all that had to be considered by the author prior to undertaking the research.

Chapter 4. Analysis and Findings

4.1 Introduction

The analysis of the primary data was conducted in line with the procedures as stated in the previous chapter. The researcher set out to interview some of the stakeholders in the specified Government workforce development initiatives with a view to gather data to enable them to be critically reviewed.

In this chapter will look at the findings of the empirical research which will be placed in context with the literature explored in chapter 2.

A transcription of each interview held is available as appendices A to F but these do form an integral part of this dissertation and should be referred.

4.2 Findings and Analysis

We will examine the findings of the empirical research by using the common themes used in the interviews. The focus of the interviewees comments below will therefore reflect the themes of success, challenges, collaboration and engagement, employability and the future of the schemes. The following sections will provide a description of the data collected and that also available in the public domain from the HEA and third level provider. In order to further and discuss the findings, this section will also look back to the literature and provide an introduction to the findings. The analysis will look at the findings under the following sub-headings which featured heavily in the literature review.

4.2.1 Workforce development initiatives

The data shows that everyone is in agreement that these programmes are a good way of addressing the skills deficit. The programmes provide skills and occupational training and have the potential to advance future economic growth which is the nature of workforce development programmes (Williams and Hufstetler, 2011). Much in the same way as the district of Georgia, USA, as described by Williams and Hufstetler (2011), tackled their workforce development issues, the government has completed a job profiling

analysis through the EGFSN and determined the level of skills necessary which helps employers build the workforce they need. In Georgia, they tasked their Colleges to implement the scheme providing "technical and academic training focused on building a well-educated, globally competitive workforce" (Williams and Hufstetler, 2011).

To remain competitive, the work-placement company and Bridges (1995) foresee that the ICT worker of tomorrow needs to be more innovative and entrepreneurial, even if they are directly employed by the organisation. Their views are corroborated in that their concept that companies will not just be looking for any qualified individual to fill their roles, they will look for the one that shows potential and talent. This leads into Wright et al (2001) view on remaining competitive by ensuring you have a stock of talent in the organisation at all times, referred to as the human capital pool.

Below are some of the areas mentioned as a measure of the success of the schemes to date. It was unanimous by all stakeholders interviewed that the schemes have been successful to date. They attribute it to many factors, including collaboration, work-placement and career bridge.

- i. HEA stated that it is generally agreed that the initiative is a success. They have recently published their stage 2 evaluation of the 2011 class, which is the first cohort on the Springboard initiative. Out of the 4,956 registered on programmes 40% are in employment following the completion of the programme. The HEA and DES agree that they would both like to see this figure going up and but they found it difficult to find a realistic benchmark or level of measurement for this as there are too many factors out their control such as the "number of jobs available out there...where the participants are living". They both agree that it is a complex issue.
- ii. Feedback and collation of data has been critical to the HEA in reaching this point where they can deem the scheme a success. HEA have been surveying the graduates of 2011 every 6 months and the plan is to keep that up for at least two years after they have graduated which will be in

Autumn 2014 and to replicate this process with subsequent graduates. DES outlined the strands of the evaluation approach as set out below, which they describe as "a robust a process....in terms of probability, than any approach that's around the place":

- a) Data gathered directly through the application
- b) Data returned from the providers
- c) Direct email survey's to the participants

Both the HEA and provider have gathered some excellent testimonials from people who had lost their jobs and successfully gained employment since completing the programme, some of whom have already been promoted within their workplace. DES have not been surprised by the data collected in terms of employment outcomes. These vary based on their "prior education attainment and depending on the duration of unemployment. The shorter the person was unemployed the better their prospects are of getting back to work". But the message that is repeated over and collaborated by the interviewees, is that the initiative has been a "life changing moment" for the likes of these people. They state that they were contemplating emigrating but since completing the programme their lives have turned around. HEA gives credit to the participants on these courses that have "worked really hard and made the decision to totally change focus" on their career from being, for example, a structural engineer to a software developer. HEA state, "that's what it's all about really".

iii. Work experience placement was cited by Forfás as being an essential feature of successful programme outcomes. It features a lot in the HEA individual feedback where participants have actually written "I did a placement and now I've got a job". A comparative study between those how did a work-placement and got a job and those who didn't complete a work placement has not occurred to date but HEA has commenced a process of collating this data. However, they do believe that the anecdotal evidence to date has suggested that the course and work placement elements combined have made a contribution to people

getting back into employment. It has also helped to raise awareness of the scheme with employers as the graduates go out into the work place. The provider agrees that their focus is to "really get them a paid job".

- iv. The work-placement company see "employability as critical" to the whole process. They appreciate that they "all have different backgrounds" and interests. They try to establish early on "where they want to go...what are their strengths" then see what area they will fit into. "What we look for is appetite, energy, enthusiasm, desire to learn is important for us". They claim that there are "four internet years in one year" and that at this fast pace of change "learning is an on-going process". With so much information and free software available on the internet they tell the students "it doesn't matter how old your computer is, if you have got access to the internet...the world is your oyster".
- v. It has been evident from HEA feedback and supported by the workplacement company that the soft skills are very important to employability. The work-placement company "preach the whole idea of respect, teamwork and a sense of everyone mucking in". They feel the little things like dress code and showing respect to customers go a long way. On top of these they also emphasise the benefits of "communication, presentation and interpersonal skills" and they have seen it working with the current cohort who are "clustering and working with each other and their confidence is growing" which is a great motivating factor.
- vi. The participants taking their own initiative and being responsible for their own learning is an element that the third level providers have brought up. The work-placement company recommend being able to set up your own "e-portfolio" to showcase your skills at the end of the course "shows integrity" and initiative to "get up and go". They believe the students should take time over the summer and "create community website for your sports club" or "something of interest to you in health" but "go out there and use your skills" to have something to show for your time. They believe that sort of self-direction shows innovation and

"that makes you very employable". "Unless you practice and use those skills" those skills will go out of date and new employer is only to have to "re-train" you. There is no time for "spoon-feeding" they are going to need to be "self-motivated".

vii. Competition in the ICT roles are coming from all areas and the workplacement company recommends being "aware of what your competition is...it comes in all shapes and sizes". They will have to be "self-motivated, got the skills and sales, got experience under their belts and have become employable, if not more employable, than someone coming out with a degree with no experience". If faced with these two CV's the CEO of the work-placement company says he will pick the one with the "crammed e-portfolio full of examples of the work they have done, not just within the company, but perhaps on a voluntary basis or something that is of interest to them".

4.2.2 Creating a talent pipeline

Looking at Romans and Lardner (2005) pipeline, the government initiatives are trying to feed the supply of qualified and skilled people for roles in ICT organisations. The employer needs to know the skills they require and develop a profile to recruit. They need to look at how they can attract these qualified people, particularly the SME's as the likes of Google get hundreds of applications for every role they advertise. The work-placement company and careers area in the third level provider, agreed that the work-placement process was a good way of getting real industry experience and that many of them can lead to full-time positions (there is no quantifiable data available for this at present).

The research has shown that there will be lots of ICT graduates coming into the jobs market in the next few years. The participants in these schemes need to be able to show that they have talents and previous experience that might be of interest an employer that enables them to set themselves apart from the competition. There seemed to be consensus from the strategists that the funding model was reflective of Dobson (2012) two strategies to invest in industry excellence while also developing a pipeline for talent for ICT companies.

The work-placement company agreed with Matathia and Salzman (1999) in that these newly received skills they have required need continuous upgrading to remain competitive, being mindful of Campelli's (2008) concept that newly trained individuals are more likely to move on to make better use of their new skills. This is where the latter part of Romans and Lardner's (2005) pipeline comes into play, as employers have to keep their employees motivated and reward them for their commitment to the company to encourage them to stay.

Just as Siemens developed a framework for sourcing IT talent (Weitzel et al, 2009) it appears that Ericsson also took their attainment of the right people to a new level. The Vice-Dean of the School of Computing explained the scheme. By availing of skillnet funding, Ericsson partnered with the Dublin Institute of Technology (DIT) to provide a one year intensive Masters in Applied Software Technology. Applicants were allowed to retain their social welfare while participating on the programme. The students that completed successful were given a full-time, permanent position with Ericsson. This model is a perfect example which supports Weitzel et al (2009) practice of binding these people into the company whilst having them totally trained up on all of the organisations required technical skills. The Vice-dean of school of computing thought that the Ericsson model would be a clever way for both industry and the participant to enjoy a win-win situation and could be a future model for funding the supply of specific skills in the ICT sector.

The interviewees had a lot to say about how the work-placements and career bridge module prepared these individuals for employment and how they can become more work ready.

i. The HEA would like to establish better connections with employers as they believe there is "scope to do a lot more" in this side of things but they don't see it as their area of expertise and feel it is something the College could do a lot better than them. They have "quite a bit of interaction with chambers of commerce, Enterprise Ireland, IBEC, IDA and Small Firms Associations" and any time they hold sessions with employers groups "they have been really positive" and "very supportive" but they believe that a more local approach through the College would be "more meaningful" and may amount to higher "level of awareness". ICT skills have recently distributed an employers survey as those offerings were closely designed with industry partners. DES have "a very high expectation for very high employment rates" from this initiative because of this collaboration. Forfás believe that through collaboration with industry, they have "improved alignment of ICT programmes to the needs of enterprises". The have established "a foresight group, comprising education bodies and enterprises, whose aim is to improve the alignment of program provision".

ii. While work-placements have a contributory factor in the initiatives success, they do place an additional financial burden on the participants. Most of the programmes are delivered on a part-time basis to allow the participants still look for work or gain employment during the course of their studies. However, if they are still on the live register when the work-placement comes around, there is no additional financial supports available to them in terms of travel or childcare expenses. This can make it difficult for participants to fully engage with this process and they could be missing out on a key element of the programme through lack of funds. From the employers perspective, by not paying an intern as part of the work-placement, they should be prepared for the student to leave if the get a paid job in the meantime.

The careers and work-placement office also had concerns about placing people in organisations where they had an idea that the employer was going to take advantage of them. "You can have a company that don't have an IT department and they think they will just get someone on experience and then expect them to do everything". The workplacement officer was conscious not "to set people up to fail... and set realistic expectations" so that the students "confidence was not shattered".

- iii. Work-placements can also be difficult to source by the providers. Some organisations have "very strict entry requirements" and "go for people that fit into a certain box". The careers officers experience has been that the bigger firms do not tend to take the participants of these schemes as they prefer for the interns to be returning to college following their work experience, which is not the case with these initiatives. They also found that there was little recognition of the scheme with employers.
- iv. The careers office provides a "13 week career bridge module" which includes a "tailor made work placement service". It involves an "individual meeting" on a "one to one basis to discuss their career....and a strategy for them individually". Their overall aim was to "ideally get them a job" and saw the work-placement as "second best". They made them aware that the "jobs markets changed" radically from the time they last were looking for jobs. "They didn't know about reverse engineering roles, hearing about jobs, speaking to your friends, being up on Linkedin, word of mouth and that 80% of jobs are not visible". They saw this as the "biggest service they provide to students, because of their age profile....they never had to look for a job that way before".
- v. The HEA and provider have received very strong feedback about the career bridge aspect of the initiative. The participants found it "incredibly useful". It was "almost like the final hurdle…as people had lost confidence…and a lot maybe hadn't been actually in the jobs market for so long" and they found it a "hugely important dimension to the whole return to work process". It was seen a great way for people to gain confidence and applied a "final polish". The provider agreed it was an integral part of the process to equip them with the latest ways of finding employment by covering "career planning, skills awareness, the hidden jobs market" along with the usual interviewing skills and how to do a CV. They believed that it was the Colleges chance to engage with the participant on a one to one basis and the feedback that they received

as a result of this was that they "actually did care, they actually did mind and were listening" and trying their best for them.

- vi. Confidence was an issue that came across from the HEA and the provider. The fact that they are unemployed "affects many aspects of their lives". The HEA felt that by providing them with "examples of people that things have worked out for" through testimonials, they could let them know the inside information on what a person in the same situation as them has done, and prove that it could worked out for them too. The provider found that students expectations must be set from the outset. "It isn't always easy to get a job and a work-placement and...sometimes ...they think they are going to be guaranteed one and that can be hard".
- vii. They also believe that engagement with the process is key and the participant "should be willing to make changes for themselves" as "there is only so much you can do on career bridge". The interviewees from the education provider all agreed that there was an element of "mental health issues" with some of the students that felt "under a lot of pressure". Some showed signs of "extremely low self-esteem, that manifests itself as anger". This was associated to the fact that some of them "get disproportionally angry" at small issues like classes being cancelled. The careers office provide time for them to vent their feelings "sometimes your just listening, a lot of the time....you are just letting them talk it out", but they can't be counsellors and "there isn't money in the budget for a counsellor".

4.2.3 Labour Market

There is no doubt from the literature review and evidence collected that there is a skills shortage in the ICT sector in Ireland. The Government has made a huge financial commitment and supplied the resources, in so far as they can, to scrutinise the impact and measure the level of success. Yet the HEA have pointed out in the data collected, that 10,000 have been through the Springboard programmes over the last year, yet the number on the live register remains over 400,000. As pointed out by Minister Bruton in the Action Plan for jobs (2013) and supported by the interview with the DES and the Vice-Dean of the School of Computing, there are only a finite number of ways to build the pool which is:

- Through mainstream education at 2nd level
- This feeds into your third level colleges programmes, which are already starting to see an increase in numbers
- Through conversion courses
- The migration of people from abroad

The DES interview alluded to a number of issues in the past, particularly with the first two points that lead in some part to the deficit that is currently being experienced. It is a balancing act to "stimulate demand from students for places responding with increased number of places". The number of people interested in taking a computer science course dropped significantly following the dot.com collapse which saw the CAO points for these courses drop. Some of the students that did go for those courses, didn't have the core mathematical capacity and this amongst other reasons "contributed to the very high level of drop out from first year programmes". DES explained that the Action Plan for jobs has embarked to address these issues simultaneously as "if you play around with one over the other, you can create an imbalance". One such action is to address the maths problem and this year introduced extra points for students taking honours maths level in the leaving certificate.

The same interviewee also supported the roll out of statistical profiling for all unemployed people as set out by O'Connell et al (2012). They believe that this will help to streamline the process and speed up the intervention of suitable training solutions.

A lot of improvements have been made to these initiatives over the last number of years to support the government's investment. The interviewees comments on this and the collaborative nature of the schemes are mentioned below.

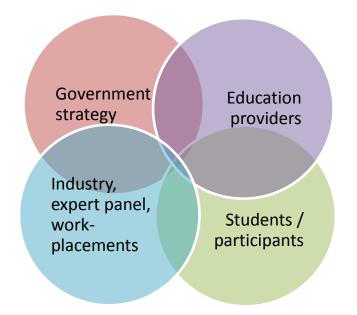


Figure 3: Collaboration between stakeholders

A lot has been done in the three years since the establishment of the i. Springboard scheme to raise awareness of the scheme with eligible applicants and fill the number of places available on the programmes each year. The HEA have successfully used their evaluation work to make changes and improve on processes and systems year on year. Part of these improvements focused on supports to the applicants. Initially they could apply for up to 15 programmes at the one time over various providers. This caused great confusion and competitive atmosphere between providers. By changing the limit on the number of courses people can apply for and by providing independent guidance to them, this year the average number of multiple application is down to 2 which indicates that applicants are more focused and informed in their decisions. The HEA see it as the whole experience (the programme, work placement and career bridge) and the achievement of being engaged and motivated that potentially add up to bring people back to employment. The providers also reacted to the feedback from their participants and implemented improvements to services and processes on an on-going basis, such as introducing a support tutor and extra lab assistants.

- ii. DES sees "guidance as being very important". "You're looking at somebody who may have worked for the last 20, 30 years, they may have worked in one job or even one area". They may not be aware of the "transferable skills they have so a guidance piece for people who are older and have prior experience in the labour market is our view is particularly important". The work-placement company pointed out that some had transferrable "management skills" which they see as a gap in their own IT organisation. They also commented on the "people who have gone on the conversion courses have shown more of an appetite from day one…because it's specific and a decided effort to get on target…maybe a bit more mature as well…they hit the ground running and the pieces of work they did was excellent".
- iii. There is also a lot of initiatives currently available to the unemployed and many are focused on the "same cohort and the same target group" as Springboard. This dilutes the pool of available or interested people and creates confusion for participants and support services. Forfás concluded that there is a "shortage of high level ICT skills globally with countries competing with each other for such skills". However this creates an "increasing global flow of ICT talent between countries".
- iv. One of the main collaborators, with the schemes at an operational level would be with the DSP. There have been individual issues with students and their local DSP office in terms of them stopping payment when students are on the placement or work-placement. The HEA have put this down to poor communication and have intervened whenever possible to ensure the right outcome for the students. They are also in discussions with the DSP to investigate the possibility of the work-placements being linked to Jobbridge which would provide an extra €50 towards the expenses of working on a daily basis.
- v. The HEA role is also to coordinate the 38 providers. They do so via a means of a number of meetings throughout the year. They meet in

April, pre the announcement of the tenders, as a planning meeting with last years providers to discuss marketing and promotion. They then follow up with a launch and another meeting in July to "drive the process and get everyone working together for the roadshows and August campaign". These meetings work well and the true collaborative nature of the process is evident in the flow of information and sharing of ideas between all the parties. There is a "sense of a very good relationship" that they just need to "keep building on…to keep focusing on the same goal". The HEA see the engagement and collaboration as an example of how "things can work extremely well" and "how valuable Higher Education is and how much a difference it makes to people's lives". DES agrees that "the more you engage with people the more you sort of understand where everybody is coming from".

