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## Employability and Finnish University Graduates

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**ABSTRACT** In this article the authors concentrate on the change in the concept of employability during the Bologna process. They show that employability has gradually moved from a peripheral to a core presence in the most recent Bologna process documents. Using a Finnish university merger (University of Eastern Finland) as an example, the authors demonstrate that implementation of the Bologna process has reached the most remote eastern border of the European Union. The Bologna process is shaping the Finnish universities, and employability discussion is embedded in university reforms. The authors argue that the reason why employability has been raised as one of the core concepts of the Bologna process is labour market needs. Moreover, students want university education to help their transition to the world of work. On the other hand, employers want graduates who are well prepared for the world of work. In this way, the *raison d'être* for universities is to fulfil the needs of national economies and the labour market.

### Introduction

The connection between universities and the world of work is becoming ever more important. The Bologna process has tried to establish a comparable degree system in an attempt to create the European Higher Education Area. This can be seen as a response to one of the basic principles of the European Union (EU) – the free movement of labour within the EU. The Bologna process with its comparable degree system can be seen to facilitate the migration of highly educated experts. If employers can trust that the skills learned at universities are transferable from one university to another and from country to country, they have a bigger pool of graduates to recruit from. For graduates, a comparable degree system means that they can more easily offer their services to various employers in different EU countries. Universities have developed various quality assurance systems by which they try to prove to employers, students and society that their education is good and the skills and knowledge learnt at the university are transferable. These quality assurance systems are a crucial part of the Bologna process.

Recently, the Bologna process has required universities to concentrate more and more on employability. The concept of employability can be found in all main documents of the Bologna process, but its significance has changed dramatically. In the Sorbonne (1998) and Bologna (1999) declarations, employability was seen only as a by-product of harmonisation of higher education systems; however, in the London Communiqué (2007) it was given a stronger and more independent meaning. Higher education institutions were given clear guidelines to pay more

attention to the needs of the labour market: 'Governments and HEIs [higher education institutions] will need to communicate more with employers and other stakeholders on the rationale for their reforms'. The message is even clearer in the most recent Communiqué (Leuven and Louvain-la-Neuve, 2009):

Employability empowers the individual to fully seize the opportunities in changing labour markets. We aim at raising initial qualifications as well as maintaining and renewing a skilled workforce through close co-operation between governments, higher education institutions, social partners and students. This will allow institutions to be more responsive to employers' needs and employers to better understand the educational perspective.

In this article, we will discuss the meaningfulness of the concept of employability as it is seen in the Bologna process. We do this by analysing the relationship between university education and the world of work, concentrating on a forthcoming university merger in Finland. Micro-level analysis enables us to explore the 'skills discussion' that is embedded in the concept of employability as well as the aforementioned pressure to bind employers more closely to higher education reforms.

### **Universities and the World of Work**

Traditionally, universities had been the reproducers of the social elite. University students held a privileged position and they could pursue scientific knowledge quite freely with the awareness that upon graduation they were likely to obtain a highly appreciated professional position. As long as only a minority of the relevant age cohort was allowed to enter university education, the choice of the major subject was almost irrelevant (Williams, 1985). When universities expanded and a growing number of graduates entered the labour market the field of the degree increasingly became a screening device for employers.

According to Williams (1985), the debate on the relationship between higher education and employment has continued for at least two centuries. This debate has focused on the issue of whether the main task of universities is to prepare students directly for employment or whether they should aim at providing students with an opportunity for personal, intellectual and social development, which may indirectly lead to better career prospects. The employment of graduates is clearly the dominant factor in the Bologna process.

Nowadays there is a common belief that knowledge is the key to any society's success. Grubb & Lazerson (2005) describe this situation as the Education Gospel. While the significance of knowledge is constantly increasing, society, in order to be successful, needs experts with the ability to apply theoretical knowledge in their work. This means that even if there has always been a close connection between universities and certain occupations, the spectrum of occupations seen to require a university degree is currently broadening. In an expert society, universities are the principal organisations of expertise, having the main responsibility for educating experts for the needs of society and economic life.

