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A COMPARATIVE ANALYSIS TO ASSESS THE APPLICABILITY OF HIGHER EDUCATION POLICY IN UK AND FINLAND TO SEE IF THEY ENCOURAGE THE INCLUSION OF IT SERVICE MANAGEMENT IN UNDERGRADUATE UNIVERSITY PROGRAMMES (37)

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A comparative analysis to assess the applicability of Higher Education Policy in UK and Finland to see if they encourage the inclusion of IT Service Management in Undergraduate University Programmes

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Abstract Title

This research is based on a preliminary analysis to try to discover if there are any distinctive differences in the way in which education policy is designed and implemented in UK and Finland. If so, the investigation will try to show if it is then likely to influence the way in which IT Service Management content is likely to be included in computing and/or business information courses at undergraduate level in those countries or not.

Keywords: Education Policy, IT Service Management, UK, Finland, Comparative Analysis

Introduction

Anecdotal evidence from attending IT Service Management (ITSM) conferences and events over the past nine years suggests that the way in which education policy is developed and implemented in Finland is more conducive to encouraging the inclusion of ITSM "best practice" in undergraduate programmes there than in the UK. This paper has been constructed such that it will try to show any obvious comparisons. This is because initial opinions suggest that there should be few differences as both systems are within long-established westernised and consumer-based economies as defined by OECD (OECD, 2015). Both educational systems are built on basic colonial foundations and both are members of the European Union.

After undertaking preliminary research in this area, it was discovered that unearthing some elements of the "truth" was somewhat difficult, not least because of the perceived complexities of UK Higher Education policies and policy making and the perceived simplicity of the entire Finnish policies which appear to be mostly in one place. The information on Finnish activities are centred on the publications from the Finnish National Board for Education (FNBE). This includes the whole of the education system in Finland from primary to higher education. However, in the UK sources are spread across a diverse range of mainly government departments. Driven nowadays from the government department "Department for Business Innovation and Skills (BIS), which in itself includes many education-related sub-departments each producing their own reports. Notably are the departments of Universities and Science and Skills and Equality. It is also noted that a separate department governs schools and further education. This is under the control of the Department for Education which has two relevant sub-departments "Children, Family and Skills" and "State Schools". It is interesting to note that there is no minister responsible for post 16 education in the area between school and university.

This work is an initial investigation which tries to cover the complex narrative that is embedded into UK educational system "in the round" alongside (what was discovered to be) the simpler Finnish model. Initial reflections were that the overly complex UK educational policy model might offer some insight as to why it is seemingly "behind" Finland in recommending institutions to put industry best-practice for IT into university

academic programmes. This initially identified the search and drove the strategy for research.

IT Service Management Best Practice

There is also some dispute about what constitutes IT best practice. It is indeed an evolving discipline built on steadfast in-house practices, those using frameworks such as IT Infrastructure Library, PRINCE2, PMBoK, TickIT, Capability Maturity Models, CobiT and even Total Quality Management. There are those companies using international standards. Built over many years, they are an evolving set of practices frameworks and standards which rise and fall over time depending upon prevailing conditions. The latest iterations include DevOps, Agile approaches and IT4IT. All of which is confusing to the lay person. Over many years education, particularly in the UK, has included the management of IT as systems in their course curricula. As the service economy grows stronger many businesses are reliant on all their business service units to be more service-ready. IT too needs to do this but it should also assure the business that it can mitigate risks and handle dynamic changes in the way it supports business strategy. In their report in January this year, the CBI have identified their support of the National Innovation Plan which is built on knowledge, research and innovative practices. Whilst this is a general report about businesses becoming more innovative it is interesting to read in paragraph 18, that the authors of the report state:

> *"In fact, the lag in some sectors embracing digital technology in their business models is creating a 'digital divide' in the economy and some risk falling behind in this fourth industrial revolution" (CBI, 2016)*

A dynamic and innovative service-based economy is built on digital dexterity and knowledge-based skills. In the report, it is identified that the UK is ahead of some other countries in terms of high-tech engineering, advanced robotics, artificial intelligence, big data analytics and cloud computing. The digital divide identifies that more rudimentary skill-sets of their workers are not universal across the business.