- The DSP are a "key interface" especially with the Springboard scheme. vi. But there is a sense from the interviewees that the opportunity to support the iniatives are not being "promoted enough through social protection". There are exceptions to this and some are "really doing a huge amount" but that does not seem to be reflective of most. DES believe that "when people become unemployed as part of their engagement with the DSP services...they should have access to professional guidance. It needs to be at that point...and needs to be provider neutral". "It should be someone who is in a position to actually determine what's best for the person and advise them on it". The workplacement company interviewee has experience of a simular workforce development scheme in Northern Ireland and explained that they work with Department of Education and Learning and assigned a manager to work with them to produce a job advertisement which was placed in job centres. They have experienced a huge response to this initiative.
- vii. The structures around the collaboration of the three 3 government departments is purely on an "informal" basis. DES see the work they do with the DSP and DJEI as "just on an ongoing basis...just how we work". They admit at times it can be difficult as "we might not always

agree on the best things to do" but that could be because "people are working towards different policy objectives". "What might be our priority in terms of the roll out of guidance service might not be the DSP's priority".

- viii. Not forgetting the engagement and collaborative aspects of the initiatives for the participants themselves. The work-placement company "encouraged them to learn from each other" by sharing what they are working on and asking each other what they are doing so they can learn from each others experiences. The programmes are also designed to have team and group work as part the students assessment.
 - ix. None of this would have been possible without the "significant investment" in improving the "quality and quantity of ICT skills" according to DES. €10 million alone was spent in 2012 purely on ICT skills and a further €50 million has been committed to Springboard over the last three years, a third of which "is supporting free places on programmes in relation to ICT". DES believe that "we're positioned better than a lot of EU countries" where they haven't started to address the problem of the skills deficit in ICT. "We're all in the same boat, but maybe we have started the journey a bit earlier than the rest".
 - x. The funding for the initiatives does not "come from mainstream education funding, it's targeted funds" and "at this stage nearly 60 million has been invested". The evaluation piece is critical to "get an evaluation framework that will enable us to track" the outcomes and to verify that the "programmes are relevant and appropriate to the area of identified skills needs". DES is "waiting to see what the outcomes of the ICT conversion skills programmes are as that will determine our decision as to whether to do a full round of them or not as they are so bespoke". They "provide the places free of charge to everybody on the basis of the fact that they are trying to really ramp up a particular very very precisely defined gap". The need to "start to see that impact that is having" before they can justify the investment in funding. They did

indicate that they may look to change the model to "charge fees" or they may be scope for "industry to pay" some sort of contribution towards it.

- xi. DES are looking to the mainstream system to "enhance everybody's employability" and have acknowledged that there's "probably a point at which you know, do you continue to expand provision in one particular area to the exclusion of the other areas?"
- xii. The main challenge that strategists and providers experienced was to do with resources, and the lack thereof. All public servants have been observing a moratorium on recruitment for the last number of years due to the economic crisis and the general consensus was that a lot more could be done, had they the resources.
- xiii. From the HEA's perspective, "ideal situation is that we end up with the employment crisis solved and there isn't a need for Springboard or ICT skills...we're quite a while away from that yet".

4.2.4 Education and Re-skilling

The whole philosophy of the initiatives supports Stewart and Rigg (2011) and Maclean and Ordonez (2007) concept of life-long learning and the fact that people will have many careers in their lifetime. To date there has been little evidence in the findings of a skills mismatch (Peiker, 2010) as a result of the government workforce development initiatives. The only data we have to go on is that 40% of people that have gained employment from the 2011 cohort of Springboard. However, the empirical data referred to "serial course goers" by the careers and work placement officer in the third level provider. These people appear to be collecting qualifications on an on-going basis, some up to level 9 on the NFQ. There is a risk that these people will be entering the jobs market with a variety of qualifications with little experience in them, unless they have practiced and developed their skills in the meantime.

Further research is needed at a later stage to collect more robust evidence of skills mismatch or what Mavromaras et al (2013) described as occupation downgrading. We can however review the salary levels for the participants

that have so far returned to work. The HEA second stage evaluation report tells us that 60% of those re-employed are earning $\in 28,999$ or below. 25% of these are receiving the minimum wage. When compared to the average minimum private sector wage of $\in 37,722$ and public sector $\in 49,006$ of 2008 (www.cso.ie), there is a marked difference and we can only assume that a good deal of these people have taken a pay-cut since they were last in fulltime employment. But this could reflect Mavromaras et al (2013) theory that some people are happy to be back in employment regardless of the monetary compensation.

Many interviewees, particularly those in closer contact with the individual students, commented on their mental health issues and low morale, all the symptoms in the "life without work" report and OECD (2012) findings on the impact of prolonged unemployment. Although acknowledged by the interviewees, the providers found it particularly difficult to deal with these issues and suggested that professional services should be available to these students. On the plus side, the feedback from the participants themselves has shown the benefits to their confidence and motivation by taking part in these programmes.

In response to Maclean and Ordonez (2007) concerns the Vice-dean of the school of computing spoke about how their faculty kept up to date by keeping in touch with industry and practices in the sector. The majority of their programmes were newly developed in response for the call to action and the latest pedagogical approaches were applied to the delivery mechanism and the assessment strategy. The provider has proven they can adapt quickly to the challenges the programmes have brought, have shown innovation in the re-packaging and setting up of new programmes in support of the EGSFN and have actively collaborated with industry throughout the process. According to El-Khawas (2011) the provider is setting themselves up to reap further benefits for showing this flexibility and co-operation with this process when the market changes again for the better. Perhaps the college's links with industry will continue to grow as a result and more

opportunities to deliver fee paying programmes in-house will come about. Singh (2012) also predicts greater levels of remote working with the advance of e-business and access to e-mail and documents through Cloud Computing technologies. As pointed out by Pina (2011) the maintenance of this workforce through high quality education is important to preserving the human capital pool.

The work-placement company interviewee stressed the importance of the students having an innovative and entrepreneurial spirit, as suggested by Maclean and Ordonez (2007) as they will have to be able to adjust to new working environment and working in a diverse and every changing industry. Bridges (1995) concept of the remote worker or contactor was echoed in the findings by the work-placement company.

Below are some further thoughts and comments on how education is playing its part.

The fact that the "courses are all in areas where there are skills needed" i. is a contributing factor to its success. People are not just being trained in programmes that the providers have on offer and the DES also stressed the importance that the schemes are aimed at "people who have a prior experience of work". They are taking part in programmes that have been deemed suitable through a rigorous process of approval by an expert panel of industry experts. The strategy stakeholders agree that the work of the EGSFN and the access then to the research on current and future skills need is crucial to this process. The expert panel are very focused on making sure that all the courses approved are connected to what's showing up in terms of skills gaps. HEA states that a lot of thought and work has gone into "matching the people with workforce skills and experience but don't have the qualification, to the right course in an area where you know they're more likely to find employment". This is what the strategist sees as key to the process - choosing the right course, leaving no room for oversight. They predict that when things start to

pick up in the economy that the "flow of graduates through Springboard and ICT will make it an easier process for employers to fill jobs".

- ii. The strategists also compliment the work of the third level providers who they claim have really got involved and been very pro-active in embracing the initiatives. HEA see an advantage in Ireland being such a small country where everyone knows somebody effected by the recession so they see a "huge connection and a desire to do something about it". They also recognise that "education is key, and higher education is key" to these initiatives and therefore there is almost an automatic engagement with the process by the providers.
- iii. Although all are agreed that the schemes are a success, it is a challenge to define the "extent" of the success. As there is no standard available as none of the strategist have been able to "find an international benchmark" and DES feels that you "can't make your sole determination as to the success whether or not somebody" has got a job. You have to be able to comment on the skills they have received, the distance they have travelled in terms of their educational attainment and whether it is sustainable (are they still in employment 6 months later?) As the ICT conversion skills programme is only completing its first year, the process of evaluation and outcomes is only beginning to be assessed.
- iv. Another area that both stakeholders agreed could be improved upon was the gathering of data. The HEA and DES agreed that some providers are great at returning detailed feedback and conducting follow up evaluation but that both strategists and providers experience the same problems in terms of limitations as the distance from the programme grows which shows in the responses to the surveys diminishing. It is agreed that it would be great to have a more systematic way of tracking people and that this would require better connection of data which includes not only the 3 approaches set out by DES, previously mentioend, but also to include access to Revenue. This would enable the HEA to get information on whether someone has moved to employment without having "to contact people and depend on them to come back to you"

with this information. DES explains that this current matching takes place with the DSP but this information will "only tell you whether somebody is on or off the live register, it won't necessarily tell you whether or not they're back to work".

- v. The initial challenge for the school of computing was "creating the programmes". Many of the programmes were developed from scratch or by combining modules from across a range of programmes in order to deliver a suite of new courses that met the expert panels recommendations. This lead to issues with motivation and put pressure on staff that already had "other pressures in their normal job as well". On the plus side to this the provider also mentioned that some staff were "excited" about the proposals and put a lot of input into them and now they have a team of people that are equipped with the skills to write funding proposals.
- vi. They also then had issues with the recruitment of faculty to deliver the courses as they could not have planned in advance until the tenders were announced. It took time to induct the faculty, and as the material was relatively new they had a big job of work to put together the course delivery material for class. The new faculty had to be monitored and reviewed on an on-going basis.
- vii. The providers also faced challenges with the participants themselves. Each interviewee commented on the mental health and emotional state of some of the students. Many had had a "bad experience" and the work-placement officer felt that they were "going to take it out on the College". They noticed a "stigma attached to redundancy" and that many of them had a "fear of rejection". The didn't necessarily want to be back in college and this had a negative effect on their motivation.

Some students struggled with the conversion aspect of the programme too. The provider felt that those that came from a technical related area seemed to do quite well while those that came from an Arts background "wouldn't have the problem solving skills that technical people would have" and they found it very difficult. This was evidenced across the College services areas with the number of withdrawal and deferrals on some of the programmes. Forfás have echoed this by stating that the level of drop outs from ICT courses is "relatively higher than other courses".

viii. The providers are key partners in the whole project in so far as they make is all happen according to the HEA. They feel that their engagement with the initiatives has been fantastic. Internally, the providers mention that there could be better in-house communication and collaboration when it comes to delivering a cohesive package to the students. Careers and work-placement believe that "we should approach it more as team....be a college wide thing...we can make it amazing....something we can get really well known for and develop a reputation for excellence" in this field.

The careers office works hard to establish a relationship with industry and "will always have a presence and hand out brochures" at any events with recruiters. They believe that this enhances their visibility. They are aware that the work-placements process is very competitive and the larger colleges will get the Google and Facebook placements over them. However, they have established good relationships with "small to medium enterprises, incubation centres and start-up companies" where the majority of their students are placed. From discussions with Enterprise Ireland, they believe that the students are getting better exposure and experience with these smaller companies and it also works for the age profile of the students. "Going into a big company, you're kind of just another number".

ix. On tracking the students after they have completed the programme, the HEA acknowledges that "some colleges are obviously more developed and have systems of keeping in contact and tracking outcomes than others". The challenge is that the HEA are not explicit in their instructions to the providers in this instance and they acknowledge that

the main function of the providers is to get the people through the programme and have a good outcome.

x. To ensure the programmes stay up to date the provider must get feedback from faculty through annual monitoring reports. They also obtain feedback from the students on the technologies that were used. Their industry links are related to faculty as they hire faculty with industry experience. They use the relationship with industry links to help them prepare and write the funding proposals. They "engage with industry to...find out their feedback on the technologies". They also use these contacts as potential placements for students.

Chapter 5. Conclusion and Recommendations

5.1 Discussion and implications of the research

The research questions raised in Chapter 1 were to discover, from a governmental point of view if the workforce development initiatives were fulfilling their objectives. From an organisational view it was to see if these initiatives were addressing the skills deficit in the ICT sector and creating a pipeline of talent for indigenous and international firms in Ireland. And from the individual's perspective, if the schemes had the ability to prepare them for the jobs market again. Finally, the question of the future of these initiatives was addressed. From the research collected, and analysed in the previous chapter, a discussion of these questions and the implications they may have.

5.1.1 Review of Government initiatives from the stakeholders view

Each of the stakeholders interviewed agreed that the initiatives were successful in their aims and objectives, but to what extent remains a question. If it depended on the experience of students to date in completion of programmes and achievement of qualifications then the figures point to a clear success. Even the figure of 40% of enrolled participants back I fulltime employment is impressive. Whether they have gained employment in the area they have re-skilled or re-trained in is unclear, so the question needs be raised as to whether they are in sustainable employment. This will become more evident as time goes by and more information is collected. It is also worrying from the state's perspective that 10,000 have engaged with the Springboard process over the last 3 years but this is only a very small number in relation to the 416,000 that are still on the live register. There has been no analysis of why people on the live register are not engaging with these types of initiatives. Perhaps, if we look back to Table 1 and the Pathways to work, there are so many initiatives to choose from and many have similar if not the same cohort in mind, that this had led to confusion and dispersion of the eligible candidates. It is clear from the remit of ICT

conversion skills and the Springboard initiatives that it is the intention to ensure the individual gets employment in a known area of jobs stability.

Another reason could be what has been termed the "welfare trap" in a recent report by the Citizens Information Board. The report found that large numbers of people were turning down jobs as they were too low-paid and they would lose their entitlement to social welfare benefits (Weston, 2013).

"Governments need to adopt the right skills strategies in order to bridge the gap between employer's needs and the education system and to make ICT qualifications and careers more attractive to first-time students and those re-skilling" (Minister Bruton, 8th February 2013). There is scope for the Government departments involved to develop and utilise their existing relationships with employers and industry and exploit this to the advantage of the schemes.

The collection of data is an area that was highlighted as needing attention. The HEA need to be more explicit with the providers about what they require them to do in terms of following up with students. The current system leaves it open to goodwill or the standard practices in some providers to come back with valued feedback and information. This needs to be asked and tasked to the providers as part of their duties in delivering these programmes.

A more co-operative approach from other government departments including Revenue and Social Protection would also assist the collection of data. If the participants do not return surveys there really needs to be another way of calculating the return on investment for these types of schemes. Collaboration in general across the Departments needs a more cohesive approach. It is too haphazard and too much is left to the discretion and willingness of individuals in the different departments to get results. The experience of students ranges widely depending on what local social welfare office they interact with. A lot of these issues come down to resources and the lack thereof. But if people don't see their interaction with these initiatives as part of their role or remit, or being critical to its success they may be less likely to engage to the appropriate level needed. If executed correctly through the three main government departments (DSP, DOE & DJEI) these initiatives could be a real example of effective co-operation and efficient use of resources, intelligent record management and tracking and a model of success that could be replicated throughout the EU.

From the provider's point of view, they need to treat the initiative with a more strategic view and engage with colleagues and industry on an on-going basis to develop and maintain their own level of contribution with the scheme. It seems that they will already be asked this year by the HEA to provide better follow up research on the work-placement experience and what happens to them after they graduate. They need to ensure that curriculum up is kept up-to-date as this is critical to the quality of the award the individual receives. It is anticipated that there will be a worldwide doubling of the numbers of international student enrolment by 2020 to five million and that institutes will need to develop their curriculum to reflect international viewpoints (Ischinger, 2009).

5.1.2 Talent pipeline

The schemes are producing graduates in specified skills shortage areas and therefore they should, in an ideal scenario, have their pick of jobs to choose from. As previously discussed the individual needs to be able to set themselves apart from the rest of the pool and showcase their previous experience and talents. The career bridge module helps the students open up the hidden jobs market and teaches them the strategies involved in applying for roles in today's ICT companies. The following list of 8 recommendations used by Siemens displays the inside track on how they recruit for IT talent:

- 1. Use individual channels, on and offline, to approach and attract potential suitable candidates
- Use complementary online resources such as blogs or social networking platforms to attract IT talent

- 3. Continually renew your understanding of where your potential candidates are and how you might attract their attention and interest
- 4. Establish a long-lasting relationship with potential applicants for IT positions while they are still students
- 5. Treat candidates as customers
- 6. Never reject a qualified application; store the details on file
- Include present and former members of your own IT staff in your IT talent pool
- 8. Transform a standard recruiter to a "recruiter 2.0".

(Weitzel et al, 2009)

The organisation needs to be aware of their human capital pool and the skills available to them now and into the future. In the long run this could mean the difference in them remaining competitive and staying in business despite the economic crisis. Altman (2008) provides the following five steps to success in ensuring the pool stays full and gaps can be replenished.

- 1. Everyone in the organisation has a part to play in talent management
- 2. Highly important in creating strategic value for the organisation
- 3. Ask yourself why would an enthusiastic, intelligent, ambitious and energetic person want to come to work in your organisation?
- 4. Engagement is a critical element to drive the strategy and assist implementation
- 5. Have a human capital strategy to support your organisations goals

Altman (2008) believes that if your organisation is "talent powered" it will build unique capabilities and produce extraordinary results.

5.1.3 Work readiness

The career bridge module and work-placements go a long way in preparing and trying to achieve work readiness with the participants on these schemes. The taught module is about ensuring the student is well prepared for applying for jobs, where to look for them and techniques in carrying out an effective interview. To compliment this, the work-placement builds confidence, helps the graduate gain relevant experience in their area of study and get exposure to business and the culture of these establishments. These organisations may be very different from the places they have worked before and they may find a big change in culture and ways of working. They may receive more exposure to latest technologies on an international level and practices in larger organisations while those with placements in smaller SME's may be required to use a variety of skills and multi-task as part of their daily duties.

