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European Knowledge Society and Higher Education: Universities between the Tradition and Transformation*

Avrupa Bilgi Toplumu ve yükseköğretim: Gelenek ve dönüşüm arasındaki üniversite

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Özet

Bu çalışmada gelişmekte olan Avrupa Bilgi Toplumu ile ilgili olarak ortaya çıkan yeni sosyal riskler ve değerler dizisi değişimi, yükseköğretimin pay sahiplerinin görüşleri açısından incelenmiştir. Araştırma sorusu bilgi toplumu ile ilgili olarak yükseköğretimdeki yaklaşım değişimi, politikalar, uygulama, gerçeklik ve deneyim konularını kapsamaktadır. Araştırma altı Avrupa ülkesinde altmışaltı katılımcı ile bir yılda tamamlanmıştır. Veriler yarı yapılandırılmış görüşmeler ve odak grup toplantıları ile toplanmıştır. Araştırmanın tasarımı ve örneklem niteliksel araştırma yöntemlerinden kartopu yöntemi ile yapılmıştır. Her odak grup toplatısında yeni sorular oluşmuş bu sorular görüşmelerin sorularını yapılandırmıştır. Ayrıca küçük bir grup ile başlanan odak grup toplantılarında görüşmeler için daha geniş bir katılımcı grubuna ulaşılmıştır. Veriler niteliksel veri analizi algı kodlama yöntemi ile analiz edilmiştir. Bulgular Avrupa'daki üniversitelerin geleneksel rollerini koruduklarını ve bilgi toplumunun geliştirilmesi için yeni bir role hazır olmadıklarını göstermiştir. Hızla değişen toplumda üniversiteler gelenek ile dönüşüm arasında bir ikilemle yüz yüze kalmışlardır. Üniversiteler Brüksel ve/veya ulusal kaynaklı değişim isteklerinin baskısı altındadır. Değişim baskısı küreselleşme sorunlarına yanıt vermekten çok kuramsal düzeyde kalmaktadır. Böylece toplumun dönüşmesinde rolü olan üniversitelerin, temel sorunlar nedeniyle, hızla değişmekte olan toplumun gerisinde kaldığı ortaya çıkmıştır. Avrupa vizyonunda yer alan toplumun hızlı dönüşüm ihtiyacı ile Avrupa üniversitelerinin gerçeği arasındaki uçurum bu çalışmada ortaya çıkan önemli bir vargıdır.

Anahtar sözcükler: Avrupa Bilgi Toplumu, dönüşüm, gelenek, yükseköğretim.

Abstract

This study examines the role of universities in the European Knowledge Society as regards to new social risks and paradigm change as perceived by the shareholders of higher education institutions. The research questions addressed attitude change in universities for reform; the universities' responsiveness to possible social risks and opportunities for the graduates; and the institutional practices regarding curricula and governance which may lead to knowledge society. The study was conducted in six European countries with sixty six participants and completed in one year. Research was designed based on the qualitative research approach. Snowball technique was used to design research and to identify the sampling. Data were gathered through interviews and focus group meetings. Each focus group contributed to extend the number of participants and improve more questions in the interviews. Data gathered from the interviews and focus group meetings were analysed using perception coding system. Results showed that universities in Europe keep their traditional role and are not ready to acknowledge a role in the development of European Knowledge Society. The challenges they face in a transforming society create a dilemma between the tradition and transformation. They are under the pressure of Brussels-directed changes and/or national context and regulation. Major outcomes of the research addressed the reality of the university in Europe lag them behind the role given by the European vision. The gap between the society's need for dynamic transformation, which is expressed as an ambitious goal in the European vision, and the university's traditional existence and resistance to transformation was highlighted.

Key words: European Knowledge Society, higher education, tradition, transformation.