The author of this report argues that managing IT as-a-service, whichever set of practices is used, will help to improve business operations and encourage them to be

more “innovative” in order to maintain their viability in highly competitive global service economy. Business as they embrace complex digital technologies must be underpinned by the broad principles of running IT as an end-to-end service across the enterprise.

The narrative beyond this comparative study must include some form of agreement between business and education as to what constitutes a minimum set of IT Service Management practices. Beyond that further agreement should be reached as to what should be taught and at what level. This comparative study tries to address reflections of the state of engagement at undergraduate level in universities and the likelihood of including anything at all.

This report will therefore only seek to draw correlation and comparison around higher education policy but for those policies which address the more vocational-type courses offered in both countries as ITSM are a set of practices of that ilk.

Research Strategy

The research strategy adopted had, by definition, to focus firstly on policy making in the respective countries. This was to try to get a feel of the bigger picture and to put educational systems in perspective to each other. An initial investigation was to see if there was anything to be gleaned from this in order to try to identify the way in which both countries placed their respective education systems. Next it would be important to identify general commentary, research and observations about comparisons between them to see if any up-to-date and credible analysis had been undertaken. Many of the articles which were discovered quoted the OECD figures especially those related to the Programme for International Student Assessment (OECD PISA, 2015), which identifies comparative skills and knowledge of 15 year olds across 70 countries worldwide. A comparative analysis of what drives higher education to include more vocationally-orientated subjects was another area of research, however very often this was linked to discussions about national economic prosperity but in general rather than subject specific contexts. The overall aims of the research then became a quest to try to unearth any major influences, factors and themes which would seemingly enable Finland to more easily include ITSM within its curricula. Another line of research sought to

understand what major factors might not encourage the UK to do the same. This was an interesting point, because nowhere within the research was it obvious that UK universities were dissuaded from including them. On the surface, it therefore seemed a more a question of institutional choice in the UK rather inhibiting factors.

Within the scope of this research a full analysis of this across the UK is also difficult because within this are the nation states of England, Scotland, Wales and Northern Ireland each (rightly) with regional differences to course structures. However, all the countries in the UK are supported and influenced by the Quality Assurance Agency (QAA); an organisation which publishes a set of recommended subject-related content descriptors to be followed by universities in order to main subject specialism quality standards.

As stated earlier, the Finnish policy model was somewhat simpler than that of the UK, but initial observations showed that this may be to do with the overall simplicity of education in Finland versus the more complex structures to be found in the UK. It was noted that there are only 14 universities in Finland (MEC, 2015), whilst there are over 160 in the UK which does not include all privately funded institutions (Unistats, 2015). In Finland the entire education system is managed by the Finnish National Board for Education which oversees the whole of life education system for children, young adults and mature learners. Wholly funded by government funds, there is no monetary pressure on post-compulsory education students. There appears to be social responsibility built into the fate of young people through the value education provides (FNBE, 2015). Research into the UK university sector shows that once compulsory education is completed, fees are applied through loans which in turn is supposed to drive student choice as identified by the Browne Review in 2010 (Browne, 2010). The opening up of choice therefore enables students to choose courses based on their own personal preference rather than a national economic need. Influences on that choice can very often lead universities to be consumer-driven offering commodity-orientated courses. Research also shows that attempts by successive UK governments to link student salaries to degree pathways is tenuous. (Wolf, 2002). Also the research showed that little attempt has been made in the UK, through scholarly research, to identify whether IT industry best-practice which is used widely by practitioners, might be worthwhile to include in the general computing curricula. It was also noted that the

latest under-graduate subject benchmark statements are now in draft (QAA 2015) but still do not (frustratingly) include the management of IT. It was also noted that the contributing team is made up of university academics mainly at professor level with only one employer represented. Therefore, the way in which companies can have a full discourse about this with QAA do not seem to be represented.