While universities have transformed into universities for the masses, the relationship between universities and society has changed radically. Nowadays academia has to prove its legitimacy to society, economic life, and taxpayers. Recently, this mission has been understood to be the input of universities to nations as they compete with each other in international markets. This means that the traditional educational mission of academia, i.e. mediating cultural heritage, introducing a new perspective, and providing the critical observations of society, is about to be pushed into the background.

It is evident that at the level of the EU, the aim is to tighten the bonds between educational systems and the labour market (Kivinen et al, 2007). It has also been claimed by Kivinen & Nurmi (2003) that universities in Europe have become more school-like and vocational. In becoming more vocational, the goals and content of university studies are increasingly following the assumed needs of the labour market and various professions. This is clearly articulated in the last Communiqué (Leuven and Louvain-la-Neuve, 2009).

As long as the labour market expanded and there was a growing need for highly educated experts, it was relatively easy for a graduate to find a suitable occupation. When the expansion phase ceased, the employment of new graduates became more complicated: 'a college education was once sufficient for the attainment of a good job. It is clearly no longer sufficient, but at the

same time, it is all the more necessary' (Smith, 1986, p. 93). Our own analyses of the employment of graduates of the University of Joensuu (e.g. Puhakka & Tuominen, 2002, 2005; Puhakka et al, 2008), have established that a university degree opens up the possibility for employment, but it does not guarantee it.

It is obvious that no longer will all university graduates be able to find a job at the higher end of the occupational hierarchy. New graduates face more difficulties than before. The massification of universities has led to a situation where most of the students study in order to get a good job (e.g. Glover et al, 2002; Wood, 2004; Purcell et al, 2005). Honkimäki (2001) sees new students being more instrumental and vocationally oriented. For them, the university is just one possible route to a working life. No longer do students enter the university in order to deepen their knowledge on a particular subject; rather, they wish to increase their employment prospects.

Previous research (e.g. Patrinos, 1997; Dolton & Silles, 2001) has demonstrated that there are differences between graduates according to the vocational orientation of their studies. Professionals whose education is more closely linked with the labour market fare better than those graduates whose education does not have the same connection to certain occupations. Yet the current emphasis on general skills and competencies seems to suggest that the benefit of more vocationally oriented studies may be diminishing. Teichler (1999) claims that there are several reasons why the emphasis has been increasing on general competencies rather than specific competencies: (1) specialised professional knowledge becomes obsolete more quickly than before, (2) new occupations within enterprises are not tightly linked to certain disciplines, and (3) the labour market is changing. However, Schomburg (2000) argues that flexibility is more needed from those students who are studying a subject not explicitly related to a certain occupation.

Whether studying a vocational or generalist discipline, university students have the responsibility to make themselves employable. In order to be employable, students are expected to acquire skills that are relevant to employment and work (Teichler, 2002). The Bologna process defines employability as follows: 'the ability to gain initial employment, to maintain employment, and to be able to move around within the labour market'. Romaniuk & Snart (2000) suggest that the concept of *employability* involves more than attaining and maintaining the skills needed for work: it also includes the fact that one has to market oneself in order to obtain work. According to Connell & Burgess (2006), this reflects the neo-liberal ideology of individualism, in which individuals are responsible for becoming employable and retaining the skills that make them employable. Brown (2003) sees that employability actually reflects the devaluation of academic currency. The consequence of widening education is that graduates have a personal responsibility towards employment.

On the other hand, in the latest Communiqués (London, 2007; Leuven and Louvain-la-Neuve, 2009) universities are given more and more responsibility for students' employability. Universities have to make sure that graduates obtain the skills and knowledge that make them employable. This demonstrates that in the Bologna process, no one believes there is a solid, stable work career for university graduates. Instead, graduates have to be flexible and ready to change their plans and workplaces constantly during their work career.

### **Re-organisation of the Finnish HE System**

The massification of higher education in Finland was initiated in the 1970s, when more than 15% of the age cohort was able to enter the universities. Since then, the expansion has been very dynamic and the number of students has more than doubled in the last 25 years (Kota database). The expansion of the Finnish higher education system is related partly to the development of the welfare state and partly to regional policy (Nevala, 1999). As long as the Finnish welfare state was in its building phase, the expanding public sector was able to accommodate the growing number of graduates regardless of whether they were professionals or generalists (Kivinen et al, 2000).