As expressed by the work-placement company interviewee, employability is key to the whole process. This is more than the qualification, it is a mind-set that needs to be fostered and encouraged in order for them to show potential employees that they are the best candidate for the job. Both the career bridge module and work-placement are factors that address employability; the rest is up to the individual to enact that change within their own behaviours and personalities.

The provider also has a role to play here. Based on the literature by Maclean and Ordonez (2007) and Bridges (1995) which was endorsed by the work-placement company, the provider should consider introducing an entrepreneurship element to their programmes to prepare the students for the possibility of working as contractors, independent workers or employees of an SME. Remote working has become more popular due to a number of reasons including cloud computing and video-conferencing technologies allowing people to access data from wherever they are and a more forward thinking flexible attitude to work by employers (Singh, 2012).

5.1.4 What does the future hold?

It is unclear how long the government can sustain the funding for these types of initiatives when budgets are under such stringent conventions and scrutiny. A lot of money has already been invested and without tangible and comprehensive analysis of where each graduate goes after completing the programmes it is difficult to substantiate the return on the investment and effort. As these schemes are relatively new, there is a lot of data still to be collected and information to be extracted that will impact on their effectiveness and influence on getting people back into employment. A more cohesive approach to collecting and collating data across government departments and the providers involved is required to maximise the information held on each individual and build a more comprehensive picture of their journey and final outcomes. With fees for completing an MSc with Springboard at almost €9,000 per person this year, evidence of these students success in the jobs market needs to be closely monitored.

Perhaps a more industry lead or focussed funding model will be more appropriate in the future. Although the MSc in conjunction with Ericsson was state funded through the Skillnets scheme, the model worked to the best advantage of all the stakeholders. The state saw a tangible return on their investment, the provider gained a very important industry partner and a programme that they had over-subscription of places on and finally the participants knew that they were guaranteed a full-time job with a prestigious company at the end of the process. It is surprising to find that this model has not been replicated with others in the ICT industry in the last few years.

As pointed out by the DES and HEA, there are only a finite number of ways of growing the numbers of people entering ICT for careers:

- \circ 2nd level STEM support in maths subjects
- \circ 3rd level courses
- \circ Migration
- Conversion courses

These issues are already being addressed and the numbers of school leavers applying for courses at 3rd level is on the rise. There is however, still a lack of women in ICT roles as highlighted in the Forfás interview.

The journey does not end here for the graduates of these programmes. They will need to constantly up-skill and re-train within their organisations or independently to keep their skill valid and current. To ensure the quality, continuity and integrity of the standard of skills, Brian, Julia and William (2002) recommend the following principles:

- Experts and more experienced IT workers need to input into the skills requirements for the organisation by identifying the type of work, skills, knowledge and capabilities required to be successful
- These requirements must reflect the broader industry needs rather than narrower company objectives
- These requirements must be updated continuously and be able to be applied remotely and in a flexible working environment.

5.1.5 Other observations

Communication has been a key theme throughout the findings and analysis. The careers office in the third level provider called for better communication between the internal departments involved in the delivery of the programmes to ensure a better outcome for their students in the process. The HEA looked for better communication between the DSP and the candidates. And the DES hopes for improved sharing and intelligent use of data held between government departments.

The public service has experienced a lot of transformation recently, particularly for those involved in this scheme. The last number of years has brought a lot of change to their work conditions and remuneration and there has been union resistance to these changes. The DSP as part of this process has seen the number of clients they have to provide a service to greatly increase under times of financial austerity. Their already heavy workload may be a reason for part of their lack of engagement with these schemes.

The author envisages an impact on HR professionals when the graduates of these schemes commence full-time employment with organisations. Everyone interviewed agreed that there were issues with stigma associated with being long-term unemployed, confidence and in some cases motivation. Before stage 4 of Romans & Lardner (2005) "Human Capital Pipeline" can commence the HR manager needs to make sure that these individuals are

inducted properly into the organisation and are sufficiently trained in the aspects of the role they will be working in. If done correctly, and following the final phases of the pipeline, they are less likely to experience issues with the retention of these employees. Although, this is where the recession works in favour of the ICT industry, as employees are less likely to move jobs and therefore retention is high.

Payne and Jones (1987) pointed out problems encountered by unemployed individuals when returning to work such as:

- Getting used to the routine of working again
- Working under too much pressure
- Fitting the demands of work with social and recreational life
- Worrying about what is expected of you at work.

If HR can tackle some of these issues they can make the transition easier for the new employee.

5.2 Recommendations

The following observations and recommendations are based on the information collated and observed:

- Increased collaboration and sharing of data between government departments
- Increased communication between departments within the 3rd level provider
- Make sure the participants are aware of the value of their feedback. They may be more likely to respond if they know that their opinions and experiences are of real value
- Better buy-in and exposure to the initiatives with employers
- Improve the standard of engagement and return of information in relation to the outcomes of the programmes from the providers.
- The providers should provide an entrepreneurial or innovative aspect to their programmes. Not necessarly a credit bearing module but perhaps an assessment that has an entrepreneurial element to it.

There is a lot more could be done with extra money and resources, but as neither of these are likely to be increased in the near future, recommendations will not be suggested in these areas.

The above are based on the outcome from the research and are not an exhaustive list of possibilities, but it is the author belief that they should be implemented.

5.3 Implications of future research

This research highlights the need for other further studies, some of which are suggested below:

- What is the difference between those who completed work-placement as part of their course then those who didn't? Are there higher levels of success in employment? How many of the work-placements lead to full-time positions?
- 2) How are HR dealing with the integration of these graduates in their organisations?
- 3) What is the evidence of psychological/social/psychical benefits to those coming off long-term unemployment?
- 4) What impact has ICT conversation skills courses had on filling roles in the sector?
- 5) How can we encourage more women into IT roles? What are the factors that deter them from careers in this area?

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Chapter 7. Appendices

7.1 Appendix A – Department of Education

Q Minister Bruton has announced that he wants Ireland to be a hub for third level IT professional in the coming years? How are government initiatives such as Springboard and ICT conversion skills fulfilling this goal?

A: Well they publish 2 stages of the evaluation now. There's 2, the second stage evaluation is published in I suppose maybe 2 months ago and they've actually recently just published the data report to back up that second stage. Ahh evaluation, so, mmm, because of the timing I suppose that second stage, the first stage evaluation was very much a process evaluation. You know because the programmes only just being rolled out and up and running and all the rest of it so, it was very much around the process. Ahh because obviously we didn't have any output or outcomes at that stage but what we really got from that first one was a whole participant profile piece which was, really really useful so in terms of that mmm, so that was that. The second stage evaluation has mmm as I said that has started to identify the, well the outputs we have all the academic outputs from all the programmes plus the employment outcomes. Initial employment outcomes and they have done I suppose they've done 2 stages, there's 2 stages in the mmm employment outcomes. Mmm. I think they did the first, the first survey was around 6 weeks or so after the programmes finished and the second was within 3 months, I think now I don't-I'll give you them, they're published, they're there, so that's the initial I suppose that's you know that's the first evidence coming through from it. Mmm and I think overall the, the, I suppose the evaluated, we have been very anxious and when I say we I mean we the department. With the HEA 'cos 'cos we fully fund springboard and ICT skills through the national training fund it's not from the mainstream education funding it's targeted funds. So the evaluation framework is very important to us to get in place an evaluation framework that will enable us to track it from the outset. So it's, it's sort of, it's, some really interesting stuff

in it actually that second stage evaluation like a lot of it's not been surprising you know the employment outcomes vary depending on the prior educational attainment, depending on the duration unemployed as a key one. The shorter the person was when they started the better their prospects are of getting back into work. But that's what we sort of know intuitively. In any way. But know but it, is actually, it very strongly supports that mmm and then there's a huge variation too across different programme areas and all the rest of it so, all of that actually, the detail is all in, in the data report itself. So, so that's that. With ICT skills the first stage of the ICT skills programme started in March of last year, so the first group of graduates are just coming out from that now. So the HEA has just started the, the first stage if you like of that evaluation that we have sent out or they have sent out detailed questionnaires to all of the participants and track where they're at, you know, in, and sort of in terms of employment and all the rest of it. Ahh, I suppose I should say with both of them, well with ICT because we just got to the stage where we're starting the first piece of evaluation with them, it's a sort of a, there's a couple of strands to it in terms of the evaluation approach. There is what's gathered directly you know through the application. Process there is data returns from the providers. And then there's direct email surveys of the participants. And then we have done or the HEA has done matching with DSP data. Matching PPSNs. To see you know, the live register or, that'll only tell you whether somebody is on or off the live register it won't necessarily tell you whether or not they're back to work. Yes so, mmm, so while it's it's quite a robust process I think in terms of probably, any approach that's around the place, you know it still has limitations. And that's something we're very conscious of because like we get very good feedback, say data back from the ahh email surveys but the longer person moves from the programme you're not gonna get the same responses from the, from the data. So I suppose what we want to try and do is maximise the scope and the potential for matching administrative data. You know like say our data with DSP data and hopefully subsequently with Revenue data where you know you can then track to see whether they're actually in employment

or not in employment. So it's, it's an evolving framework put it that way. I would say it's an evolving framework. And ahh- you know, as we speak actually the HEA are, are sort of seeking for more assistance around further developing the framework and, and sort of you know producing the reports mmm because like we're generating our, you know huge volumes of data are being generated but it's being able to have the capacity to I suppose to mine it and you know to draw conclusions from it. Mmm, but like we, to the extent that we have and can we have sought to reflect back in the, you know the. Like I say the first evaluations for instance showed huge lack of support for people in selecting programmes. That was a huge, you know, that was a really really big thing. So, in an attempt to sort of you know address that in some way for the second stage of springboard we put in place a, the guidance helplines. But that's a sort of a, that's a temporary solution. You know what we have been proposing and actually it is now reflected in the pathways to work that was published last week The need actually for people when they become unemployed as part of their engagement with the DSP services with intro or whatever they are, that they should have access to professional guidance. In terms of being able to select a course option and it should be a, it needs to be at that point because it needs to be provider neutral. In terms of you know picking the education or training option, assuming an education or training option is relevant. But it should be somebody who is in a position to actually you know determine what's best for the person and advise them on it. So the downside of something like say the springboard helpline which You're sort of almost pre-selecting to do a is better than nothing. springboard course before you ring the springboard. Guidance service but at least that is a guidance, that is a neutral service in that you know the HEA again contract people to man that helpline so it's not one of the providers who is providing advice, you know because providers also have a, an interest in filling places on programmes as well so:-So do you know what I mean, so it's-it's mmm it just from our point of view the best way to do it is on a provider neutral basis.

Q There's a lot of initiatives on offer now for long term unemployed, there's more and more now for the like the pathways to work last week which you mentioned. The profiling of unemployed people was in that as well wasn't it?

A: Profiling of unemployed people came in in, under the first pathways to work which was 2011 I think but at that stage what profiling was rolled out for new claimants on the live register. Not for people who were already unemployed. The springboard target group for instance are people who are already unemployed. They're also people who are, have a prior experience of work. You know as opposed to, it's not targeted necessarily at the young people. It's targeted at people with prior experience in the labour force. And for, for that cohort in particularly we see guidance as being very important because you're looking at somebody who may have worked for the last 20, 30 years or whatever but they may have worked in one job or even one area. And they may not know what transferable skills they have so the guidance piece for people who are older and you know have a prior experience in the labour market in our view is particularly important. So there's the profiling piece as I said it was rolled out initially for new claimants on the live register but our focus now is moving towards people who are long term unemployed. Mmm, obviously, and the majority of our springboard cohort are people who are long term unemployed. But that's just because the majority of people who are unemployed are long term unemployed. So, mmm, yeah, that's ahh, that's being rolled out for them.

The profiling will just tell the Department of Social Protection information on the person. I think the objective of the profiling for the Department of Social Protection is to determine which people are most in need of support. Do you know what I mean. Rather than necessarily the intervention per say but then they are then referred, the intention is I think to refer them to a case manager who then goes through the intervention and it's, that's the piece where we're saying the guidance piece is important. It shouldn't be just a sort of an information, it needs to be actually at that point. People need to have access to you know appropriately qualified people to advise them not just you know give information about you know here's a whole load of brochures and do you know what I mean. So it's sort of that service so, like, and as I said that's what we were ahh it is reflected into the latest version of pathways to work ahh I can't remember the action off-hand I think it might be action 43 ahh but it's anyway it's intended to cover that and DSP are going to contract out more of their what they call their intro services, you know their case management and engagement services but as part of that they would look at contracting guidance advice and services too.

Q What do you see is the role of the third level institute in contributing to the success of these initiatives?

A: Just springboard or ICT. Then it's no different than the role of the third level institution anywhere it's to provide a quality learning experience in a programme area that's relevant. Now obviously as I said they are funds that are targeted very much we set the targets for you know they're directed at a particular cohort population but it's very much about the programme has to be relevant and appropriate and in an area of identified skills, needs and more and more mmm you know increased waiting is given to engagement with employers and ahh provision of work-placements.

Q Work-placements seem to be becoming more prominent as part of these schemes.

A: Yeah. And momentum, momentum is if you like very similar to springboard. It's just the levels, the you know the same target and levels are different but they, they would have the same cohort, the same target group, including graduates, you know graduates are, are a target group for momentum as well as for springboard. Ironically it's probably non graduates are more of a target for springboard. If you know what I mean cos it's very much focused on I think trying to get people who have the workforce skills and experience but don't have the qualifications that match them. Whereas I think you know quite a few of the momentum programmes are actually

around re-skilling. So they're for people to, to re-skill in an area where you know they're more likely to find employment.

That can just as easily mean a graduate who might already have a level 8, going back and doing a level 5 or a level 6 in something do you know what I mean, it doesn't, when you're re-skilling it's not necessarily about going up, it's about, It can be about going across and it can actually be about going back in terms of you know your qualification levels too so, like if somebody who already has a level 8 or a level 9 ahh degree who applies for a springboard course can just as easy apply for a springboard level 6. Do you know what I mean so it's doesn't, I suppose in that sense it's very different to you know our main stream system and I suppose the supports that are they are around supporting people to go back to full time education.

Q Is there going to be further investment to improve ICT skills?

A: There's significant investment to improving, well the quality and there's the quantity of ICT skills. Mmm and obviously from an education perspective, the, our main focus is on the ICT action plan which I presume you have information on that. In terms of the investment there we have been investing ahh in the purely through the ICT skills we've put in about 10 million in there in the last year I think. Ahh springboard have quite a high level of ICT. Almost a third of the provisions on springboard is ICT provisions so if you sort of look at what we have funded there over the last number of years. I mean well over 50 million has been committed to springboard, 55 million. A third of which is supporting free places on programmes in relation to ICT. Sorry, what I should say in relation to ICT and the ICT conversion skills programmes at the moment which we are waiting to see, is actually what are the, the outcomes on the conversion skills programmes because that will determine our decision as to whether to do a full round of them or not and because they are so bespoke. Like they really are in terms of you know designed with industry partners and everything down to the last thing, I would have a very high expectation for very high employment rates. And if there aren't very high employment rates from

those programmes. Well, we will have to decide whether they're you know it's appropriate to invest further in them now you know or we need to look at, you know cost sharing in relation to rolls out for further you know programmes or whatever. Like we took the decision that we'd provide the places free of charge to everybody on the basis of the fact that we were trying to really ramp up a particular very very precisely defined gap I suppose or skills shortage. But now you know we've put in 1500 places so you know we need to start seeing what impact that is having. And ahh you know if we do another round of it will we charge fees, you know, would we expect industry to pay for you know, our contributions whatever. So like they're all they're sort of the factors that which is why the evaluation piece are so important. If you know what I mean?

Q Springboard has announced 40% of people who have signed up for programmes are now in employment. Is this seen as a success?

A: Yeah, they are average across all of the different mmm the different sources if you know what I mean because there was sources there from, direct returns from the providers. Some of the providers had fantastic data on what happened their graduates after they left and they kept track with them and were really able to give us good data. Other providers didn't have that. So you know, It's a, it's a, and then we obviously have the as I said the, the direct email survey of participants as to where they were. Mmm. Where it's a very valid and it's the one we're all interested in, did somebody get back to work or not obviously in the context of that they're directly targeted at unemployed people. We would obviously be very conscious of the fact that in the absence of jobs out there you can't make your sole determination as to the success of this initiative as to whether or not somebody you know has, so you can't just focus on the rates. You know 60% or 40% or whatever it is. And then you know even if you do focus on the rates you also have to say well okay are they, is it sustainable you know in the sense of you know is that person still in a job 6 weeks later or you know 3 months later or whatever it is, but the, the distance travelled piece is just as important. Now

that's, that's a challenge for, for us, well I think it's a challenge generally in terms of evaluating the impact of education and training programmes. Which is why okay we get a certain amount of qualitative stuff back through the, through the surveys. But then the limitation on that is as your distance from the programmes grows. The data that we're getting back, the responses to the surveys are diminishing. So, but that is, that is an issue I suppose for the department and I generally something that that we're very, very conscious of and very focused on. But it's not just an issue for us, it's an issue for momentum or skill nets or whoever how we best track outputs and outcomes from our programmes.

Q You mentioned earlier the collaborative of approach to this type of initiative with DSP and the Department of Jobs Enterprise and Innovation, how does that collaboration work and how is it monitored or evaluated?