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*This research study that was presented partly at 14th World Congress of WCCES (13-18 June 2010, Istanbul), is a part of NESOR Project sponsored by European Commission's Socrates Programme. For the final report of the project see: http://ec.europa.eu/education/transversal-programme/doc/studies/2006nesor_en.pdf



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deomed.

he concept of knowledge society was used to emphasize the importance of knowledge in a society which is structured with economic rules in the mid 1940s. Hayek's identification of knowledge society was economy-driven. The problem of the society was not economic but more of the utilization of the knowledge -which was not given to anyone in its totality (Hayek, 1945, p. 520). Subsequently, the term "educated society" where the work that is based on "the mind rather than the hand" was used (Drucker, 1957, p. 114). Thus, meaning and impact of knowledge for a society has changed as the highly educated man with high skill and knowledge has become the central resource of today's society where knowledge society needs more educated people (Bell, 1973; Burton-Jones, 1999) in quantity and in quality i.e. more people with more qualifications gained through education. Bell (1973) in The Coming of Post-Industrial Society emphasizes the coming age would increasingly be depended on people and institutions that produced knowledge in science, technology, research, and development. The extension of specialization from economic to intellectual realm would be the most prominent difference marking off the first and second periods of the twentieth century. In this context, the education itself would rocket the proportions with huge enrolment rates. This prediction partly becomes true i.e. mass enrolment rates in all levels of education, more educated people and longer education years do not necessarily provide a better knowledge society. The three components of the knowledge-driven society were predicted as a shift from manufacturing to services; the centrality of the new science-based industries; and the rise of new technical elites and the advent of a new principle of stratification. Thus, a transformation in the groups was necessary in order to create the new form of society. Another presupposition was on the knowledgeable society in which, more than in other societies, its members: (a) inquire into the basis of their beliefs about man, nature and society; (b) are guided (perhaps unconsciously) by objective standards of veridical truth, and at upper levels of education, follow scientific rules of evidence and inference in inquiry: (c) devote considerable resources to this inquiry and thus have a large store of knowledge; (d) collect, organize and interpret their knowledge in a constant effort to extract meaning from it for the purposes at hand; (e) employ this knowledge to illuminate /and perhaps modify) their values and goals as well as to advance them (Lane, 1966). Education, in this regard, has a function to distribute social

status. A function of distribution of status (Boudon, 1974; Sewell, Hauser and Feathermann, 1976; Teichler, Hartung and Nuthmann, 1980; Husén, 1987) in the sense that the achieved and certified educational level has considerable influence in opportunities of the individuals to access to material and immaterial resources, influence and prestige. The obtained education certification influenced the access to resources (material resources, influence and social prestige) providing new life-course opportunities.

Earlier discussion on the knowledge society and the role of education in the formation of the society illuminates present debates on the relationship between the society and education. The meaning of knowledge society today has been improved, and became more specific as a result of the economic and social transformation. Knowledge and information have become the foundation for the organization and development of economic and social activity. The knowledge society stems from the combination of four interdependent elements: the production of knowledge, mainly through scientific research; its transmission through education and training; its dissemination through the information and communication technologies; and its use in technological innovation. At the same time, new configurations of production, transmission and application of knowledge are emerging, and their effect is to involve a greater number of players, typically in an increasingly internationalized network-driven context. The emphasis is given to the relationship between knowledge production and the society through which an important agent to pursue this relation comes into mind. Given that they are situated at the crossroads of research, education and innovation, universities in many respects hold the key to the knowledge economy and society (Commission, 2003).

The university is traditionally and literally exists to create, expand and pursue knowledge driven through scientific methods. The relationship between a knowledge society and higher education is strong: First of all quantitative and qualitative correlation can be mentioned: Knowledge society needs more (and only) higher education graduates, and the graduates answer the needs and expectations of knowledge society in their qualifications which are gained through programs. Second, lifelong learning, which is provided by higher education institutions, is an element in a knowledge society. Third, knowledge is produced in higher education institutions via science and technology. Fourth, knowledge economy and knowledge industries are driven by the policies highly depending on higher education developments. Laurillard (2002) focusing on the curricula, asks two questions which universities should answer to respond the demands of the society in this process: the curriculum balances expert knowledge and practitioner knowledge; and the relevance of a degree course for a long-term grounding for an individual.