Now the expansion phase is over and the Finnish universities are in turmoil. The higher education system is reorganising to better meet local and global challenges. There is a belief that the university reform is necessary in order for the universities to better serve the needs of the economy. This clearly resembles the ideas of the Bologna process, in which the building of the

European Higher Education Area by harmonising university education is supposed to ensure the competitiveness of the EU.

At the moment, the restructuring of the Finnish universities is taking place at an unprecedented pace. The legislation concerning universities has changed and the universities are to be separated from the state at the beginning of 2010. As a result of the current mergers, Finland will in 2010 have 16 universities instead of the current 20. This article concentrates on one of the mergers, i.e. the one in which the University of Joensuu and the University of Kuopio are merging to form the University of Eastern Finland (UEF) at the beginning of 2010. The Ministry of Education has supported the project since its initiation in February 2007 as one of the pilot projects of the structural reorganisation of Finnish universities. The merger is a response to changes in the global innovation and research environment. The new university aims high, as it seeks to be among the leading 200 universities in the world. Furthermore, the new university will be one of the biggest universities in Finland, having over 14,000 students and some 3000 members of staff. It is expected to produce 1500 master's degrees and 150 PhDs yearly, in 11 fields of education.

The building phase offers a chance to explore how the new university implements the Bologna process. One of the very first reports (Tuominen et al, 2008) of the forthcoming university investigated the employment situation of graduates and the relationship between university education and the world of work. The study was published in December 2008 although the University of Eastern Finland will commence in 2010. The fact that the two universities forming the UEF wanted to investigate the employment situation of their graduates together shows that employment and employability are relevant parts of the new university and a crucial part of its quality assurance system. This interpretation is reinforced in the strategy of the new university which strongly emphasises graduates' employability.

### **Research Questions, Data Collection and Data Analysis**

Literature and previous research prompted us to pose the following research questions: (1) How is the educational gospel of the Bologna process implemented in the University of Eastern Finland? (2) How is the concept of employability as seen in the Bologna process compatible with graduates' work experience? In order to be able to answer these questions we are exploring (1) graduates' labour market situation; (2) the skills and knowledge they need in the labour market; and (3) the potential differences between professionally oriented (vocational) and generalist graduates.

We investigate the employment situation of master's degree graduates who completed their degree at the University of Joensuu or at the University of Kuopio in 2001 and 2002, and the relationship between their education and their working life. This will enable us to critically explore the skills discussion that is linked with the concept of employability.

The data was collected in the autumn of 2006 and 2007 as part of the national career survey carried out by the Aarresaari Network (Academic Career Services representing 19 Finnish universities). The data has been combined from these two surveys. A total of 1294 graduates responded to the questionnaire, making the response rate 66%. The response rate for men was 58% and for women 68%.

In our data, the group of professionals includes those who graduated from psychology, social work, pharmacy and medicine as well as those who completed teacher education as a major or minor subject in their studies. Generalists are graduates whose degree does not aim for a certain occupation or produce any specific qualifications. Some 52% of the graduates were classified as professionals and 48% as generalists.

The data was analysed by using various statistical methods. The description of the respondents has been mostly looked at in terms of the most common descriptive statistics: frequencies, percentages, arithmetic mean, median, and standard deviation. Relationships between qualitative variables were examined by using the traditional chi-square test.

The dimensions (scales) of skills and knowledge needed in work were constructed with the help of principal component analysis using the main loadings of the components. The reliability of the scales was measured by using Cronbach's alpha coefficient. Due to skewed distributions and the ordinal nature in the dimensions constructed, the differences in scales in relation to background variables (e.g. professionals vs. generalists, the employer sector) were analysed by using non-

parametric methods (Mann–Whitney U-test and Kruskal–Wallis analysis of variance). In this article, the statistically significant association/difference refers to a significance level that is less than 1% ( $p < .01$ ). This significance level was chosen because of the large sample size: practically even small differences reached the ‘conventional’ 5% level ( $p < .05$ ).