A: It's not evaluated as such in the sense that it's our, it's just how we do our business. Do you know what I mean, it's, it's how we you know through we have various inter departmental structures and meetings and formal groups and all the rest of it but a lot of it is actually just informal. It's informal like you know we work with colleagues in enterprise and in DSP just on an on-going basis. Like that's something, sort of just how we work. You know in, in the public service so that would be abh it's it's increasingly important piece though and like you know we, we, it can be difficult because people are working obviously in different, you know towards different policies objectives and whatever you know I would say these, they're just Mmm. Over time particularly in this whole good range of relationships. unemployment area. You know we mightn't always agree on the best things to do but, you know or you know what might be our priority in terms of I don't know something like the roll out of a guidance service mightn't be DSP's priority in terms of their you know, that course That's just the way the business works.

Q Is there anything more that you think education providers can do to support the initiatives?

A: I would say there's been reasonably good mmm participation. Like it's not obligatory. Like we, you know, we're very clear about that where they're competitive funds. People can apply for them or not apply for them. Do you know what I mean? Obviously we would like to see as many as possible institutions you know participating and you know and certainly I think HEA is probably a better person to talk to about this because she has more direct relations with the providers but. You know I think over time probably some providers have have really engaged with this mmm you know have adapted and developed and you know their programmes and their initiatives and their offerings, you know much more so maybe than some others but it's the nature of the institution. But like I mean, but we set quite clear mmm ahhh objectives around. You know the calls for proposals or whatever and we have an independent selection panel who examines them and you know selects them and again there's been quite good continuity in terms of the membership of the selection panels as well which is good. And ahh, and you know the enterprise development agencies are part of those as well so that's another link back into the working with mmm you know with colleagues in enterprise and you know whatever so we, we sort of try to, you try to do that mmm we here in the department actually just more generally have an enterprise engagement forum which needs to be applied for 3 times a year where all of the, you know the secretary general and the senior management meet with representatives of industry mmm and with colleagues from the Department of Enterprise on I suppose all education policies and issues of interest you know right through junior cycle reforms, you know whatever. You know whatever it's the whole gannet of, but that's just another opportunity. 'Cos the more you engage with people and the more you sort of understand where everybody is coming from, but I suppose that engagement piece is something that really is an issue for individual institutions. You know it needs to happen at different levels. Mmm. And you know and then there's also an overall balance if you're talking about something targeted like springboard or ICT skills who are very focused, very narrowly on having programmes delivered. You know whatever that are going to enhance everybody's employability obviously when you're looking at our mainstream system. You know there are other objectives there, we don't see the system as being solely there to you know very specific technical skills needs and enterprise and you know ICT might be an example there where you know the demand on the industry side is continuing to grow. You know the system has responded very much to student demand but you know I don't know there's probably a point at which you know do you continue to expand provision in one particular area to the exclusion of other areas. They're all just I suppose parts of the balance.

Q Particularly I suppose if it's been included at second level now as well as school leavers are being encouraged to enrol on ICT programmes at third level. You are going to have an influx of graduates at that level too?

A: Oh the demand is going up. I mean like, I don't know whether you've looked at those stats but like definitely the demand for STEM type programmes and computer science in particular is on an upward trend which is good. And in actual fact we're better positioned I think than a lot of the EU countries where I don't think they have quite started, I think we've, the trend, the upward trend in acceptance has started a bit sooner for us. Compared to some of the other, you know other EU member states Cos everybody is, everybody is in the same boat in this, in this area you know what I mean it's not that and I don't think there are any particularly innovative are different or whatever solutions that are out there, that we haven't already to do you know what I mean canvas or reflect in the action plan or government reforms or whatever.

Q Is there any international model or benchmarking system in the EU that is influencing this?

A: No. Not that I know of. No I mean there's a huge volume of activity around it but I don't know if there's anything, there was a, there was a grand coalition for digital jobs, have you come across the grand coalition for digital jobs. The conference back in March you should google that. Mmm, and they had a, a follow up piece I was actually away when it happened as part of the Department of Communications Presidency Conference here on the Digital Assembly I think it was. There was a follow up to the, the grand coalition but the grand coalition was really, it was about bringing together I suppose the different, what would be the equivalent of you know our Department of Enterprise, our Education Department and Social Protection at EU level, like the 3 directorates . You know jobs, whatever their particular titles are. But it would have been those 3 plus industry plus students you know there was a big conference and it was all around how to, how to build digital skills, Mmm, it sounded quite reassuring. Actually to be at it because it was a, a, I didn't come across anything you know a major thatI'm not saying that we, we never thought of it but that, you know I don't know that there are any, there are any silver bullets in relation to this type of thing, like, if you're, if you're looking for more ICT graduates for instance there's so many ways you can get more ICT graduates. Like there's a finite number of ways you get more ICT graduates, and that fits, you know you build them through a mainstream system which feeds back into your, you know like a you second level and that and attract people from abroad. Like that's sort of pretty much it in terms of how you build the supply. And you know you have that constant thing then between stimulating more and more demand from students for places responding with increased numbers of places, increased numbers of places, there's a, there's a quality piece in it somewhere too which is actually what's happened when you say following the .com collapse the places certainly the number of places available certainly at third level in that whole broad computer science area and all sorts of mmm very narrow specialisations that were increasingly rolled out and out and out like you know the places were there, the demand from students was not there, the points, to use was that awful term, but you know. So what happened was you had people going into programmes who maybe didn't have the core I suppose mathematical capacity for the programmes and you also had people going in who didn't actually really know what it was that the programme was doing it was the first time they had ever experienced whatever computer programming or something like that. And you know so that would have been contributing to a very high level of drop out from first year programmes in the sort of broad computer science area so I suppose that's very much what the whole action plan approach was around, trying to address all of those, you know issues simultaneously, because they all feed in and if you play around with one more than the other you know you can create an imbalance, you know so, it's sort of quite a, quite a delicate balance you know.

7.2 Appendix B – Higher Education Authority

Q: How well has Springboard achieved its aims & objectives to date?

A: Yeah I mean yeah. I mean I think you know if it's generally agreed that the programmes a success, to what extent it's a success I meant that's you know that's a difficult one to you know. Like we talked about it you know we, you know, 40% within 6 months back in work is that good? 'Cos you know we'd love it to be 100% but how realistic is that when there are actual job shortages and then on the other hand to Springboard courses are all in area where there are skills needed, so, you know I suppose we don't have a bench mark. Mmm and we, you know, we don't even, we haven't been able to find an international bench mark we've looked for that. You know, so mmm, so I mean in general, in a way we're kind of almost sort of saying asking people or you know getting that feed back well what do people think of that. So obviously you know we need to keep working on it and matching, you know that matching of courses, jobs and hopefully as things you know start to pick up in the economy you know the flow of that is coming through a springboard and ICT as well you know just, it all becomes easier, you know an easier process for people to, to get jobs so, but yeah, I mean overall I suppose-You know in that sense that it's working.

Q: What would you put the success of it down to so far?

A: Em-well I think all the elements of the initiative, the fact that it, you know there has been, we had access to that research on current and future skills needs. We've used that, like we've, you know very, you know, we've had a very slow focus on making sure that all the courses that are approved are connected in to, you know, where that, you know what's showing up in terms of gaps. Ahh we've also I think, mmm you know, I suppose the guidance given to every college and then in that process we've had where we've had an expert panel of industry representatives looking at the courses, reviewing them and and kind of giving that expert input into it, sort of saying yeah this course is on the money, this course is, you know, so you know so it's not kind of oversight. So I think they're probably 2 key things. You

know, mmm. And then I suppose the third thing is I mean our sense of it would be that mmm the system higher education colleges, you know the whole, anybody's involved have really got, you know, involved and are very pro-active and have really kind of embraced the whole thing. That's our sense if it anyway you know is that there's huge engagement. And you know it's a little bit I suppose in a way it's an advantage of us being a small country everybody's got a neighbour, a sibling, a relative you know a friend who's in the situation of being unemployed and so there's a huge connection to that and I suppose a desire to do something about it. And because you know education is so key and higher education is so key ahh you know there's been a kind of almost an automatic engagement which has been great.

Q: I know you're in touch with the graduates for a long period after they finish up, how long does that engagement process work after they're gone?

A: Well we're just about to survey 2011 graduates now. Like in the next couple of days we're due because we've been surveying them every 6 months, so this will be our third survey of the 2011 cohort. And so we, the plan is that we, you know we keep that up. Em- Now how long we keep it up for, I mean the, we sort of said that we'd survey them on a 6 monthly basis. I would say probably we plan to do it for a minimum of 2 years. So it will be,

Mmm. It'd be great to have a more systematic way of tracking people. And that's, you know, I mean that is going to require better connection of data and you know say being able to access say revenue, you know just to get a view of what's, where people are without having to try and contact people and depend on people to come back, you know. Mmm. Like you know at the moment now really our only source say for those 2011 graduates are the individuals themselves It's kind of quite imperfect really you know but mmm. So but I mean that's the plan that we'd, we'd keep it up you know certainly, certainly until, you know for a 2 year period and keep that going

then for every, for the 2013 graduates up til now. So we keep that rolling process up of tracking 'cos it's so important. You know

Q: Do you see the providers playing the part in feeding that information in as well?

A: Yeah. Well we've asked, again we've asked now and you were at the meeting last week where we you know we asked for the information to be updated as much as possible. We do know that as time goes on the colleges become less and less connected, you know. Now some, some colleges like and again this is something we kind of want to do a bit more work on. Some colleges are obviously more have more developed systems of keeping in contact and tracking outcomes than others. Mmm. But, but I mean I suppose you can't expect you know that's not really a role the college you know have or is a kind of a sort of an explicit part of their job so you know. So you know the main function I suppose is to get people through and a good outcome and so on and then mmm obviously Springboard being so focused it's something we've asked for but I mean I'm not sure you know how, what colleges will be able to report to us like 1 year on for example. You know

Q There's a stronger emphasis on work placements this year as part of the scheme. Have you seen a greater success rate from those that completed a work placement going on to gain employment?

A: Yeah. No definitely I mean and all the research confirms that. So, now we have to, one of the things we want to look at is mmm and we haven't, like we've done it kind of almost you know as part of the process, we're sort of looking at how many who did work placements got jobs in comparison to those who didn't do work placements. So we're looking at how we might try and build that in to surveys and to reviews and so on. Like obviously we have that information say and outcomes-so we're gonna do a bit more work on that but certainly in terms of the, the kind of the feedback we got so far mmm and even the individual feedback where people have actually written and said I did a placement and now I've got a job. Like

you know that's featuring in a lot of the positive feedback we're getting. You know that there was the course and the placement and the 2 combined. Emyou know got people back to work.

Q Do you see any sign of extra support for people going on to work placement to relieve the financial burden on them in terms of travel or childcare?

A: Well, there, like as you know there's, there isn't anything there at the moment. And I suppose in the environment we're in you know part of the, like you know, there's been at this stage nearly 60 million has been invested in you know, this is the third year you know close to which is kind of a lot, the scope or the money available to sort of build on kind of additional supports while it's recognised I don't know how realistic it is. You know. Now what we are looking at and talking to social protection about is building better links between say Springboard and Job Bridge. So and as you know job bridge is an extra €50 per week for people. And now 1 of the things we think we need to do is like for the moment job education, job bridge internships are 6 months or 9 months so we're we're in discussions about going with them about maybe including an option of a 3 month placement 'cos a lot of springboard placements are that. People have previous history of employment so 3 months tends to be in a lot of the courses you know a lot of springboard courses would have that. So if we were, if we did, were able to do that, that would be something. It would be some, you know so people would have their income support plus the €50 per week. So it's not I mean, when you think about child care costs and you know travel and that it's not a lot but it's something. So that's really the you know probably I, I mean obviously it's not, it's not the HEA's decision but mmm and we certainly you know we've flagged the issue about costs you know for people on placement but it's just, with where we are financially in the country I just don't know you know, I don't know if there's any scope you know like in the social protection budget or the HEA or the Department of Education skills budget to look at that really

Q A lot has been done since the roll out in 2011 to increase awareness of the scheme. Are you satisfied with the level of awareness of the scheme this year or what more could be done?

A: Ahhh. I'm not, I'm not sure. Em-like you know, on the one hand and I know certainly one of the meeting you know certainly the conservative feedback I know the table I was at you know people were saying Oh everybody knows about springboard now you know, yeah there's no problem with awareness. But I'm not sure. Like you know and, and like the third, and certainly we've experienced it this year you know because springboard isn't new any more and because it's sort of you know it's all good news it's been harder to kind of get mmm you know to get the media attention on it, mmm than it has been in previous years. Mmm and which is fine as long as we don't -you know as long as we don't need to do it. So I'm a bit like I kind of do get a bit nervous from time to time and kind of go Oh God like, are we, like you know and I suppose that's where we've had, like we've had the planning meeting back in April, you were there you know on the marketing side and you know promotion and then we had the follow up. Em- and we're sort of trying to drive like try and get everybody working together for the road shows and for the August campaign and that 'cos obviously we've got 6,000 places available, you know we want to fill them. You know and just 'cos there's 3 there's still 300,000 people out there you know so like you know mmm making sure that the people do know and have really thought about it as an option

Q From your statistical information is seems the application process is a more thoughtful, or thought invoked process now.

A: Yeah, yeah. That's true I mean and you'd have a better feel for that now than we would you know in terms of who you're dealing with and so on but certainly that feedback from the application so far you know would indicate you know that that you know people do seem to be more clued in and so on. Again we don't have any hard evidence on this but I'm not sure that we've you know the opportunity say from springboard and so on are being promoted enough through social protection. You know 'cos obviously that's a key interface. You know, so, I mean again the other day like there was fantastic stories of you know local social protection offices who are really like doing huge amount and very engaged but I'm not sure is that a comprehensive picture. Yeah so it's it's, you know, like I mean I suppose our big thing is and be a big indicator is you know how are we doing by the end of August mid-September. You know are all the places filled and you know, how are things going and you know so, I mean, yeah, I mean you know and I don't know what you thought at the meeting the other day but certainly there was a sense of kind of like well you know so far so good but we've got a good bit to go ye. Em-

Q What are you doing to raise awareness of the scheme?

A: Yeah Em-we've had like the, the Em-, one of the I mean this, and this is maybe where -we suffer a little bit from lack of resources certainly in here. Em- like there would be a lot of scope to do a lot more on the employer's side if we were able to. And like I suppose we're always very aware as well like it wouldn't be our area of expertise you know obviously we've been talking about education about springboard courses and so on, Em-, we've done quite a bit of interaction with chambers of commerce and with CITD and so on and any time we've done those sessions they've been really positive. And great engagement from employers. But a lot of feedback is jeepers, I never heard about this or I never knew about this or I heard about it and I didn't understand, now I know I'm going off to find some Springboard graduates straight away you know. You know which is brilliant like 'cos it's, you know they're endorsing the whole idea but again to what extent employers around the country are aware, now obviously we pushed this year the connections between colleges and employers. And like probably that's the best way in a way of getting the awareness out there rather than anything a small team in here can do. Like we can do a bit but really I mean NCI has a huge amount of contacts, DIT does, UCD, IT3, you know Dundalk and so on and maybe that's -that's the way. Yeah, you know it's probably the most feasible. And also maybe the most meaningful because the local, a local, you know a college in a particular area working with particular industry reps or, you know areas of industry can really kind of talk with the most knowledge about their courses and their graduates. You know so, but again and it's hard, again it's really hard to measure these things. Maybe what we need to think about doing actually is an employer's survey or something. You know like we haven't, we've, that's been, it was done for ICT skills but we haven't done it for springboard so maybe that's something we should look at to try and get a handle on mmm what's the level of awareness, you know.

Q You'd imagine if the circle was complete and industry were inputting into the programme that they'd like to see the graduates coming out of it to them in work-placements.

A: Yeah, yeah absolutely, you know. Mmm you know and like when we talk to IBEC when you talk to IDA, Enterprise Ireland, Small Firm Association it's, now all the representative agencies and sort of just a few of them but, like again they're all very positive, very supportive, mmm, but you know I suppose it's hard again just and this was saying like you know they're promoting it with the members and so on and just to what extent it's really kind of gaining traction at this stage is you know. Like it'd be lovely I mean, the, you know, the figures again going back to the 40% with a job within 6 months. Mmm it would be great to see that figure going up. And I think again that would be a really good indicator of engagement by employers. You know if that got up to, let's say we got up to 60% within 6 months. More, you know, it would be super. You know, so, so that's, it'd be, you know maybe we should start kind of you know that, maybe that should be our goal mmm, but you know it's talking- hard to put a figure on it, 'cos it's all so like it's all so dependent on jobs available. Graduates coming through, where they're living you know all of those things. Like it's quite complex. You know, but, at the same time that's what, that's the bottom line that's looked at.

Q The Career bridge module covers topics such as networking, job searching and skills and interests as well as the typical CV & interview preparation elements. How important do you think these soft skills and tools are to the participants?

A: Yeah, yeah. Well I mean again we were getting really strong feedback about, well we were getting it from a few different angles, you know the, the feedback, the sort of feedback we got from participants was, a lot of it was saying like where it was available they found it incredibly useful and like it really you know it was almost like the final hurdle you know because people had lost confidence because a lot of people had maybe hadn't been actually in the jobs market for so long you know maybe 10 or 15 years working or whatever it was, so, hugely important and then we were also getting feedback from say you know, we've done say work with Sigmar Recruitment they've been kind of working with us on a pro bono basis over the last few years. And they would even talk in a general sense about you know the fact that so many candidates that they see, springboard or not springboard let themselves down when it comes to their CV's, their selfpresentation, their, you know all of that, so we knew that it was kind of a really important dimension of the whole return to work process. So that's why we made it kind of a, we wanted to see it as part of every programme. You know, now it will be interesting to see what feedback we get because we will be getting that again we've, we put out the survey you know, like, we're putting out the survey just of you know say the new graduates and then obviously as it moves on then for you know for this year what'll happen, you know say October November when we survey the 2013 people coming in how they are finding it, you know. It really worked for people's confidence and for. Yeah, yeah, no 'cos it's like the final polish isn't it? Like you know and that sort of sense being able to translate everything you know, everything you're bringing to, you know sure we could all do with it. You know, we could all do with it!