The focus of these concerns is related to curricula designs, teaching-learning processes, redefinition of aims and teaching methods and tools. In order to answer these questions

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universities may review their present system of curricula and teaching into more practicum-based teachings. "Reflective practicum" (Schön, 1987), for example, is a system where practitioners have to make sense of uncertain, unique, or conflicted situations of practice through "reflection-in-action". In this system learning by doing is recommended through, for example a studio, supervision, or an apprenticeship. Practice is learnable but not teachable by classroom methods, thus, coaching rather than teaching is necessary in reflective practicum. With this approach the focus of education becomes the individual in a knowledge society and thus a new language of education is introduced. This new language of education is dependent on the continuous diffusion of areas of state responsibility and an increasing reliance on the market economy as the sole defining characteristic for societal affairs. This is also a drift towards a neo-liberal ideology in education meaning a shift from being responsibility of the state to a responsibility of individuals themselves. For example, life-long learning means shifting responsibility for education and learning from the public sphere to the private and civil... life-long learning also means a shift of responsibility from the state to the individual (Säfström, 2005). In this transformation process the role of university is to link the requirements of industry, technology and market forces with the demands of citizenship as well as giving society a cultural direction and enable people to live more effectively in a complex world (Delanty, 2001). As in the emerging knowledge societies the relationship between industries, its occupational groups, and the state are changing; and this will change the organization of higher education systems in the direction of what public authorities, businesses, academic institutions and students define as their knowledge interests and what kind of alliances they will form in the future (Bleiklie, 2005). The university in the emerging knowledge society has been positioned in a standing role as the significance of knowledge grew and more and more people became interested in it (Rinne and Koivula, 2005). However, universities found themselves in a competitive environment where knowledge is produced by other educational and research institutions on the market which may function as the research institutions in science parks or the teaching function in virtual courses (Fuller, 2003). Modern higher education is oriented to the provision of high-qualified workforces for the public administration and public services as education, health services and public research.

In the last decades, a retrenchment of the public graduate labour market can be observed, which is accompanied by a growth of the private labour market. These increments the pressure to diversify the programmes of higher education in coherence to the more diversified labour market segments for graduate workers and incrementing the pressure to reinforce the vocationalism in higher education. The policy strategy to promote the knowledge economy based on high-qualified workforces concedes high relevance to higher education as one of its main pillar. The objective is to increment the active population with high education credentials. This trend will reinforce the above-mentioned trends to diversificate the higher education on the vertical and horizontal line. For European societies, the Bologna process generalising the three-cycle design of higher education can be interpreted as part of this diversification process as well as part of the process to vocationalize higher education (Krüger and Jimenez, 2008).

While expectations from and functions of higher education increasingly change to be a major actor in the development of knowledge society, higher education faces challenges emerging from their new role to create knowledge workers. With this assigned role, universities must respond to questions of social equity, new risks of social exclusion, and employability. In the face of these challenges, universities conceive new roles in the creation of knowledge society and at the same time they continue to fulfil their traditional role of providing future "knowledge workers" with the necessary knowledge and competencies to succeed in an increasingly competitive labour market and complex society. It is recognized that the role of universities within the knowledge society is changing in the changing economy in Europe and to the conditions under which they will be able to effectively play that role. It is stated that the development of knowledge society depends on its:

- Growth on the production of new knowledge
- Transmission through education and training
- Dissemination through information and communication technologies
- Use of new industrial processes or services (Commission 2003).

It is also emphasized that the European Union needs a strong university towards European Knowledge Society that is excellence in its universities to optimize the processes which underpin the knowledge society and meet the target to become a "world reference" by 2010. Furthermore, it is the goal set out in Lisbon of becoming the most competitive and dynamic knowledge-based economy in the world, capable of sustainable economic growth with more and better jobs and greater social cohesion.