## Results

In general, the graduates’ employment situation seems good. Moreover, two-thirds (67%) of them were working already at the time of graduation. This is a typical feature for Finnish university studies: students enter working life while still studying (Kivinen & Nurmi, 2003; Sainio, 2008). Professionals and generalists start their transition to working life at the same level. When examining the graduates not working at the moment of graduation, the differences between professionals and generalists start to appear. The generalists encounter more difficulties in their transition to working life than the professionals. For the professionals, the median waiting time before starting in their first job was 2 months, while for the generalists it was 4 months. However, compared with the situation in the rest of Europe, we can conclude that the transformation from the university to the world of work takes place quite easily, as according to Lindberg (2007) the length of the job search is the shortest in Finland, Norway, the United Kingdom, and the Netherlands.

Less than half of the generalists (49%) reported that a master’s degree was required for their first job, whereas 81% of the professionals had needed a degree. A similar finding is that the professionals (66%) were able to utilise the skills learned at the university more often in their first job than the generalists (50%).

One-third of the respondents (34%) had been unemployed after graduation. The unemployment periods are longer in the case of the generalists. The median unemployment time for the professionals was 3 months while it was twice as long (6 months) for the generalists. The differences are statistically significant. Our results confirm previous findings (e.g. Kivinen et al, 2000), which have shown that generalists find it more difficult to find their place in the labour market.

The employment rate of the graduates five years after their graduation was as high as 83%. Approximately one out of six respondents was temporarily absent from the labour market, but in total only 2.3% of the respondents were unemployed. The reasons for being absent included studying (2.2%) and family leave (10%). Schomburg & Teichler (2006) have found in their studies that three to four years after graduation, 84% of European graduates are professionally active and only 3% are unemployed. Our results support these findings. As in the case of the first job, a degree had been required more often from the professionals (93%) than from the generalists (68%) for their current job. It is hardly surprising that the field of work clearly differs between the professionals and the generalists. The difference is statistically significant (Table I).

%	Research	Education	Executive	Client/ patient work	Administration/ development	Others	Total
Professional, <i>n</i> = 631	5.2	61.1	6.3	20.4	4.0	3.0	100
Generalist, <i>n</i> = 565	21.2	15.6	15.6	6.0	20.9	20.7	100
All, <i>n</i> = 1196	12.8	39.5	10.7	13.6	12.0	11.4	100

Table I. Field of work for different qualifications.

An interesting finding is that almost one out of six generalists (16%) is working in the field of education five years after graduation even if they did not originally have the qualification to work as a teacher. Moreover, a tenth of them had acquired a teaching qualification after graduation. However, if a generalist acquires a teaching qualification after graduation, this implies that there may have been problems related to employment.

More than half (57%) of the generalists can constantly utilise the skills and knowledge learnt at the university in their current job. The difference compared with the professionals (72%) is remarkable. At the European level, professional use of knowledge and skills acquired in the course of university studies varies from 28% in France to 74% in Norway. In Finland, 69% of the graduates said that they can make great use of the knowledge and skills acquired in university studies in their current job. Researchers have also found that graduates in the fields leading to professions stated a higher use (56-79%) of skills and knowledge learned at the university in their job than other graduates (42-50%) (Schomburg & Teichler, 2006.)

The majority (77%) of the professionals reported that their current job corresponds to their level of education, and less than 10% considered themselves slightly or clearly overeducated. Less than 70% of the generalists reported a proper match, but nearly one out of four (24%) claimed to be slightly or clearly overeducated. Since vocational education has an increasingly close connection with working life, it is not surprising that the professionals have found it easier to find a job matching their educational level. At the European level, the appropriateness of employment and work for a person's level of education varies from 48% in Italy to 87% in Norway. In Finland, 82% of the graduates said that their work was appropriate in relation to the duration of their education (Schomburg & Teichler, 2006.)

The generalists thought that their chances of career progress are better than those of the professionals. Only one-third (32%) of the professionals, but almost half of the generalists (48%), saw that it is possible to advance in one's current job. While the generalists find it somewhat harder to find their place in the world of work, it seems that once they enter working life, they have a better chance to advance their career. However, the professionals (70%) agree that their current work career has been in line with their career plans more often than the generalists (52%). In sum, the professionals seem to be happy with their current employment even if their chances of career progress may be limited. This is consistent with the idea that they have made a clear decision to study a particular subject in a way that will guarantee them a specific qualification.