Q What more can the colleges do to support the initiatives do you think?

A: Em- It's all, you know I suppose there's, you know every, like we've got 38 colleges this year, we had the same number you know we've had more or less the same number every year and like all colleges are different you know in terms of how they, you know I mean really I suppose it's, it's, like we would see the colleges are absolutely key partners in this whole project, you know. Mm-and make it, like really making it all happen, so, like, I think overall I mean, I think we're really like, as I said earlier the engagement by colleges with this whole initiative has been fantastic. And you know if people really bought in and you know have understood what we're about you know it's a very focused programme, it's about employment mmm and you know like we've had that formative element of the valuations and trying to feedback you know, you know the fact that you know the needs of employers are so important, you know all of those things and building on those. So I mean I think it's really, it's to continue the engagement and to mmm you know continue the very good I think that sense, we have a sense of a very good relationship, you know with the colleges and sort of, you know just to keep building on that and to keep, we're all focused on the same goal which is, you know, ideally that every graduate that comes out is back in employment. You know and we kinda all keep working towards that. You know but I mean, I think the whole thing like, my sense of it anyway is you know it's been very positive and you know an example really of how you know things can work extremely well and you know the really valuable offering that Higher Education can make to people is really kind of you can see it's tangible you know. Like a lot of time with working here now, you're not, obviously you're in the college so you see people more, but a lot of time we wouldn't have contact - with individuals but over the last 3 years we've had a huge amount of contact whether it's queries, feedback, you know and you really get a sense of like just overall how valuable Higher Education is and how much a difference it makes to people's lives. And then secondly just how right now it, you know it's just, you know it's just got that, you

know it's basically people are saying if it wasn't for Springboard, you know, like we've got a brilliant testimonial last week where this guy basically said he was in, he lost his job, he did a course in medical devices, you know, got a job he has since got a promotion and he said if it hadn't been for Springboard he would have had to emigrate without his family, 3 children and like instead he's at home, he's doing really well and he's just like- life changing moment. Yeah and like you sort of look at that and you go God, okay even if somebody won. But the fact that we know it's not just one person there's loads, you know so it's brilliant, you know. Yeah so it's very, it's great. That's what it's all about really.

Q What do you see for the future of the initiative?

A: Well I mean I suppose the ideal situation is that we end up you know the employment crisis is solved and there isn't a need you know for, for the likes of Springboard or ICT is as well obviously meeting the broader skills need as well as unemployment but I mean I would say like we're quite a while away from that yet and certainly in, I think you were at the launch in the in government buildings, the signal from the Minister seemed to be like that we probably, you know they're will probably be another year maybe 2 or, you know of springboard required. You know so, - but I mean it's always a bit you know how did it go this year, how are we doing, you know there's always that bit of kind of review and so on that needed it. So I would say, I would say that slightly that we'll have you know we'll have, we'd have another Springboard 2014 maybe 2015.

Q Do you think that it will remain just a Government funded initiative or do you see scope for employers to contribute?

A: I hadn't thought about it. But I mean you know you're right. Emyou know I think that maybe that's something we should definitely look at. You know see, you know if there, you know, is there an appetite or an interest or, well I mean there'd have to be obviously a bottom line for employers you know that has to be- but I mean I think you know that would be probably if it happened a really good thing because then it would be a buy-in. You know an investment and then people wanting to see return and you know, so-you know the level of engagement would go up so, yeah, maybe that's something we should we should be and well you know well just pass for the Department of Education skills to be looking at. Mmm-And maybe through the expert group raising it. I don't know if that's the right form but mmm, yeah, I mean I think it's certainly something we should you know.

Q Do you have any stats on the amount of people that converted into roles and ICT?

A Yeah we do, we do, and I mean the, and we can we can we're going to be doing actually a bit of more detailed analysis on ICT specifically. So we can you know, we should be able to send that on to you. You know just add in like, say by course, you know have, you know, what were the employment outcomes by ICT courses and at different levels -in the country as in by course and at different levels.

Some people have returned to their original careers after completing. But I mean arguably and these are the intangibles like that particular person say, you know, he you know, it was on CV he had done a Springboard course, he had done extremely well, the employer who eventually took him on saw that. Also he had been kind of engaged and you know motivated and so on-He'd done his job readiness, his Career Bridge. So all those things potentially added up you know to him being back in employment. The fact that he didn't end up back in, he didn't end up back in- he didn't end up in a software job, you know, so maybe, maybe so what? Yeah, you know that it was the, it was the whole of the experience and the achievement rather than the specific course.

'Cos again we got that feedback from employers I mean it makes, it's just elementary, it makes sense you know if you're looking at a CV and you can

see that somebody has been doing something you know, has actually been pro-active in their job search as opposed to 2 years out of work or whatever you know and you know without anything to sort of show of what they've been doing for 2 years. No 'cos mmm like and that's like you saw the figures say from so far 40% of graduates end up in ICT jobs but we know that like a lot less who've graduated from ICT jobs are in, ICT courses are in ICT jobs so I would guess that maybe that -that outcome of like doing a course in an ICT area and then maybe getting a different job might be, quite widespread. You know, so, it'd be interesting to get a bit more on that. When you start to delve in there's just so much, you get lost in it.

7.3 Appendix C – Forfás

Q How likely are we to achieve Minister Burton's aspiration that Ireland becomes a hub for ICT graduates by 2018?

A: The Government launched the ICT Action Plan 2012 around 16 month ago. This followed on from research work undertaken by the Expert Group on Future Skills Needs with ICT enterprises, you can take a look at it on the Expert Group of Future Skills Needs (EGFSN) website. The ICT Action Plan 2012 contained several main actions to increase the quantity and quality of ICT graduates. This included the doubling of the number of ICT NFQ Level 8 graduates by 2018. The new ICT conversion programme was introduced and aimed at people who already had an NFQ Level 8 degree in a cognate subject such as unemployed civil engineers, quantity surveyors and the likes, who could undertake a one year specifically designed ICT conversion programme on a free fee basis. This programme was designed in collaboration between education and enterprise and also includes a 3 to 6 month work experience opportunity placement with those enterprises that indicated their support for each individual course. This work experience placement is an essential feature of successful programme provision outcomes. A third iteration of this programme was announced by the HEA in December 2012.

Q What more can be done?

A: The ICT Action Plan 2012 includes an action to reduce the level of drop outs from ICT programmes which was relatively higher than other courses, especially at the end of the first year. The HEA had undertaken research work on the level of drop outs and this identified that the level of maths proficiency was a main determinant in the level of ICT drop outs. The aim is to look at successful maths supports initiatives across third level institutions to see what could be successfully mainstreamed. In relation to this there has been the decision to introduce bonus points for students taking Leaving Cert higher Level maths paper, which the EGFSN had recommended in its 2008 report on higher Level ICT skills needs in the ICT

sector. This initiative has resulted in a significant increase in the numbers of students taking the Leaving Cert higher level maths paper, and an increased level of maths proficiency of those enrolling on ICT programmes. Initial results are that drop our rates on ICT from the HEA programmes have improved.

Q How does Forfás fulfil its objective to build world leading education and training to sustain and build Ireland's prosperity?

A: There is a goal to ensure the improved alignment of ICT programmes to the needs of enterprises. EGFSN research had indicated the need for all programmes to contain the core ICT / engineering skills necessary with any specialisms required being provided on the third / fourth year or through post graduate education provision. The Higher Education Authority have established a Foresight Group, comprising education bodies and enterprises, whose aim is to improve the alignment of programme provision.

Another main goal of the ICT action Plan is to increase the number of female ICT students which is currently running at around 20%. Although a similar figure to other countries it is clear that female participation is one significant potential area of potential recruitment. A main horizontal issue is the need to promote ICT careers to students and their parents and to better communicate the interesting and rewarding careers available.

In relation to the numbers taking NFQ Level 8 ICT programmes, the numbers fell significantly following on from the dot com bubble crisis of 2001/02 up until 2009, and have increased each year since then - with a notable increase in the 2012 academic year. This will result in progressive increased ICT level 8 output given the average 4 year duration of programmes.

As well as the domestic output, inward migration has played an important role in the supply of ICT skills required by enterprise. There are several large ICT companies which have their European headquarters based here, and who would see their potential labour market on a wider European wide basis. Such inward migration is also important for innovation and the cross fertilisation of ideas. The European Public Employment Placement system (EURES) which is hosted by the European Commission is a potential mechanism to be better utilised in this regard. The Department of Enterprise, Jobs and Innovation is also responsible for the issuing of work permits including for ICT professions.

There is a shortage of high level ICT skills globally with countries competing with each other for such skills. In this regard there is an increasing global flow of ICT talent between counties. It is also essential for companies and individuals to invest in their continuing professional development, as ICT technologies are continually changing, and for companies to introduce strategies to enhance the retention of their ICT talent.

Q How did we not anticipate the skills shortage in the ICT sector?

A: The gap between the demand and supply of high level ICT skills was foreseen in the 2008 EGFSN report on high level ICT skills which can be viewed in the EGFSN website under publications, and a series of recommendations were made in that report to address it. The EGFSN are currently completing a study in assessing the demand for ICT skills up to 2018. There are no details yet of any publication date.

7.4 Appendix D – Vice Dean of School of Computing

Q What challenges have you come across at School level in dealing with these programmes?

A: Em- I suppose from the initial part the challenge was... our first challenge was really to create the programmes. I think initially we got a team together and they created quite a large number of programmes that addressed the requirements of the springboard em- application, and particular areas that they were looking for. Like web development, software development and then later on data analytics. So I think the first time we did it they seemed really motivated and they developed maybe 6 or 7 programmes? Very fast. And then we got funding for the em- primarily web technology got most of the funding. I think as it progressed I think by the third funding call it seemed to get a little bit difficult to motivate people to put together the proposals. There wasn't so much development, I think it was probably because the development was already done, that it was if you just come back and re-check the development. It wasn't as exciting as it had initially been I suppose or there was no- to cause them to have to input, it was just a ticking the box kind of thing or re-checking? I think they also felt other pressures and there was a lot of other pressures within their normal job as well and it was to try and find time, it really was to try and find time to do all these updates along with their own normal job. But any release kind of happens, I think last year. And then having said that the last funding. proposal instead of one person really involved in the funding proposals there was a group, all the course directors relating to their programmes to the funding proposals so they seemed to be motivated and writing those as well. And the result of that is that we got even more money and more funding this year. And now we have a good cohort of people that are able to handle the funding proposals and that's quite good.

Q What are the advantages and disadvantages of running these courses for a Springboard cohort for the first time out?

A: So of the challenge around that I think the biggest challenge was the recruitment that we, we ran it here and off campus at the same time so we had to recruit faculty. So that was a big challenge. The challenge was actually trying to get quality faculty and I think it nearly was apply for a job and you got it. It was nearly 1 to 1, and the quality would be very varied and because of that, it really, we ended up running I think with one full-time course and two part-time courses. So we really had to keep an eye on all the issues and in particular they were putting together new course material. So you had faculty that hadn't, some faculty may not have any lecturing experience, they were trying to put together course material that they wouldn't have any experience of doing as well. And that had to be reviewed and ahh, it was definitely a challenge the first time around

Q So you really had different issues with different groups then depending on who they had and where they were studying?

A: Yeah. And then you had, yeah, you had issues with the students on top of all that. I think the students were more or less saying that the world had to, they were in a, they had a bad experience like they'd been let go from work and they felt then that they were in a college and they were gonna take it out on, because one person actually remarked that they were gonna take it out on the college. So you'd a mix, you'd a mix, a mixed bag really of emotions, there was a lot of emotions, emotions were high, like marriages were breaking up, people were losing their jobs and things like that. And then on the other side of it people, some students saw it as an opportunity. That if they did really well on this course they'd have a good opportunity to get into ICT was converted to higher, the higher diplomas were converted in courses. From non-technical areas into ICT. And that in turn caused its own set of problems that the, they were working fairly hard but they mightn't be getting the results they wanted. So then they mmm there was pressure there because they, they didn't want to submit projects unless it was perfected so

they'd get a first class honours and they'd be sure, that would ensure they'd get a job. But then 'cos they weren't at that level they were looking for extensions and they were raising issues to get extensions, so that put a lot of strain on resources as well.

Q What extra resources did you have to put in place?

A: We had to put in place the support tutor. And they put in quite a lot of extra hours to help with particularly with technical areas and probably the more difficult ones were service site programme on the Higher Diploma and web technologies. So I think in general there was probably two hours of support workshops a week put on to help with that much and maybe two hours with clients. And then in addition I think sometimes they may have been 1 to 1, but very rarely and it's not encouraged. In fact I think we'll probably just move away from that altogether 'cos it creates its own set of problems and we just don't have the resources to do 1 to 1.

Q How do you deal with various levels of education attainment and engagement in the class? How easy is it to re-train a professional into an ICT role?

A: Eh, it varies, and again like I guess our experience has reflected that. With the entry requirements people coming from technical areas were able to, to mmm, they were able for the course and they seemed to do quite well but they had to put in a lot of work. People from arts would have, wouldn't have, the other extreme you have people in arts that wouldn't have had the problem solving skills that technical people would have. And they found it very difficult. The disciplines vary like, if it's a technical discipline they tend to teach problem solving skills and that's what you really need for computer science.

Q How did people that came through the College's RPEL system get on?

A: We saw no difference between RPEL and ones that came on the course. I think in one class it's 50:50 in terms of the marks. Or in one, in

another class it's 49 versus 51 % in the differences between them so So there's real, there's no difference.

Q How do the faculty stay up to date with all the latest technologies? Do you know what the next thing is coming and how do they stay up to date with what industry want?

A: Em- well we, we have, we take in, we do the annual monitoring reports- and from that we get feedback from the students on what technologies are and we get feedback from the faculty what the next person of the technologies are and mmm and generally each lecturer, each lecturer is an expert in their area anyway. For example with Server-side Gorman emthere was actually coding in the projects and industry on Ruby on Rails and any time a new version of Ruby on Rails came out he updated the course material and every year we also submit the IT requirements so he was always updating the- the technologies for the IT requirements for the lads. So we had to do it every year on an on-going basis. Now there was, there was one issue em- ah- I think it was really around multi- media where you have one technology to do Adobe and another technology to do with HTML5 and I know some students, a lot of students were indicating they wanted to move to the newer technologies but the reality is that most of industry was still using Adobe and the older products. So we didn't actually make that transition until it became maybe 50:50 that it became more 50% HTML5 and 50% Adobe. Then we made the change and that change happened last year. HTML5 wasn't really proved standard but everybody was starting to adopt it.

Q What are the industry links and the collaborative process that factor into the programmes?

A: Yes so the- I suppose, in the beginning the industry links are related to the faculty, we normally hire faculty with industry experience and they are currently. So that's one aspect. The other aspect is what we do write the funding proposals we engage with industry. To get, to find out their feedback on the technologies and if they've taken students trying to gather their feedback in relation to how their progressing and particularly in the funding proposals where there's a work placement we have the, well we have the links with industry there, and, so we're constantly trying to get feedback on the programmes through that as well. And also we were looking to see if they would mmm, sponsor or, the letter, to have an intent to take a work placement student. And that would be all gathered before we'd submit the funding proposals.

Q How regular is your contact with industry in relation to the programmes? So say the initial set-up and then how often would you consult or collaborate with them?

A: Em- I suppose initially with the fund proposal and then the next step would be really around when we're trying to do the work placements. So there's a lot of work there seeing if they want to take these students. And then after that it would be around... they don't really do the visits for these work placements.

Q Is there an impact at the moment due to the introduction of work placements on these programmes in your department?

A: At the moment the faculty don't visit them. I think the big, the big impact would be to the FÁS certain web development. That they are- they're not missing going on work placement, the idea is that they'll get a project, they'll apply for a project from the voluntary organisations, where they'll develop maybe a web site for a charity. That would be done through the Career Bridge, but then when they go into the work placement, the work placement is integrated with the project. So the work placement is effectively, if they get, if they apply for that and they get that project they can then complete that work in the college, with a lecturer, we'll assign a lecturer to it and can complete that work under the guise of the project. So it's equivalent to the work placement, and that will be supervised or by an academic, and if they don't get, if they don't, if they're not successful in getting a project they'll be just assigned one by the academic. It'd probably be too much of a drain on resources if you had to follow up on each student that was out on work placement with ICT skills and springboard. I think in a way it would be good to do it to keep the link going with industry as well.

Q What do you see in the future of these schemes?

A: As soon as they have enough ICT people the funding will end.

Q Do you envisage a change to the finding model? Do you see industry starting to partially fund these programmes?

Well I think with the skillsnet you know Ericson's A: Yeah. collaborated on a MSE and the, I think what they do is they do fund the students on that and then give them employment afterwards. So that's a new trend that started maybe 2 years ago, 2-3 years ago. I think maybe the most would be probably with industry collaborating it's more on the research part where they'll fund that or, I'm not so sure if they would fund people that were on courses. Not the Higher Diplomas anyway. 'Cos I think the Higher Diplomas won't last. They will, but the problem is now that the primary Degrees are taken on so many students that Em- maybe 3-4 years ago you'd only have 20 people graduating but now you're getting 100 like out of our college we're getting now up to 100 plus graduating in computing. The pipeline is-. And it's the same for all the other colleges they're pumping out graduates now in ICT, so there'll be less need for conversion courses. At some stage in the near future it's gonna end.