Research Design

Research was designed based on the qualitative research approach in order to make a deeper analysis of the question

from the perspective of a larger shareholder group. The main assumption addressed "reality" as the subjects see it (Wiersma, 1995; 211-212). Reality here refers to the role of higher education in the development of European Knowledge Society. The objective of this process was to emerge a comprehensive, accurate description of the reality of European higher education from the perspective of those who experience it.

The research was conducted in three stages: 1) identification of research sites and participants, 2) data collection, 3) data analysis. The sites were selected (i.e., research institutions, international organizations) in six European countries as representative of the European Union countries (McMillan and Schumacher, 1993, p. 479). A snowball sampling technique (Marshall, 1996) was used to select the participants and organize the data. The researcher made an initial contact with five personsfrom universities in Vienna and Prague who were relevant to the research topic, and then through the focus groups these contacts provided further contact with others. In each focus group new contacts were gained for the following meetings and interviews. Thus 38 participants from universities (professors, lecturers, managers; HE experts, researchers, students) and 28 from nonuniversity organizations (public and private organizations, employer associations, research institutions), totally 66 people were reached at the end of the study (**III** Table 1).

The main data collection procedures were focus group meetings and interviews. A series of questions emerged from the focus group meetings improved the basic structure of the interview (■ Fig. 1). In each stage of the research data were developed and re-organized for the following step. The interviews and focus group talks were tape recorded. The modes of interviews were face-to-face, via telephone or skype. All interviews were tape recorded and then transcribed.

Collected data were reduced and organized using perception coding (Wiersma, 1995; 217) and interpretational analysis (Gall et al., 1996). These codes were used to accurately record participants' reported perception and understanding about the topic and patterns within the data to explain the phenomena. Descriptions of approaches, opinions and experiences were identified and coded in categories. Then similar concepts were combined to identify patterns across interviews.

The main interview questions were developed around the question of the role of the universities in the development of European Knowledge Society. Throughout the focus groups more questions were discussed as regards to *attitudes of the HE actors for reform, challenges the universities face, universities'* responsiveness to society and practices of HEs regarding curriculum

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Institution	Number of participants	Total
University and other HEIs	18 professors, 5 research assistants, 8 PhD students and interns, 7 undergraduate students	38
Organizations, associations, NGOs	4 UNESCO, 2 trade association, 5 NGOs, 5 research institutions	16
Public Institutions	3 ministries, 2 research institutions	5
Private institutions	4 project management company, 3 private consultancy	7
Total		66

change. In each stage these new questions were integrated to pose in the following interviews. Thus, addressing these questions, 66 participants from six countries were interviewed (I Table 1).

Four focus groups (**II** Table 2) were organized in Vienna (2), Prague (1), and Bucharest (1) in the universities. Participants from other countries were invited to the research sites. Focus group meetings provided data on the potential challenges confronting the higher education sector regarding its role and profile on European knowledge society.

During the interviews and focus group meetings respondents expressed themselves in terms defined by thematic components of the research and were encouraged to raise issues that were important to them. It was thus suited to attempt to discover respondents' own meanings and interpretations. Thus research questions were also developed and organized thoroughly.

Key Research Questions

The general research question posed in the beginning of the study was about the role of universities in the development of

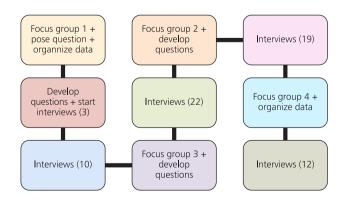


Fig. 1. Research design

European Knowledge Society. Throughout the focus group meetings more specific questions emerged about:

- Attitude change for reform to meet the needs of emerging European Knowledge Society.
- Challenges the European Universities face
- Universities' responsiveness to possible social risks and opportunities for the graduates.
- Institutional practices regarding curricula and governance which may lead to knowledge society.

Results

Data were categorized using a coding system. The categorization resulted into four subthemes: (1) attitudes about the role of the university in the development of the European Knowledge Society; (2) challenges the European Universities face; (3) risks and opportunities for graduates regarding European Knowledge Society; and (4) institutional implementations and examples.