Next it would then be important to examine commentary on UK and Finnish Education Policy to see if any indirect comparisons could be made. Commentary on UK education policy are many, but that which tries to understand the linkages of economic prosperity and growth are much less obvious. The Oxford Policy Centre produces academic research on the state of the higher education landscape. The most interesting and relevant (for this investigation) was a paper by Tapper and Salter entitled "Understanding Governance and Policy in British Higher Education" (Tapper, Salter, 2004)) which identifies a number of factors which have (in their view) inhibited autonomy by successive governments as they attempt to redefine higher education for differing political goals. The authors argue that higher education is at the mercy of swinging political themes, losing its general identity as a national social and economic treasure. The number of politicised government papers show that new governments seek to make changes based on their political philosophies and it is little wonder then that those working in this sector feel confused, aggrieved and therefore respond to prevailing political debate. Developing course themes is at the moment being driven by free market economics. The 2015 green paper by current conservative government (BIS, 2015) is seen by many HE commentators to be blue print for wholesale privatisation of HE.

Commentary on Finnish education policy tends to be more constructive and complementary. This is mainly in response to positive OECD and EU statistics in its performance. This point made comparative research somewhat difficult in general and almost impossible from the standpoint of comparing issues around the relevance of specific course content. Osbourne, Sandberg and Tuomi (2006), identify that both the UK and Finland are managed by agencies of the state within well-defined structures, both with the aim of promoting life-long learning but not necessarily illuminating in itself. A report by Rawlings Smith (2013) delved deeper to more clearly show that the main differences between Finland and the UK identified that Finland had a more

comprehensive schools reform agenda basing the whole of the education system on *"quality, efficiency, equity and internationalisation*". This, looking at the underpinning research did not appear to be true for the UK, as successive governments have commissioned, adapted and sometimes shelved reports which were unpalatable to their own political missions. Notable here was the landmark report by Mike Tomlinson (WG, 2004), which tried to address the synergies, opportunities and challenges within the 14-19 age group, a report which was abandoned by the then Labour government. However, there were some interesting aspects in Tomlinson's report which had some synergy with the way in which Finland structures its education. This is shown in the way that it recommends those teaching this age group to try different ways of teaching and learning to offer more diversity of learning, engagement and knowledge discovery. This report will identify more on this in the comparative analysis which follows as it may shed some light into the apparent dysfunction across the UK education system as a whole which then might inhibit the creation of relevant content within HE.

Comparative Analysis

As stated previously comparing the two education systems must be undertaken from a holistic policy standpoint as this is the only solid ground to work on. With regards to Finland and the UK, educational systems are managed through government policy. In Finland, however there is less emphasis on assessing school children from an early age and more on learning (MEC, 2015). Children in Finland start school later than those in the UK – at the age of 7, and they are encouraged to "learn together" as a social aspect to learning whilst removing streaming and other academic groupings. There is opportunity to choose what is learnt by way of a modular content as long as by the end of the compulsory learning cycle the student has obtained a set of curriculum ideals and take the National Matriculation Examination. It has to be said that this is against a backdrop of governance by local educational authorities which are overseen by the Finnish National Board of Education. It could be argued, as seen from evidence published in "Lessons from Finland" (Sahlberg 2011), that cohesive support in education, must be reinforced by professionalization within teaching and learning in general and include the knowledge of teachers within their field of study. On the other hand, quality of teaching in the UK is not so strictly managed (holistically) across all areas of education.

The education philosophy of the Finnish University sector continues from school age education through to university level. Students are encouraged to learn through problem-based activities taught by teachers with a minimum standard of education (M-level). Whereas in the UK, universities are somewhat autonomous in their structures and approaches, based on generic standards. Those standards and practices, can be more pragmatic and are open to much more interpretation into content and learning styles. Whilst on the surface this may seem to offer much more choice there are obvious negative sides to this as there is no natural requirement to produce courses which meet specific economic conditions.

It could also be argued that computing as a discipline is relatively new in educational sense. In the UK, for example, since the 1980s computing as a scientific discipline has long been established and readily, at least in a theoretical sense, consolidated in mainstream programme design from a computational science perspective. Similarly, business related courses are written into the standard "DNA" of course design. The respective QAA subject benchmark statements show the lack of synergy between the two. It is to be noted that ITSM is a cross discipline subject area which explains how to best manage IT built on those doing it "in practice" which as a concept does not naturally fit into the usual teaching systems. Embedded with existing subject descriptors are long and steadfast traditions, which seem to be very difficult to shake. In Finland, however these long standing traditions do not apply as Finland (after its separation from Russian control in the early 1900s) was determined to develop a joint economic and education system built on social and economic values from the ground up. Finland was also determined to change its economy from a predominantly agrarian one to that which is built on high-tech. This required them to develop a sustainable whole-of-life and integrated educational system to support it.