7.5 Appendix E – Careers Officer and Workplacement Officer

Q What service did you offer Springboard students?

WPO: Ok, with the Springboard students, we provide the 13 week career bridge module, and then we provide a tailor made work placement service for each student. We meet them individually, on a one on one basis and discuss their career and, cause they've all had pervious careers and discuss a strategy for them individually. Then get them, ideally, a job, the work-placement is second best, ideally it's to get them a graduate job, a paid job out of the course. But because the course are only an academic year the feedback from industry is that they're not always necessarily ready to get into a graduate role so that's where they work-placement comes into place. The service is really to get them a job and where it's not possible to get, to get them a work-placement which invariably leads to paid employment. The work-placements are anywhere from 3 to 6 months it depends on the company.

Q Are you placing many people in real jobs, as opposed to workplacements through your own contacts in the Careers office?

CO: Not really.it be honest it's mainly been business development. The kind of jobs we get called in are HR jobs – that's where our brand is recognised.

WPO: I think there are some other places like IADT in Dun Laoghaire, who are in the design space, get the design jobs and the digital skills academy, and the digital hub would have...so we're not, we're known as a HR college. But I think we're breaking into that space, with every good student that goes out and does a good job, that has a great ripple effect onbut it's business development. It would be rare to get jobs called in.

CO: Very Little comes from faculty. It would be interesting to see how many, very very few came, mainly it's just us getting in touch; sending out the CV book. Then the 13 week class, that covers career planning, skills awareness, the market, the hidden jobs market.

WPO: Ye, because we find you can't just give the whole CV and interview tips, these people have been HR managers, architects, supply chain/logistics, maths teachers, they know how to write a CV, they know the correct grammar, the font to use, so you can't, if you're going to go in with that you're giving them nothing. So you do spend time on that but you would assume by the time they get to that they have their CV so you're really talking them around how the job markets changed since they were last on the job market so what I found last year, the biggest, the greatest service we provide, in the most feedback I got from the students is "I used to look for jobs on a Friday evening, get the jobs section in the paper, apply for jobs", they didn't know about reversing engineering roles, hearing about jobs, hearing about companies, speak to your friends, networking, being on linkedin, word of mouth and that 80% of the jobs aren't even visible. They didn't realise that now companies don't have the budget to hire, the lack of awareness that they don't advertise jobs as they don't want to be inundated with irrelevant CV's. They don't have a HR team to recourse...get back to everybody. You put it out to your network, like here, if you want to recruit somebody, our first instinct isn't to go to HR, you go to your network. So that's the biggest service we provide to these students, because their age profile, they don't really realise this, they never had to look for a job that way before, so that's the purpose.

We also get guest speakers in and explain to them the hidden jobs market, forcing them to realise that its not just real, because a lot of them say to me "oh, like that doesn't work" or "she as really lucky to get that job" and I'm like well if you break it down they weren't lucky, They did loads of small things that affect that change and I think that when they see thatcause it's easy to get up every morning at 90'clock and go on to the computer for two hours and say I'm looking for a job and no one is getting back to me. I'm looking for a job and they're like I'm looking for a job all day. It's hard cause that's like saying you're wasting your time and your wife is looking at you doing that and you're say "I'm really looking for work, but the harder thing to do is step away from that, put yourself out that and like maybe say to

someone that you worked with 5 years ago, "Hey listen I was made redundant and I'm back in doing this course do you know of anyone or would you know of anyone who might be looking...". And it's hard, the fear of rejection, but if you don't do that you're kind of at nothing. That's a problem as I think a lot of them have been made redundant, and I know myself from having been made redundant, some people say to you..., you do feel, there is a stigma attached to redundancy. Always was a stigma, when I worked in recruitment, "we don't want redundant people, the company would say to us. If you don't acknowledge to them that there is a stigma attached around redundancy they won't buy into you so you have to just say it.

Q Do you think that careerbridge is giving them those tools to be confident and put themselves out there?

WPO: The first thing is maybe they are more aware of it cause sometimes they genuinely don't know why people aren't getting back to them. The genuinely don't know it. Then you're saying "look, the world is kind of a cruel place and everyone is just looking out for themselves". That's it no one owes you anything, everyone is just trying tread water. You're not going to unravel in 13 weeks, issues that they have at home cause obviously it affects so many aspects of their lives, you're making them aware of it and you're giving them the examples of the people that things have worked out for an saying look there was someone in the same position as them and it worked out for them. And then they have to get the confidence themselves, because we're not counsellors or like psychiatrists, you know, but we can definitely give them hard truth that no one's had to tell them.

CO: The idea is that at the end of the 13 weeks they should have skills to be able to do everything, so then it's just a question of practicing it. But certainly they should know how to look for job, how to do a proper interview, how to do a CV, how to network, where to network, how to set up an account on linkedin.

Q Do you see a difference between providing the service to these students over those of the average mature learners?

WPO: I would feel that they have a little bit more a chip on their shoulder. Something bad has happened. They don't want to be back in college.

CO: There is a difference, say for example in the Web Technologies group there was a paid group and Springboard group mixed together and there was very bad feeling amongst the two groups. The paid group felt the other group weren't as motivated, there marks weren't as high and yet they were getting a silver service from Kate, and it wasn't fair. There was actually quite a lot of that.

WPO: So I've met about 5 people from the paid group now that have asked for some help with their ...and they ask me why to the Springboard get the work-placements, when I have to go and get up at 6 in the morning, go and do my regular job, and go back at night an go to college. In one way they are being penalised for not being unemployed, they had to pay for the course but looks that's just the way it is. I understand, it's a scheme to get unemployed people back to work , there will always be those with exceptions to it.

CO: I think the other thing is that maybe the way it's marketed they don't necessarily think they have to take control themselves and I think say the way that it's marketed as "Free places for the unemployed" there's no real call to action in that. If you listen to the IFSI ad on the radio at the moment, on newstalk, they have career's start too, it's brilliant. "Are you currently unemployed and looking to upskill into the workforce, do this, this and this and be in with a *chance* of a work-placement , so it's not all...where as I think that the likes of the Springboard crew, it's all been handed to them on a plate, there's no expectation on them, its "you will get me a work-placement" and "you tell me where the jobs are" and "you tell me what to do" and I'll just go along. The element of control is gone, they're lost the ability to control it.

WPO: I don't have to get a job, if you want to of the course then you should have to be willing to make the changes yourself. There is only so much you can do on career bridge.

CO: There is a sense of entitlement and a few of them would have said to Kate that "I'm paying your wages"

WPO: Like obviously we're paying for you to lecture us. The know themselves, they can work it out, a lot of them are accountants, this is how much you are getting as a college for me being here and they can work out how many are in the class and multiply. They say we pay for you, a bit of Helen, but essentially, you're getting all this money. They will throw it right back at you, so I have spoken to people about this years and being stronger from the start as there is an element of they say jump and we say how high? Because they are being surveyed the balance of power totally drifted to them this year so that's the orientations biggest difference between other students and them. It should be that they're grateful, its actually the other way around. And I think that's because there's no bite, some students said to me there were going to Australia for the Summer, going to New York for a few weeks and I'm thinking is there no mechanism at government level that this is fed back to Springboard who are administering this on behalf of the Department of Education who feed it back to the Department of Social Protection. We've just given them essentially a free €5,500 programme and they are now not availing of the opportunities, you know that's to me...

CO: Yes there should be a penalty say for those that don't engage. There should be a feedback mechanism. If you try and don't get one, but if you don't want one because you have to get two buses, or you only want to work in Cavan, or you've no intention of working, that can't be correct. There should be a cap too on the number of courses people are allowed to do. There are some people that just do loads of courses, and it's just something to keep busy, it's a mental health thing where they just want to get out of the house, that's grand but maybe it's not the idea of Springboard.

Q What are the main challenges that you meet dealing with Springboard students?

CO: Self-motivation. Mental health issues. A lot of them are unemployed because of the market, but maybe also because of mental health issues. Would that be fair?

WPO: That would be fair. The reason they are unemployed is not because of the skills shortage, they are unemployed for other reasons.

CO: Maybe they got made unemployed and as a result they have had an episode where it does affect you. But there is definitely, like a good percentage of them would be in need of a counsellor, but there isn't money in our budget for a counsellor.

WPO: I think if you're doing something of this volume with this many people and many of them long term unemployed, like when I go into my one-on-one's individually with them, you just wouldn't be shocked anymore. Sometimes your just listening, a lot of the time you are giving career advice you are just actually letting them talk it out, letting them just speak. "I feel like I'm under a lot of pressure at home & family life & children", they're parents and the feel like under a massive pressure and they've got extremely low self-esteem, that manifests itself as anger and I think that why they're angry then with the college. I remember one of them actually saying, you know, life has been really crap to me and now it's my turn to be crap to ye. This is, I have, we're like their avenue, you know we're like that place where they can be angry. That's why they get disproportionally angry at classes being cancelled or people not being around because they just ... that because of their own levels of mental health. They suffer from self-esteem and that's the problem, you are dealing with people that are ticking time bombs. And it's the ones that are quiet and go about it and they come in and they take what you say and the tell you "Kate I followed up with those 10 companies and that name and I actually have a job now, thanks a million". So you're like, brilliant Barry, talk to you later, you know they go off silently and quietly, it's brilliant. The ones then that you're chasing constantly, or you know, they've got bigger problems then the course.

CO: Maybe expectations, like you know, it isn't always easy to get a job and a work-placement and I guess sometimes these people come in and they think they are going to be guaranteed one and that can be hard. Like some people in a particular class (pensions) we like I don't want to be involved, "you just tell me where to go, I'm not going to be interviewed for any job". I don't think they have an understanding.

WPO: Hopefully we're remedied that this year. We've had a change of language around the marketing and I think everyone that is at admission stage now recognises that it's not a guaranteed outcome. That's an issue we had last year, "I chose NCI because you had a work-placement, I would have just gone somewhere else if I'd have known you didn't have one" so by the time they got the career bridge class in 2^{nd} semester they were nearly like, they were expecting us to say – you go to Bank of Ireland, you go to AIB. So I'm hoping we're remedied that.

CO: And then I think the other challenge we have is getting industry involvement

WPO: The feedback from industry is, and this isn't just an NCI thing, this is a Springboard thing, can you actually achieve that much in a one year course. Are they actually that ready?

CO: And then the last thing I think is the employers. The academics perhaps have not engaged with industry, as a result they don't know what industry want and as a result I think they have taken in some of the wrong people. So maybe the entry requirements don't reflect what's actually needed to get a job in that market.

Q How are employers engaging with the service?

CO: We do a database – Silicone Republic, It's happening here, Recruit Ireland, jobbridge, every place that an employer would be looking, I suppose

not even expressly looking for employees, but they've announced jobs. We monitor the news every day. So like the IDA jobs announcements, then we monitor things like It's happening here and all of that. We sit down every morning from 9 til 10 then based on that we target those kind of companies. And then we keep a database separately.

WPO: So like a typical e-mail from me in the morning would be like "Hi, I work in a careers office in a college, I know that you're looking for a four year plus ruby on rails developer but we don't have anyone like that but we are the only college in the country offering them, a course specialising in ruby on rails and here is a collection of students that have just finished it and are looking for work-placements, and you may not be interested now but you might want a chat. And invariably they come back cause it's not like a hard sell. Like ok, "look, maybe we'll wait til we hire the developer but ye I'd be really interested in taking an intern or someone on work-placement". So you have to send about 20 of those to probably get about 2 or 3 conversion. A lot of them might get back but they have hugely unrealistic expectations about what an intern can do. The go "oh I can't get the 4 year person so I'll shoehorn this person in". The temptation is to place them but then you know the students confidence is going to be complete shattered. They're going to go into a situation set up for a fail and you're like "they won't be able to do that". It's better to be honest from the beginning. So then that's how we get the leads developed.

CO: And then the other that we do for the students as well is that we take professional photos's for their linkedin and that and we do a CV book. So say we did a CV book for all of the classes this year and we used that to send out to employers. A meet the class one pager profile. So say the thing is you 've got undergrads – they're all the same, but for the post grad, springboard students they all have different backgrounds. It's hard to see the class as a whole so we did the CV book. So we have to think of something different for this year. Maybe something online like a online video presentation. Something different. Even if you got them to do their own website or

something. What else do we do? We do linkedin. We put up notices and say all our that linked in profiles would have links to the work placement brochures.

WPO: This helps support the calls to the employers. When you reach out to them, they may not be ready now to take someone, they might say come back to me in 4 to 5 months, the more stuff you're putting out, the more events you are going to they might say "Oh, someone mentioned that NCI were looking for people". So you're hoping that that's where we have the competitive edge over the other colleges, because of our recruitment and sales backgrounds that like, our training is that. So instinctively we do that. That's where I think our edge is.

CO: Like if there's ever a thing going on in the College with recruiters we'll always have a stand and have a presence and hand out brochures. That's really how we do it. Visibility is the main thing?

Q How could that be increased through the Springboard initiative?

WPO: I think Springboard don't really advertise what they're doing like. Loads of employers I speak to, there is confusion over what's jobbridge and Springboard. Jobbridge unfortunately

CO: That's another challenge actually, is the payment side. Cause a lot of the students want to be paid and then there was an issue, say that they take the bulk paid placement, how does that effect their dole payment if it's not through jobbridge. There still needs to be clarity over that.

WPO: The Department of Education and the Department of Social Protection are not on the same page, as we found last year. Here I am telling a student that work-placement is an integral part of your course, they get the job, they get the unpaid work-placement, they go into the Social Protection office to tell them "I'm starting an unpaid work-placement" – "You're not available for work, we're stopping your payment". Then they ring me in an unbelievable panic. The Department of Education say they can't help, this is not their mandate. Most of them are unpaid, and if they are unpaid we point out to the employer that we will support them to leave if they get a paid job while on placement. I think we have to do that, I think they shouldn't expect anyone to work for free. But in terms of Springboard, jobbridge has a negative connotation than Springboard because the people on Springboard we have probably a more niche skillset than the people on jobbridge so Springboard aren't very good...they way its advertised in distinguishing itself from jobbridge. If Springboard had a ... do you remember they invited us to a careers fair for people who finished springboard courses and what they did was they got a load of companies together and they invited loads of recent graduates from Springboard, it must have been just the first year of ...Springboard had just finished and they invited loads of careers people to come and do like a CV clinic. That was good because they said to the employers that they were organising a careers fair in DIT but it was run by Springboard and then they had companies there. Like the careers fair that we do but Springboard could that on a national basis, and it would only be open to Springboard graduates.

CO: Even they were talking about doing employer breakfasts and all of that and they were taking a tent at the Galway races. That was last year and I haven't seen what they are doing to promote these students to employers, like how can a Springboard student help you not jobbridge. There is advertising around jobbridge. Jobbridge is quite hard to get, and it entices students in for 6 to 9 months. Jobbridge has been kind enough to us I will say. But you do have to be careful with the IT roles, you can have a company that don't have an IT department and they think they will just get someone on jobbridge and they're expecting them to do everything. And there is so many of them at the momentum and everything. If they could have some sort of employer briefing and bring all of these people who were consulted into a room and invite the students to come in and talk to them.

Q How do you monitor the student while on work-placement?

CO: We are putting something in place but at the moment we just leave them. Cause it's not credit bearing but we need to do something cause I think it's not fair to send them out for three months and not even check in on them.

WPO: There are two schools of thought on it, one is like they come in here we teach them the academic part of the course, the work-placement is a value add, give them the skills and see you later. We're not being monitored on it, that's my thing. I mean we have been so interested in them and so vested in their lives we should have a follow through but when you are faced then with another class of another 50 or 60. We had just done the two groups of ICT skills last year and I would have been ringing them and asking them how they got on but then there was IFSR, there was pensions and entrepreneurship and you're kind of thinking what are my deliverables as in getting to the employer and getting the people placed. Nobody is coming back and asking me how are they getting on three months in, no one is asking me that. The academic's don't care.

CO: I do think this year what we should do is like week 6 or something we should send them a survey asking them how they are getting on? And get their input on it and at least then for us they feel like we're taken some kind of an interest and we know what they thought of it.

WPO: We've 108 undergrads out on a credit bearing work-placement and the academics need to visit them. They do weekly learning logs, monthly learning reports and the academics visit them. But it's been a battle getting the academics out on the site visits like they want to know who pays for it, it is in their job description, so for me then to come up and say can you do a few site visits for the Springboard with no nothing – no carrot or stick or whatever, there's just no way that would happen. One company took two of my students last year in web development and it's embarrassing, they're ringing me and asking me to come out, so I'm going out to them next week

and they'll take students again like. They really want us to come in to see how the lads are getting on, they're doing brilliant and they rang me you know. Like I didn't ring them, I'm sure if I rang other companies they would be like come out. But is this part of my job to go out and visit the companies?

CO: I think the problem is that people put in the work-placements not realising that it's not easy to get and then when you get it you have to mind it.