The role of the Universities in the Development of the European Knowledge Society

Two significant trends in the views of stakeholders were emphasized in the interviews and focus group meetings. First, a number of participants stated that there need to be an attitude change for reform in the universities in the direction of global changes as well as science and technology. Policies and strategies for adjustment should be set up. There are initiatives and given examples; different levels of implementations are observed. These universities are organizing program reviews and setting up new strategies. In a university in Belgium, for example, positive attitude towards change leads reformative actions in the direction of new market and social demands. "The mindset is changing" a professor stated. "Current needs of social groups are considered. Reaching to larger groups through lifelong learning programs and increasing the amount of skills based and problem based programs were identified as main policies. The scope and content of the lifelong learning, skill based and problem based programs are being enlarged" (Interviews # 5 and 56).

Similarly, a number of participants stated that they observe their universities are open and responsive to social changes and adaptive to reforms. These universities view the university be the most important institution to materialize Lisbon Strategy and as the engine of the process towards a European Knowledge Society. Curricular reform is realized in relation to emerging knowledge society demands. Labour market searches, graduate tracking programs and community education programs are done systematically in such universities (Interviews **#** 56, 33 and 35).

Table 2. Focus group meetings

Location	Number of participants
Vienna	5
Prague	12
Bucharest	8
Vienna	10

Second view was represented by a more traditional approach. They agreed that there is an effort which shouldn't be ignored but the elite role of the university cannot be disregarded. It is the dilemma of the university's elite identity and the "university for mass education". Reforms for structural changes, answering market demands, issues on labour market are viewed as threat to university's elite role by the participants. A professor from the University of Vienna states "what makes a university different from other institutions is its elite role". "The professors in our university do not accept shareholders from the business sector in the curriculum committees" (Interview # 8). Another disagreement is "for some courses and programs they are informed and asked their opinions. Quite often it is done in an informal way, thanks to personal contacts of the teaching staff" (Focus Group 1). Participants stated that, for example, employability of graduates is not a subject because the university managements view the university does not bear such a function. As in the statements of a professor: We don't have such a function. University trains students but it cannot be job agent. We don't have capacity to follow our graduates and get feedback from workplaces. This is another work and a big thing to organize (Interview # 62). Majority of the participants stated that the future of the graduates is not in the agenda of the universities. The common belief is that the university is not responsible for the post-graduation period.

Correspondingly, emerging terms such as *market demands* and *skill-based training* were viewed as fashion and tentative by many professors. They believe that these "trends in higher education" will eventually replace with university's main elite role. As in the statement of a professor from a Polish University "universities want to be elite, they want to be academic rather than job providers" (Interview # 22, 30 and 32). Similarly, a university manager says: "European Knowledge Society is not an explicit concern for the university leadership and cannot be a university policy" (Interview # 30 and 42). Concerning an outlook and perspectives on the labour market and developments in the economy, some interviewees even proudly defended the lack of interaction with the shareholders: "Science and university education shouldn't focus

too much on demands of the labour market" (Interview #20) "We are responsible to transform society as a whole; it is possible to go through the curriculum without ever getting into contact with labour market" (Focus Group 2).

Majority of the non-university participants agreed that the university has an important role and must be the engine in the creation of European Knowledge Society. And this role should be consistent with relevant policies and transformation of traditional university structures. However, all participants recognized that in their present structure, many universities in Europe are hardly prepared for this change. A representative of an employer association criticized: "I don't think universities think much about what happens to their students afterwards" (Focus Group 1 and 2).