In Finland, and based on the need to prepare the workforce to support the new economic landscape, those leaving compulsory education can enter the university system. Studies are broadly based but include practical training in a field of study. The practical element is important in this discussion because students cannot enter the 2nd cycle (known in the UK as masters level) without having on-the-job experience. As practical experience underpins undergraduate study, the Finns have set the learning landscape to include

practice-based elements within their programmes. Conversely there is no such requirement in the UK, where study at undergraduate level can be theory-based only with no requirement for practical application. With the recent underfunding of further education (the normal practice-based way to study), the UK has lost yet more synergy across the whole education terrain. Attempts have been made to develop apprenticeship schemes with some limited success. Many have failed due to lack of true employer engagement (Raikes, 2015).

The model of UK higher education may also be an inhibitor. There is no doubt that compared with Finland, where local authorities design their own education standards, the UK on the other hand has been built on systemic elitism over many centuries. In creating the post-1992 universities, governments have tried to re-shape the landscape, but it could be argued that this is with minimum success from a national curriculum development stand point. Those at the top of the elitist stack systematically pick and choose the brightest candidates a problem which successive governments have tried to address. In the latest government green paper (BIS 2015), once more, social mobility and heterogeneity have been recommended to be written in to university admissions criteria, but whether this will be successful or not is yet to be seen. Problems are likely to occur due to the complexity of the UK university structures and it more than likely the ideals in the green paper may only be able to pay lip service to changes in diversity, given the fact that there are so many other factors included within it.

This underlying complexity explains that actual curriculum design is at the whim and fancy of individual institutions. Universities (as a sector) still insist that A levels are the gold standard for entry. It is easy to see why that is, because with the dysfunctional approach within the current secondary and further education educational systems, universities have to maintain their entry standards. Meagre attempts have been made over the years to try to change this and "way back" with the Dearing Report (1997), it tried to find a way to identify widening participation and lifelong learning in the UK as essential to economic growth and social mobility. It is interesting that after nearly 20 years after the publication of this report, this is sadly not fully realised.

Conclusions and Reflections

It is clear that the Finnish education model is more conducive to proactive learning and assessment across its entire education system. Also, it set up to support practical learning throughout, particularly in higher education. Therefore, it seems logical that the Finns would not think twice about including work-based IT best practices into their curriculum. In the UK on the other hand, there appears to be systemic failure of successive governments to develop holistic education policies which would then be set up to provide and encourage total flexibility across teaching and learning from an early age through to university level. It is little wonder key subjects are missed off the curriculum. On top of that with the politicisation and commoditisation of higher education, there seems to be inherent difficulties which will prevent university developing courses which will include more practice-based content. That said it is generally noted that some institutions have "sandwich" years built into their programmes but these have mainly been in the disciplines of engineering and health. This report does not attempt to compare the philosophy of why that is as noted in the last comment, but it is highly likely that this is something the IT industry as a whole need to take on board.

Generally speaking then, the UK education system appears to have a more dysfunctional approach with embedded and long-standing traditions rather than a more holistic, pragmatic one. This may well impede advances in doing something differently and developing educational areas in new IT-for-business subject matter across the educational landscape. Maybe it is time for QAA to develop a third stream of subject descriptors which will fill the gap between computing and business. This may be especially important as the reliance by businesses on IT is now an established fact by most business and IT commentators. This, however, will not address the lack of synergy across UK education as a whole, it will only try to address the issue of lack of subject know-how of more practice-based activities within IT. This is unfortunate in that embedding a new educational philosophical stance will be important to meet the needs of a dynamic global service-based economy. If done more consistently it will naturally produce more relevant subject matter content that cuts across both computing and business domains.

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