WPO: The more companies we visit we might have a better relationship with me then and will want to take more people next year. Instead of like – you were all over me until I took a student and then I never heard from you again. They student and employer is left feeling a bit empty. And when I'm struggling next year to get places and I say remember me from last year it's going to an awkward cold call. They'll be like god she didn't even check in with me to see how the students were getting on. We're looking at it, last year we were kind of fire-fighting a bit with it - got a place – tick, then I never have to think about that person again. That's not really longevity. But it's how do you justify taking that time out to do those client visits. I'm with one tomorrow up in town but do you concentrate on the ones you are going to get more placements from, like I've been out to DELL, obviously you are going to go out to the big companies. Our target market is really the small companies, the UCD's and all them get the big ones, so it's like that's a resourcing issue as well.

Q How has it affected the everyday activities of your operation? (effect on staff, levels of staff, additional supports etc)

CO: Well my job has changed. My job used to be just careers and now there's an extra three people doing work-placements and the amount of time it takes up, cause there was no procedures in place. Everytime something new comes in you have to go to management to fight to get an extra person or fight in relation to salary levels. To be honest, I would say it has taken up 50 - 60% of my year, everything else has fallen completely because of it. Like there's a lot more to it than people think.

WPO: My job wouldn't have been able to function –say if Caroline had just stuck to the letter of the law with her job like "I'm careers for full-time" there wouldn't have been any way I would have been able to do my job. And the same goes for Siobhan, her job was just undergrads but there is no way she would have placed the undergrads without my help and no way I would have done mine without her because luckily she as a good team player and we worked well as a team. Technically we're in competition with each other and that's the reality of it. She'll get a job on and I'll hear her and I'll be like - that might suit one of my students, or like I'll know this is more suited to an undergrad. Luckily, the environment is one where if I post a job and one of her students applies, I'll send their CV on, but technically you should be like - you know, that's my job. Looking after your patch. And that's the worry of expanding it and bringing on new team members is that will they have the same approach to it. If they were right you could say, this is my desk and these are my students and they could hide the jobs, we are in competition and that's the reality. If you give a work-placement co-ordinator the job to meet targets and at the end of the day they don't because they are sharing their jobs, technically their line manager could call them up on this.

CO: I thinks it like an after thought, like some said to me this morning that Springboard won't start until after January and I thought they were going on placement in January, but nobody would think to tell us any of this. And I've done my whole plan around this and they never thought to tell us. It's like we're an after thought. It's like, remember they forgot to the students in Digital marketing last year that there was career bridge.

WPO: It's seen as an administrative function, the support around workplacement, from an ego point of view I don't care about that, but from my working day needs to be seen as a level tht's similar to the academics. When I'm in a meeting, I have asked for a lot of these meetings, - can you please tell me what the timetables are – we're not consulted as careers and workplacement. It's like – they'll just deal with that when it's here. And you read this documentation and it's like you will get a job and you will get a workplacment and I suppose it effects the morale of the team, you just think, you are writing all of this and you have no idea what you are basing it on, who has said this to you and we are the ones in the coldface. We are the ones in student services in the open plan office. They come up to us and say "where are these jobs", that's the biggest frustration. I can deliver on something that I have promised, that I have researcher or I've evidence for. But when someone else is doing it and you're the one having to stand there and say it's very demoralising. My point is, are we doing this for the long haul, is Springboard going to be around for the next 1, 2, 3, 4 years? Cause if so the better we do it, the better quality, the better it is going to be for everybody. But at the moment it just kind of feels like reactionary. And that's the thing that's demoralising. But I think we're...we like the challenge of it and it's hard at times, It's frustrating. I get frustrated with the academics in the School and I don't want to be like that. I don't want to be angry in work. But sometimes you kind of can't help it. I wouldn't design a module downstairs and then just throw it on someone. Some of the associate faculty have been very good, they're out in the real world, they're working in industry. And the students I find reach to them a lot better, cause even if its something negative, the lecturer would be like - "look, we're not going to cover that but here's the book, do it yourself, - they'll kind of go - "ok, I'll do it". It's better to be spoken to in an open and honest way.

Q Tell me about the success stories you have come across

WPO: That's the ironic thing. They are the ones that you don't jump up and down about. They're the ones like...for the career bridge I have a careers report at the end of it and there was one guy last year and his was just basically about how this course had changed his life and how had been employed as an architect and he got a placement in sourcedogg and that turned into a developer job. He was just so nice and positive and I actually just have it saved on my desktop and when I do have a bad day I open it a read it. In recruitment they tell you have a picture of a Ferrari or a handbag, but it's just something that keeps you going and there are so many of those. And I think like, so many people whose lives have changed and how've converted, even if they haven't got a job straight away, but with the career bridge they say - "I didn't know what I was doing wrong" or "no one was listening to me". I feel the biggest feedback we get as a careers office is like you actually do care, you actually do mind and you are listening so like even if you can't help them, they know that we are trying our best. When you reach those that are trying and are getting the amazing jobs, and that would be the good thing about going and chasing feedback, we would hear more about those positive stories because we're actually relying on people to contact us. I met a student in M&S and he gave me a big hug and he as like so grateful and if I hadn't have bumped into him I wouldn't have known. He might or might not have e-mailed me, but I suppose the point is if we chase more of the monitoring of these placements, we'll get more of the positive stories. The 81% was phenomenal, I think we do, we are trying to do it well, that's the standard we want to work to.

CO: I think we've done well.

WPO: But unfortunately those few that were admitted that do have mental health problems, who have issues, they take up more time. And I see them deferring, withdrawing, I see them with support tutor, they need extra help. They are not just a drain on our resources and a drain on our mental health as well, but they are a drain across the college. I would love to look at the cost analysis of taking in someone that is disruptive in terms of what we have just discussed. Hopefully they'll be ok. Well like no, hopefully they won't be ok, they're just going to keep deferring...

CO: We have a good a good powerpoint showing a good slide of 10 people who have been successful. It shows were they started out and where they ended up. It's actually really good. A tiler to a web developer. It's from the software development and web technologies classes. It's quite nice cause it shows the good news. One of the guys got placed in SAP and he came from a clothing store in the city.

WPO: He actually contacted me half way through the course to say he was offer a job and how would that affect the course. He came in very bitter and very upset and didn't even want to do a placement and the next thing... when he realised that a company had shown some interest in him he as like – "oh my god I can't believe it". Loads of people got placed in SME's, that would be more our market than the top 10 companies. A lot of the start up and medium size businesses, a lot of financial services businesses.

CO: The big ones have very strict entry requirements. They go after people that fit into a certain box.

WPO: Springboard also need to be aware of this. The likes of amazon, and Microsoft, like they phoned us jobs in and on the job description was that the intern must be returning to college after the placement. And I said I had these interns but they don't go back to class but they had a way – whether they were doing it on purpose or not, that's the way they always done it. But Springboard are not advertising what they do. I explained that they don't go back to College at the end of the internship and they were like that's problematic for us as they get unrealistic expectations about being kept on. We can take a look at them, they go back to College and if we want to hire them they come back.

CO: But then if you talk to people in Enterprise Ireland and that, they will say that they get way better experience in a smaller company or an Irish startup. They are mainly placed in SME's and that's not all bad news I think.

WPO: I think with their age profile too, going into a big company, you're kind of just another number, like would it really suit them that well? We have a list of all the companies that they're working in and they would mainly be SME or start-ups, incubation centres and places like that.

7.6 Appendix F – Work-placement organisation

Q Were you aware of Springboard or ICT before the college approached you about taking interns?

A: No I wasn't aware of it per say. Is it a new scheme? I was aware of scheme's that were available through that organisation, FIT. I was aware that they had worked with a lot of unemployed people and I think there was a link with Microsoft – possibly through the software and that. But I wasn't aware of Springboard until the college got in touch with us to take students on work-placement.

Q How many students did you take on?

A: We took on 17 students in total between interns, ICT skills and Springboard students. We took so many cause we knew we could manage them remotely. They would be based down here in the College and we are based in Belfast. So the opportunity to work as remote interns was an experiment to see how that would actually work. We believe that it has worked very well. Of course it's our first time out, it started in mid-February so they've been with us now four months and most of them are coming to a close now. I suppose how we approached it was we actually interviewed the students first, we did two interviews actually with them to try to gauge where their sweet spot was, as everybody is different. You know, what they were really interested in and to gauge their levels of expertise in say software or development. So with these students that were on conversion courses, they had other skills, there was some ex-teachers, so we looked at the whole area, as they were very useful to us in terms of some work on specifications and things that we were going to do with schools in the south. They were all different in many ways and we had to really gauge their level of expertise in technology as a lot of the CV are similar and you have to try and gauge how much practical experience they had. I think that's very important for a business to gauge that and we found, we had in mind projects for them to do. So actually we had 17 different projects for them to work on so each of them had a separate area. So they also come together, we come together for group

work or group sessions on a Thursday morning and then we have one to We really operate through Skype, we use skype for one's afterwards. connection and embracing the technology and the good thing about Skype is that you can see who's online of course, who is there or at their desk or wherever they may be. You can click a button and talk to them or whatever, and exchange of messages to ask how are going etc. So in many ways with Skype you are as connected to the workforce as much as the workforce down the corridor. You know so it works well. Now I suppose it's adjustment of the students themselves because they are not physically working in the company, as in the premises, but they can actually get together and cluster and I think we made the point that we weren't going to babysit them, we would give them as much time and effort as we could but it was very much down to them to be very self-motivated, to pick up the things themselves and we set them off with project plans but they were quite loose plans if you like. We wanted to gauge their enthusiasm all that sort of thought process. So it's worked well, I think it's worked well. We would refine things obviously next year, there is always room for improvement but I think there's a model there that I think we could expand.

Q You are used to taking on students in work-placements?

A: Yes, I suppose the model of our business is has grown from almost like an apprenticeship approach, our success is sort of based on that. So a lot of the staff we have now, our core staff, have been with us for 10 years maybe. Many of them came straight from school. And there is loyalty there as well, they have a sense of purpose and a sense of where we are going, so it was on that basis that over the last number of years we have taken on students through various government schemes, some might be as short as 2 to 3 months. There is a current scheme in Northern Ireland, the YES scheme, which is the youth unemployment scheme and there are various options but the one that we have gone for is a 9 month placement. It's for 18 to 24 year olds and we have them for 9 months and the intention is to employ them after the 9 months, if they are good enough. Obviously they have to like us as well, but through the 9 months there are, we're kind of like created our own technology roadmap if you like that they actually follow and we quickly sort of judgewhen they come through the door, after we've interviewed them and all that, we get them working on a project almost like from day one and they may be creative and they may like multi-media and the likes, they may be coders or have an interest in software development and maybe it's in research or marketing there is a whole range of things that they could be interested in.

Q What type of programmes would they have come from?

A: They are straight forward unemployed people. They are raw unemployed people. The chances are...we always ask them when they got their first computer and maybe they were 7 or 8, that's the way life is now. So they have an interest. They are on the internet every day, they are on facebook, twitter, linkedin in some cases, they have an interest, I wouldn't say in writing games but certainly maybe they've been playing games. But they are certainly heavily involved in social media. Their typing skills are pretty good as well, their keyboard skills, that's all the way it is. So we explain to them, we try to understand where they want to go, again what are their strengths, depending on that they will fit into different areas. We've currently slots for 20 people for the YES scheme and the first 4 have joined us over the next couple of months we will take on the remainder. The way that worked was the job centres advertised the placement in 16 job centres and we got 60 applications.

So we worked very closely with the DEL, Department of Learning, Education and Learning, in Northern Ireland and we had an officer, a manager that worked with us. So we produced what was like a job advert and then was it, when the new job centres, and there was 60 responded. And I can switch that off in the morning. I reckon that if they left it on, you could have hundreds applying. And they're from all different background, there is some of them straight from school, over eighteen, so maybe work in different places or whatever, part time, but they are all unemployed. There are a number of the 60, I think it was about fifteen graduates from all different history backgrounds, was a Trinity graduate, actually. And they were just from all different backgrounds, multimedia, visual communications. I think one or two had computer science degrees as well. But we don't really set any expectations there, I mean we don't even look for qualifications. What we look for is the appetite, energy enthusiasm, desire to learn is important for us. Because we stress that everything you need to know about technology and software development or multi-media or whatever the area is all online, everything you need to know is online, so they just need to be signposted to different areas. And it's very much up to themselves, we help them along, but there should be no reason why they shouldn't, all the stuff in online. And it's really very much we preach that, it should be like a sponge, get out there, get as much as this knowledge as you can. And of course, before they come in we are presented to three cohorts of twenty and I suppose we explain our vision, where the company is going and explain where they might fit in, in the process and the opportunity that might come in the back end of it. So hopefully that is enthused with the actual cohort, to be interested in what we are doing and then we ask them if they were, they had to actually reply formally if you like through, with an application form, when I say an application form, it's a very loose form in many ways and for them to describe to us, whey the feel they should have the chance. So we had out of the sixty that we presented to, there was forty applied and then we have short-listed that to twenty. And I was taking them on. But bring them all in, in the one go, just bring them in and bring them all through. But the experience has been great, you get a young person, an unemployed person, you get that at the right time and you tell them where they can go and explain the opportunities, particularly technology, which is the world is their oyster, you get this right and it's the best business in the world, I always said. And there are no barriers then in many ways. I don't see any barriers presenting, I mean you don't have to have qualifications if you really push yourself, it's all about getting practical experience, I think is the key. So I say to them, imagine their CV that you have, you have got nine months experience of

doing five or six projects within a software company and you did a, b, c and d, and you have them on your e-portfolio, which is a very important thing, that's fantastic they can supplement their CV. Obviously it's in our interest to employ at the end of it, but they are not going to get all of it....so we have given a commitment to Dell that over the next five years or four years, as we looked to grow our business to 100 people that 70% of them will come from the SP. So we have given them opportunity, because we know it works. If you get someone....sorry if you get someone who wants be part of what you are doing, and they believe in you as much as you believe in them then, it works really well for you and all that will come through. And then the rest of the team all help out as well, because they have all come through it from that background. But technology is an interesting one, because as I said, software, there are no barriers at entry, I always say this to staff and young people or whatever. You should remove any victim language...it doesn't matter how old your computer is, if you have got access to the internet, that's your world, that's where it all is, you just need to know what to go and find of course. But what an opportunity, what other career where you'd see yourself where you're self-taught? I think if you teach yourself with guides, it sticks, if you have that motivation. I think if they see, I think if they know, say for example a company like ours, in four years time I could be a developer or an junior developer or whatever and that's your passport, everyone is talking about having this passport for life and having an interest in technology and having a showcase and having experience, the world is your oyster. You look down, public figures, I think in Dublin or something shortage of three, four thousand, I mean once you get past a thousand vacancies, it's crazy. So it is all about mentality, energy, enthusiasm, motivation and willingness to learn, all those...and then the soft skills as well, I think have been very important. We preach those as well. The whole idea of respect, sort of team work and everyone mucking in, making the tea, all that sort of thing. And also showing respect for our clients as well. I always say that at any point in time during the day, I could walk in with a client and so dress code is important to us. Show that respect to the client who at end of the day is paying all of our wages, is very, very important and I think that's a very important thing in it as well. Also when I think if the dress code is right, I think your mind is right for work as well. I'm not a big fan of dress down days, I never have been. My background is management consultancy it was always that, it's the way it is and just show respect for your client. Maybe I'm old fashioned, but it's something that all our staff has embraced and that's the way they are. And they are cool dudes if you like but that's the way it is, as far as I'm concerned, I don't get hung up on titles either. Again if someone comes into our company they are a consultant, I'm a consultant, they are the consultant, there is none of this ego trip with one title...and they are who they are, they are part of the business and move forward really.

Q So considering the route that the guys came through for the new case scheme and the route that our guys have come through, how do they differ?

A: Yes, I think, I think there is a bit of caution with a degree or a qualification and again because I think there is maybe an expectation that, I wouldn't say life owes people a living. But I think to one degree it is a fantastic thing to do, I did a degree myself and I mean it's fantastic, but life is changing and things are moving so fast. As I mentioned before, the end of an internet year is three months, there is four internet years in a year, the agility is important and I said earlier, where the knowledge of the world is online, it's a level playing field, let's face it. So the degree is fantastic, absolutely great idea and I would encourage people to go...if they feel that's a route. But then when you then embark on a degree, of course you have got to be aware of what your competition is, the competition for employment is going to come from all shapes and sizes, they are going to come from people who are self-motivated, got the skills and sales, got the experience under their belts and become as employable, if not more employable, than someone coming out with a degree with no experience. So if you as an employer, you have got two CV's in front of you, you got someone with no experience or

maybe some, maybe placement experience, verses someone who has got sort of three years of industrial experience, their e-portfolio is crammed with examples of the work that they have done, not just within the company, but perhaps as on a voluntary basis or something that is of interest to them. If they are interested in sport, what they have done and charity work and it's a whole personal in many ways that you are looking for as well, because is the person going to be motivated and am I going to have to spoon-feed, because there is no time. Certainly in the business that we are in, which is a small dynamic hopefully very big dynamic company going forward. We don't have the time to babysit really. So I suppose there is an attitude thing I think. But that I think is general, I think it's a general thing that when you enter university that, I want to say this right, but for me, I think it needs to be a mind-shift, that you are there for, you are there obviously to get qualification but employability from day one is for me really critical. That you don't need a person to get a degree for purpose, more likely to get a job out of research actually than industry. But I think your mind has got to be right in terms of your attitude, the university is not just here, sort of these little silly things, you got to be up, you got to be at it, you have to be self-motivated and all that sort of thing. And I think that' something that, but I think that's for degree per se. I think there needs to be almost like an induction, this is what I would do anyway, where new students can no matter what course they are on, that they are told the facts of life which is about employability from day one. And the reason why you are embarked on a certain course is because here is the options and I wouldn't say it's careers advice, but they are here for a reason and I think, what I sense is that you know the speed could be turned up a lot, if that's right, you know that could mean perhaps a lot more motivated is the wrong word, but energetic is the wrong word...Switched on. I mean up and at it, ready and a state of readiness is really what I'm saying and that should follow through for the whole three years of the degree or whatever, it's not just post the first year or whatever else, whatever it happens to be. I think as I said the internet years, sort of, there is four internet years in the year, look at what you could do at achieving three

months, if you really put your mind to it. And an out little approach, those first three months are critical, they give them the idea that, look at what the world has got to offer you, look at the technology at things, look at the sweet spots, look for what employers are looking for. Get in and get on with it and hit the ground running. And I sense that with degrees and then you get on your placement as an internship or whatever, those are two years, that's eight years. The speed of things going so fast and you can't lose a minute, I suppose is what...and I sense that that's the sort of...there is more of a relaxed attitude I suppose is really what I'm trying to chose my words carefully here. But for some, for some interns or some people, some people are up and at it, others are a bit more relaxed and you can't really be relaxed in this business, it's you know...and it's employability, is the key I think in this. From day one they understand, it's employability, why are you here, look at what you could be doing. You are here, you are going to be placed here, but it's almost like a planning. But from day one, it's almost like an induction, this is where you are going, this is your path. Life doesn't owe you a living, you might come out with a degree, but that's no guarantee you are going to get job, because the world is changing so fast, people going out there getting plenty of experience, and you could be out there, up against someone with...so you got to be on. And there is plenty of time for students I would guess outside their formal lectures to be embracing all of this, it doesn't stop lecture time, it should be really cramming, almost be ahead of the game as well. I think we can't expect the lecturers to be always knowing everything. It's just not in this game anyway, there is so much to learn. So I think it's an attitudinal thing, but I think it's something that can be addressed, well it's not just the way... I think it's just students per se, it's an attitudinal thing. But the world is changing so quickly now, with all the online, the competition is out there.