Majority of the university and some non-university participants agreed that universities in their present situation face too many problems to acknowledge major roles in a European Knowledge Society. Several reasons were stated. First, the university is disconnected to the society in which it exists; thus the problems of the society are not in the agenda of the university. They are too bureaucratic, and too slow to respond to the society. Second, university reform is needed but not the priority of higher education policies of the state. Certainly, big changes occur in the world and universities need to review and transform curricula. Most of the participants stated that universities do not adapt new strategies for the effective employability of graduates which could be done through curricular adaptations. Third, it was highly agreed that traditional European universities are dependent on the state and strategies are formed by national policies, and to the extent that government funding. A university professor stated "developments are dependent on creating means and money. Human and social capital are financial investments, universities have no capacity and autonomy for this" (Interview # 34). Similarly, a lecturer from Czech Republic states: "It's a question of capacities which we don't have right now. We want to start reforms but our opportunities are small" (Focus Group 1).

Challenges the European Universities Face

Regarding challenges the universities face, regional and global forces create additional pressure on universities. Many participants see the universities driven by external and superimposed forces – rather than following the pulse of dynamic development, or let alone driving and anticipating societal and economic trends by themselves. Perspectives were critical about the external forces: "We adjust the directives from European initiatives sometimes without understanding the reason behind". "Some concepts of the European Union are not realistic. But it's very sensitive to criticize it because it's a "peace project", so people often argue that criticizing the EU means criticizing peace" (Focus Group 3 and 4). Similarly majority of the university participants conceive Bologna Process as a challenge for the universities. A university lecturer said: "Bologna Process had introduced guidelines, structural changes and program reviews and changed a lot of things, but not the most important issues". For Lisbon Strategy, the results also showed that it was very "ambitious" and had no influence on the world of higher education at all. "It may have indirect impacts for structural changes but no spirit; and institutions do not know how to react and implement it" (Focus Group 3) emphasized a researcher. A ministry worker states his concern in "Educational systems should be periodically reviewed as they absorb a large portion of social funds, they keep students for many hours and yet we often do not know what the efficiency of time, money and students' efforts is" (Focus Group 2).

Risks and Opportunities for Graduates Regarding European Knowledge Society

Responses regarding the possible social risks, social exclusion and equal opportunities for the graduates showed that many universities are unresponsive to such needs and expectations of the society. Interviewees in general stated that these issues are not fundamental policies in the university. A professor stated "we do not need to develop strategy because authorities are convinced that the graduates are easily employed in the labour market" (Interview # 24, 25 and 33). In many universities main strategies focus on the implementation of Bologna Process and financial and managerial problems. The attitude is clear and sharp: Policies and strategies on social exclusion and social risks cannot be in the agenda of these universities unless the major problems are solved. "Social justice is not a concern for our university" stated a professor from a Romanian University. Regarding the internationalization of qualifications through curriculum review, almost all participants stated that they observe only small number of universities have such studies. "Rewriting curricula is changing the textbook", said one interviewee, "curricula are not focused on students and their employability, but on professors and their main fields" (Interview # 8 and 10). In particular, humanities are more vulnerable than natural sciences, and already now the "lowest incomes for young graduates are in education and health services".

There were regional differences in the views of participants in foreseeing possible social risks. For example, for the Romanian and Polish participants the future risk for the graduates is the persistence of gender discrepancies (more men, less women) in participation in higher education and labour market. However, for the Belgium case gender equality is already in reverse order; "we have more male students than males; and migration is not a risk but more risk comes with religion" (Focus Group 1 and 2).

Institutional Implementations and Examples

The level of implementations in different universities and regions is diverse. What is common to all is there is an attempt for curricular adaptations for one or another reason. Some institutions undertake structural changes as a requirement of Bologna Process. The instances are mainly the adaptation of ECTS, mobility programs, diploma supplement, recognition of diplomas, and involvement of students in management. On the other hand, in a Belgian University there are strategies consistent with national policies. There is a program that Belgium Ministry of Education encourages universities with an extra funding program to increase the number of Africans, Moroccans and Turks. Within the same trend, curricular reforms in bachelor and masters programs resulted in knowledge based society courses; contacts with professionals and market demands are regarded in restructuring the curricula. In the last five years the content of the courses methods are being changed in line with new demands from the society, technological developments and workplaces. More than 90 per cent of the graduates are employed after graduation. "We provide programs for lifelong learning, social mobility and flexibility and new programs for the graduates. We offer graduates specific work oriented courses" (Focus Group 3 and 4) says a department head. Similar examples can be found in other universities. For example, in a Polish university the curriculum boards are in contact with various professionals like accountants, tax advisors or real estate agents. In a Romanian university, in annual meetings strategies are discussed to improve the curricula considering the present job market supply and demand characteristics. "We do research constantly among human resources personnel of the companies asking about the desirable professional profile of an employee having higher education diploma" (Focus Group 4) explains a professor.