### **Usage of Skills at Work**

Stewart & Knowles (1999) have presented one classification of skills. First, there are the key skills, which include the very general literacy and numerical skills, communication skills and a basic capability to use information technology. These skills are personal, transferable and needed in almost any job. The second level of skills is that of vocational skills. These are needed in specific occupations and even if they are transferable to other jobs in a specific occupational field, they are not as general as the key skills. The third group of skills is the job-specific skills, which are more forms of knowledge than skills, and these can be specific to individual firms.

As Knight & Yorke (2003) have pointed out, research findings have often been interpreted as meaning that higher education should promote generic skills alongside subject-specific understanding and skills. They are, however, sceptical of the usefulness of a skill-based account of employability, and refer to employers' anticipation of employability being linked with diverse social practices, not necessarily skills. They conclude that employability is more than just skills, and we are inclined to agree with their view.

We analysed different skills usage in connection with the graduates' current jobs with the help of 16 questions. The most needed skills and forms of knowledge for all graduates were the following: (1) problem-solving skills; (2) teamwork and social skills; (3) communication skills in Finnish; (4) information acquisition skills; and (5) organisation and cooperation skills. There was only minor variation between the professionals and generalists: for the professionals negotiation skills replaced information acquisition skills. It is important to notice that these skills are highly transferable and not subject-specific.

The skills and knowledge needed were further analysed by reducing them into four dimensions (scales) with the help of principal component analysis. The scales were constructed by using the main loadings. The range of each dimension varies from value 1 to 6 (1 = low magnitude ... 6 = high magnitude). The dimensions and their reliability coefficients with some descriptive statistics are shown in Table II.

As shown in Table II, the respondents found interpersonal skills and academic skills to be the most important ones in their recent position. The less needed skills, in general, were management skills. However, there are differences in the way the professionals and generalists need their skills in working life (Table III.) The differences between the professionals and generalists are statically significant for all dimensions apart from academic skills. The professionals need interpersonal skills in their working life more than the generalists. The generalists, on the other hand, need more management skills and communication skills in their current occupation than the professionals.

Dimensions	Items	Descriptive statistics
Interpersonal skills (4 items)	Negotiation skills	Alpha = 0.8
	Teamwork and social skills	Mean = 5.2
	Organisation and co-ordination skills	SD = 0.8
	Communication skills in Finnish	Median = 5.5
Management skills (5 items)	Knowledge of legislation	Alpha = 0.8
	Financial planning and budgeting	Mean = 3.5
	Knowledge of essentials of entrepreneurship	SD = 1.1
	Leadership skills	Median = 3.4
	Project management skills	
Academic skills (4 items)	Analytic and systematic thinking	Alpha = 0.7
	Theoretical knowledge of one's own scope	Mean = 5.0
	Information acquisition skills	SD = 0.8
	Problem-solving skills	Median = 5.0
Communication skills (4 items)	Information acquisition skills	Alpha = 0.5
	ICT-skills	Mean = 4.0
	Communication skills in English	SD = 0.8
	Communication skills in Swedish	Median = 4.0

Table II. Dimensions and knowledge needed in recent work.

	Dimension	Mean	Median	SD
Professional	Interpersonal skills	5.4	5.5	0.6
	Management skills	3.4	3.2	1.0
	Academic skills	5.0	5.0	0.7
	Communication skills	3.9	3.8	0.8
Generalist	Interpersonal skills	5.1	5.3	0.9
	Management skills	3.7	3.8	1.2
	Academic skills	5.0	5.0	0.8
	Communication skills	4.2	4.3	0.8

Table III. Descriptive statistics for dimensions by different qualifications.

The differences in skills and knowledge which the professionals and generalists need in their work were further analysed by taking into account their recent occupation. The differences tend to disappear when examining specific work areas. This means that the differences in the skills needed can be explained by the fact that the variety of occupations is different for the generalists and professionals.

However, there are a few differences between people with different qualifications in certain work fields. In education, only communication skills differ statistically significantly: the generalists need communication skills in their work more often (median 4.3) than the professionals (median 3.8). When we examine the group of generalists ( $n = 88$ ) working in education five years after graduation, we notice that one out of eight respondents (13%) had completed a second master's degree. The problems in the generalists' transition to working life can also be inferred from the fact that one in 10 respondents (10%) working in the field of education had acquired a teaching qualification after their original graduation. The difference in communication skills can also be a consequence of a group of foreign language teachers who originally graduated as translators or

philologists. Naturally, they need more language skills. However, this can also reflect the generalists' problems in work paths.