Q When you mentioned that you had them all working on different projects, what kind of projects are they working on?

A: I mean some fantastic projects, we gather a lot of data, we gather millions and millions of records of all different information that pertaining to educational process, curriculum management, mapping curriculum or the development of school plans and questionnaires and all that sort of ... millions of...so we have a need for big data analysis. And one of the projects is a big data project. And we are using SAP, SAP Hana, and it's the next big thing in big data analysis and one of the interns has done an incredible job of that, absolutely brilliant, unbelievable. We're are giving them fairly big exposure to stuff? Big time, this isn't sort of wee things. To a degree that that particular project and that particular intern, well she has that on CV...well who may not have no her CV, that they have worked...when they have that on their CV to say that they have worked on a big data project, using SAP Hana, you are going to go wow, she's employed, absolutely employed. Because Hana is the next big thing in real time and data analysis. And what I have encouraged, and what I have also said is, that while that intern is working on that project and you'd want to see the output, it's brilliant, the other interns should be asking her what she has been doing. And in some way she should be asking what other people are doing, so as a cohort, they should be learning from each other and even if they say, have a better understanding of what the other projects are, they can still have that on their CV, so what we will do is we'll do demonstrations, demonstrate the stuff and everybody sees what everybody else is doing. And we are coming up to shortly the final presentation of those. So maybe we can find a few other people in those from the college, because he has part of presentation skills. So big data is being a fantastic project. We didn't have the time to do it internally ourselves. So that was project. Another project is on the area of what's called content management. And we have one of the interns, the specification was, become an expert in alfresco. Now that's a specification, because it's such a big system, they are only going to become expert and part of it, but the person has done extremely well. And knows what we want and

we'll say we want it in an education process, so that's alfresco. And that guy has done extremely well. And there is another piece of work that we didn't have the time to do, and that would feed into our system. Another area is mobile applications, so we have got people working on mobile, there is two or three projects on mobile. There is a project more like a research project, a person who was more...it was a conversion course. He's actually analysing all of the free software, that's available to schools and education from Oracle, Microsoft, SISCO and all that sort of stuff and SAGE and there is piles of free software. So the intension is, that we'll have the report that we can bring to the Minister for Education, say if every school in Ireland, four thousand schools, took up all of the offers from all of these big players and give them the software free, the value is, five hundred million, I don't know, it's massive, why am I not doing it in a structured way. So that was a good project, great piece of work, sort of research wise. Another person is only here, only an internship, who is an ex-teacher was with us only for a couple of months, but we got her to work in sensors, remote sensors, you know sensors in schools, they are all sensors and we are doing temperature monitoring, building management, micro-building management. So that's really going well and we have got the results for her report. So it's quite wide and varied. We have got other people working on HTML5 website creation sort of stuff, using a tool called MVC. Again from a point of view, on your CV, if you have got things like MVC, you have got things like SAP Hanna, these are the emerging, all the newest of new stuff that's coming out, that's fantastic.

Q How are you monitoring all this work then, is it through your weekly meetings and your Skype?

A Exactly and I have encouraged them, although I haven't actually read them, but I have encouraged them from the point of view for the college, for them all to keep daily journals. I know that I think maybe do weekly reports perhaps and to produce weekly reports. But I have said, and I don't know if they have done it and I have asked them to, to keep a daily diary and to write down, the good the bad, not even from the point of view, but just how their day is going. But they will try certain things, things haven't worked, but have it journalised really, is the important thing. And if they don't do it, I'll say, well I have told you to do it! It's a paragraph a day, just to say what you have actually...and if it's good bad or indifferent, is the things that you'll find. But hopefully they have done that. But I have also said, if you don't have a e-portfolio at the end of your three months, now again will they do it or not is another question, but I can't force them to do it. But an e-portfolio I think would be very important, not how it is set up.

I'll show you one, just after the session here, I'll show you the best one and I showed it to the executive committee here. Now the best one that I have come across is a girl called XX And her portfolio is amazing, it really is. So she's starting her visual communications in the University of Ulster, so she's not doing software. [Stop to look at a sample e-portfolio]

I suppose your reaction is what the reaction I got from...the executives...because there was no barrier to doing that, that was all set up on free software, wordpress, more than likely or something like that, some builder, maybe she wrote it herself, because she's talented enough to do. But in one way it's a wordpress site. But what she done, she has assembled all her work online, design her own logo even, what does that tell you about from an employment perspective, she's totally employable, she probably set up her own business. So who are you going to choose. Someone who has got maybe a degree, who has no e-portfolio, you'd ask yourself after three years and then a placement or whatever. It's essential is what I would have thought. But if you get into the mind-set of doing that, imagine what your eportfolio would like at the end of your course. And if you've shown the integrity or you have shown the get up and go, to go maybe create community websites for your sports club, or you have done something that's of interest to you in health or I don't know, you have gone out there and you are using your skills over the summer, you know instead of not doing it! Even if you are unemployed, you are just going out and doing something in

the community, that makes you very employable. And no excuse, I mean that was all done, that's online, that's stored somewhere, probably get free space. So induction, I think important.

Q So back to the employability and stuff like that as well, how job ready do you think are students are coming out of the programme?

A: I think well obviously there is another year in terms of internships or another year in terms of degree, but the question would be more generally just graduates per se. They are going to get jobs, I guess because they have got a degree in computer science, they are more than likely because of whatever else. But for a small, for our type of business and the sort of people we need, it would be difficult to take grads on, it really would, without the relative experience. Because there would be a lot of training involved, retraining in some cases, because the skill sets, certainly and inflict a lot of dynamic little businesses, the skills are those ones that I mentioned earlier, the latest sort of things and whatever else. And unless you have got practice experience and using those skills then, there would be a lot of training and retraining.

Q You mentioned earlier about the soft skills, what other skills do they need to develop?

A: I think the communication skills, all that interpersonal thing, again sometimes you might feel it's hard here. But those sort of interpersonal skills, presentation and you know just...it's just things that can develop that way really. And it has worked, actually I have seen it developing with the cohorts in that they are clustering and working with each other and the confidence is growing, because they have shown each other what they have done and all this sort of thing. And we get them to stand up and present what they have done as well. It's not for everyone, but it helps with confidence building maybe, this is their baby, so be proud of it, and that's good. Be able to stand up, not just sitting at their desk, stand up and present what they are actually doing and where they are going and the challenges and whatever has worked really well. So it's all the general stuff, general soft skills really. It's the sort of respect and all that. I think we have been pretty good at sort of motivating for want of a better word and get hopefully the best out of them in this context. But there is always room for improvement.

Q Do you think these initiatives are delivering what they set out to deliver, are these conversions changing architects into software developers?

A: In our experience people who have gone on the conversion courses had shown more of an appetite from day one. I think it's because it's specific and decided to do the conversion course they have got a target to get into it, as opposed to if you are interested in the degree, you are thinking, well get a degree, and I'll worry about that in four years time where I'm going and well I'll get a job. Whereas conversion courses, yes I think people are, maybe a bit more mature as well perhaps. But then they hit the ground running and the pieces of work that they did was excellent, from fairly early on. Of course we couldn't ask them to do too much technology coding and stuff like that, so it was more research. But again there is a technology understanding in there. I think it's a great idea and I believe in conversions courses. There is also so many careers in IT, it's not just about writing software, there is probably about 150 careers in technology from marketing, business development and system analysis and design. You don't necessarily...a business analysis, you don't necessarily work for a company then necessarily know how to write code. So I could easily say that people that I would work with easily getting jobs, not easily getting jobs, but getting jobs based on their attitude and their energy levels and they are smart people at the end of the day. So you can be retrained and you can fit in then. And even from the point of view from a managerial perspective, be able to manage people is a skill in itself to get the best of them. Certainly as we grow as a business we have the need for people to manage, sets of people. So I think that's so important. Sales as well, there is one intern who is a born salesman, there is no doubt about it, I think he's a great fellow and he's the

guy doing the research on all of the software that's been provided to schools free, I can see huge opportunities for us so yes.

Q And do you think we are doing enough in the classroom, to prepare them for the jobs market?

A: I don't think so no and that's not a criticism, I don't think, I think that universities do or colleges do. I don't think so. I think there is great opportunities to get the employers in big and small over the course of the three years, two years or whatever and fill your auditorium and actually listen directly to what they actual employers want. A big employer like Google is going to have different needs of course than I would have. But I would imagine is a constant drip feed of you can nearly do it once a week, employers would be delighted to come in. Instead of going to careers conventions, where there is people passing. I think college, I had said has got a brilliant opportunity, just having Google, Oracle, facebook, like that, Paddy Power, you could have one a week, even about 4 o'clock on a Thursday from 4 to 6, this is what we need, this is what we are looking for, these are the challenges that they have got, these are the new technologies that are coming up. And get that on your CV. Get small companies in as well. You could have them every week, I mean you don't have to have an expense, just fill a place with 100 people or 200 people or as many as you want. And I mean you are all here. And not necessarily the Google's as well, they could be the AIB's, could be the Banks of Irelands, RBS, it could be anybody that's looking for graduates, technology graduates or conversion course graduates, have them come in and spend an hour. Just talking about what they need, they'd all take it up. There is 500 hundred companies in the IFSC, you could have two a week. But imagine that, you'd be hearing directly from the head of HR or a project leader in Oracle, this is what we do and a Q&A session. And have a rolling, have a calendar of that going on all year. Just fill it and the ones that turn up, the students that turn up, I mean you know these are the ones that your looking for, the ones that don't, well you have a better point in having a e-portfolio. So you can do it in such a way that the timing of it is,

where they do have to make a bit of an effort to either stay on, you know what I mean, there is this thing as, if it's part of the sort of almost like the natural day if you like. I think if you actually make the effort and fill it. Is that possible actually is that possible to do? The auditorium just fill it and just from our, we could help, we could get in touch with some of the companies. I would be amazed at any employer has ever asked, big employer in small businesses, get help from IBEC and whatever. You would definitely have one a week.

Q What improvements and recommendations would you suggest and you have already made, three as far as I can see, the induction, the e-portfolio and the employers idea as well. Baring in mind, these type of cohort unemployed people getting back into the work force, what more could we be doing for them?

A: I haven't seen the content of the course, first of all, if I could get an understanding of what they are actually going to be taught, that would be good. I could certainly pass that, and I will do that after this. I know I have got a brochure here. Ok, well is it possible to chat to some of the lecturers maybe? Because what's important for me to do is the pace, there is a pace in the actual, the types of work we are involved in, there is pure academic in that I suppose project based work I suppose is what I'm getting at. I think it would be important where each student is given almost from the outset or shortly into their course, a project. Now it' not easy because I have used I think a lot of these. But I dare say, there is lots of business, I can say I mean there is more twenty things I need done, can some of these people help out and could be the area of mobiles, could be in the area of big data. But project work as opposed to just... I think that's... and this is the general thing, I think the more real that projects can be, and a degree in whatever a conversion course the better. So then there is a sense of purpose to why you are actually doing the thing in the first place. And I think more engagement then perhaps with business. Industry, again just following on from the, I mean they should all be invited to those sessions as well, I dare say, it should

be open to whatever times you have those industry coming in should be able to facilitate that or go over that as well. Mixing them of course with other...I think one of the recommendations made as part of that induction day as well is, this is what life is all about is that everyone should have available to them, all the technology cloud technology that's free available to them. That is to say they should have, on that day how you set up a Google cloud, how you set up an Amazon cloud, how you set up an alfresco cloud. So that you as a student, should be surrounded by free clouds. And that means you have got in terms of your portfolios, your e-portfolios, the work that you'll be doing as an internship, instead of running around with your laptop and trying to connect, all your stuff should be online. You can do that in three or four hours. And then again you are back to this there is no excuse. And I would actually have marketing people in business, and the college who will have any sort of touch with information or using technology, I think should have clouds set up. Now the other thing would be to invite the sort of the technology people in, if it really got stuck. But to be honest with you, it's not hard. If you had to sign up for a free Amazon cloud as a student will take you ten minutes. So you'd multiple that by all the other free stuff and then all of a sudden, you as a student are surrounded by all this online capability. And that shows intent, if you don't have that, and you are going into your internship in 3rd year, on a degree course, you'd have to ask the question why, why are you not interested. So you could certainly do that. I think there are things just, there are just internal technical things really, I think some students would be more power users than others, particularly on the degree course in some of the technology that's here, it's not just up to speed with some. I think there are some tweaks there that really could be done. For example even with the wifi, it's a broad brush in terms that, it's not particularly strong for the power users, that can't really use it. So if you bring in your own devices, is the way the world is going now. And certainly even in our own business, we encourage employees to bring their own laptops, should they wish. We can get people to buy machines, but they are likely to have a more powerful machine themselves, so they just bring them

in and hook in. So there is some things that probably needed adjusting. Things like being in our system, just oddities where one of the interns gave a stratification, but he can't do any research on it, because it blocks out. There is and I can see it's really a bit blunt instrument really. And I don't know....so I think maybe stratification of some sort for the computer sense, graduates or whatever, where they weren't necessarily would have to be researching in the areas where the filters would block them out. So things like that. I suppose I'll send you the slides actually, I probably remember the other things. Yes, I mean the other thing really was around is around the maxing out really on your Moodle, I think that's important, let's say your 10% and for what you currently functions. It really should be like 60 or 70% let's say in 18 months time, because that's your asset, course management function as a key asset for the college. And I think it would be important that all of the lecturers and support staff and management, actually everyone, using all in a teaching learning outcomes should know how to get the best out of a VLE, verses learning environment. If you're channelling them through that all the time, they'll get the notion that this is what we are about, we are about e-learning. Blended...and I think what can happen, it's like every institution that we have worked in as well, it can be patchy, you could be the big power users, surge ahead and there's a light touch. I think it should, be level, you need to raise the bar across the board. But that's just change management and culture. Again it's not for, I mean different lecturers will have different styles and everything else and that's all admirable and I have no issues with that. But if you want to try and raise the bar in terms of colleges and e-learning as well, well then everyone has to be at a certain level in terms of understanding the capability of a course management system, but you have choose Moodle which is one of the best open sources as well. So you need to ... everyone needs to be aware and that includes, I think that included faculty staff as well, it's not just the lecturers and stuff, I think everyone could benefit from understanding what a VLE could actually do if it's maxed out, the power of it. So I think the college are going to take that on. And then other things, I mean the likes of, we use

captivate for the course authoring stuff, as you probably know. And again everyone getting an understanding of what captivate or articulate or whatever your chosen offering tool is. I think in house training for all staff is useful thing at an on-going basis. So that you know it's possible. And then seeing what's best practice out there and all the other. I think by coming out of college that embracively learning and whatever will require you to gain more really. Now again that is a challenge as well because it's big staff, you are a big organisation, getting all of that, move forward is a change management job really, how to manage that. I don't know enough about the culture, I sense that it's very accommodating and very energetic collage as we know and a building college. But you are always going to get perhaps resistance, maybe now, I don't know. But to try and get everyone along, bring everyone along on the journey, you try your best.

And there was sort of ten observations anyway and I'll send them to you, I'll send you the slides through. But I think we have covered most of them.

Q Would you hire any of the interns?

A: Yes we will, I mean definitely which is good. All this technology it really should be online and not just the sort of a light touch, it should be full on, maybe take a year to do, but I would do it. Because what I suggested was that, there would be parts of this that would cross over into the sort of market that we do with our apprentices. I would be interested to see how that could come back, so I would encourage that, that approach. But of course then you have...if that's online, you could have obviously the links out to the self, sort of the online learning resources that are out there for the Java's and the data mining...that could be very, very good. So I'll chat to the lecturers to see what do they have online and that.