In client/patient work there is a difference concerning the need for academic skills: the professionals (median 5.3) need them more than the generalists (median 4.5). It seems that the generalists working in such occupations have to accept jobs because they have been unable to find work corresponding to their level of education. This is confirmed by the fact that one-third of the generalists mention that they are over-educated for their current job. Moreover, one out of six (16%) professionals claims to be under-educated for their current job.

## **Conclusion**

The Bologna process has started to harmonise university education by creating a comparable degree system and emphasising the importance of quality assurance systems. The London (2007) and Leuven and Louvain-la-Neuve (2009) Communiqués have lifted employability to a new core concept of the Bologna process.

This study shows that implementation of the Bologna process has reached even the most remote eastern border of the EU and its universities. Our analysis shows that the Bologna process is shaping the Finnish universities and that quality assurance schemes and employability discussion are embedded in university reforms. The employment of graduates is a significant factor for the universities. Employment surveys and employability are also a crucial part of the quality assurance system of the University of Eastern Finland.

However, simplistic notions of employment and employability as seen in the latest documents of the Bologna process are clearly labour market driven. In the Bologna process, employers are stakeholders whose views should be paid more attention to when making decision concerning the reforms of higher education institutions. From the university's point of view, these demands seem to be one-sided. The ethos in the Bologna process is that universities have to renew themselves in order for the EU to succeed in the ever tightening global economic struggle. In order for this to happen, the labour market can make claims of what they want from graduates and universities are supposed to obey. This is clearly a one-way relationship, since universities cannot make their demands towards employers.

It is easy to understand why employability has been lifted among the core concepts in the Bologna process. It is an answer to the demands of students but also to the demands of the labour market. One of the key things students want from university education is that it will somehow help their transition to the world of work. The labour market, on the other hand, wants graduates who are well suited for the world of work. The emphasis on employability can thus be seen to reflect the short-term benefits of university education, which seems to be a number one priority for the authorities in different countries and in the EU as well. While the universities themselves recognise also other functions for their existence, employability is clearly becoming an ever-more important factor in higher educational systems.

Employability is clearly linked with the skills discussion. University education is supposed to offer graduates the skills and knowledge that make them employable. As the labour market is flexible and changing, employability means that graduates have to have skills that are transferable from one occupation to another. This could mean that the generic skills would be more important than the vocational skills. This hypothesis gets at least partial support from our findings. The skills and knowledge that the respondents claimed to need most in their current occupation were quite generic ones, including problems solving, teamwork and social skills, communication skills in Finnish, information acquisition skills and organisation and cooperation skills. On the other hand, the employment level of the professionals was slightly better than that of the generalists.

The skills that the professionals and generalists say they need in their current work are somewhat different. However, our results show that it is more important to analyse the skill differences between various occupation fields than to analyse the differences between different qualifications. There are only minor differences between the skills that the professionals and generalists use when they are working in the same field of work. In other words, the form of work explains the different use of skills.



What does this mean for universities as education providers? It could mean that there is no need to differentiate the more vocationally oriented studies from the more general ones with reference to the development of skills. However, if it is clear for students what they are aiming for, it may be possible to slightly streamline the curricula according to students' career-paths. However, there are also dangers involved in courses that are too specialised. In our data one in four (27%) respondents turned out to be employed in a different field of work at the time of the survey than they were right after their graduation. These graduates had enough transferable skills and knowledge to change their work career. Obviously, this demonstrates the instability of the graduate labour market. It can be asked whether these graduates would have been able to move to different occupations if their education had only followed the anticipated needs of a certain occupation.

It could be argued that the University of Eastern Finland is serving the Finnish economy well, since its employment statistics are good. Graduates have been able to be occupationally mobile and they have been employable also after their initial employment. They can utilise the skills and knowledge learnt at the university in their jobs. These statistics are a way to prove to society the legitimacy of academia: universities are still needed, because their graduates are employed well. However, if the *raison d'être* for universities is just to fulfil the needs of national economies or the short-term needs of the labour market, universities as we have come to know them are in danger.

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