As for the discourse of knowledge society, majority of the participants stated that the term (European) knowledge society is not a term used in the university context i.e. boards, daily procedures, written documents, strategies. Similarly, related terms such as social exclusion, social justice, and social risks for graduates are not referred to (Interview # 3, 5, 18 and 22).

Once again discrepancies among institutions, nations and regions suggest cautious approach to make general judgments. In one case inadequacies lead the discussion as in the words of as professor "we don't have qualified teachers, human resources, skilled and knowledgeable ancillary people". In another case, a representative of a professional association states: "There should be committees in the universities to search for the market needs. Graduates are not answering the needs of industry and business. The jobs of future are informatics, molecular biology and genetic sciences, cognition management systems, and international finance, mechatronic and communication engineering. Universities should revise their programs to new demands." (Interview #17 and 19). The polarization is strong: While the professors are far away from considering the jobs of future focusing on the everyday problems of the university, a representative of society is addressing the jobs of future.

Conclusions

Several conclusions can be derived from the results: Firstly, national borders (legislation, funding, teacher and student populations, etc.) play a decreasing role in today's European universities. Most problems are transnational, and challenges are shared - and can partly be overcome by solutions only in international cooperation. The Bologna Process has been the main trigger for curricular change, starting from the three-tier structure, but also as it seeks to provide for an area of enhanced mobility for students and teachers in an atmosphere of increased transparency, trust and mutual recognition of qualifications among universities. Secondly, ICT enables the introduction of new teaching methods, but at the same time the risk prevails that ICT use (Internet platform, e-portfolios, e-learning, b-learning) is seen as being equivalent with new teaching modes. Clearly, new teaching methods still have to be developed and finetuned in order to allow for better yield of teaching and learning which are both electronic/distance-based and interactive. Many persons amongst the teaching staff at universities is in need of updating their teaching methods (beyond "lecturing"), but at the same time current lecturers are highly resistant to training and advise and perhaps - as some interviewees mentioned - "the problem will be solved by demographic change only". Students appreciate the new flexibility in time and space, and make extensive use of the offers provided online. Truly innovative learning settings are not yet general practice, but are implemented in certain study fields (Economics), by individual teachers, or at small and young universities (such as the Danube University Krems, Austria). Third, Lifelong Learning as a new major future task of HEIs, "might make necessary that universities devote the bigger sections of their programs to creating the lifelong learning environment which in return will create the responsive public". Although universities have been accused throughout history of living in the "ivory tower" (and still are accused thereof), interaction between university and society has been also permanent.



It is moving slowly on the continuum between scarce interaction and on-going integration of stakeholders. Finally, teaching and learning (and university reform in general) can not be separated from societal change. As representatives and embodiment, but in fact as a main tool for continuation and implementation, of the state and society, higher education can not move radically faster than society. Rhetoric and reality of reform and change often are at far distance. Teaching and learning paradigms change as social change advances-but with only a tiny timing advantage, preceding general development.

There are several reasons that the concept of European Knowledge Society has not entered in the agenda of the universities in Europe. First the political goal of EU on creating a European Knowledge Society has not been identified at national levels in the mentioned countries. Rather, the universities are envisioned to be the engine in the creation of the European knowledge society as they are accepted as key organizations to create knowledge, and mostly disregarding the problems of universities. Second, the concept of European knowledge society has remained as an ideological situation discoursed at the EU level. This ideology created the rhetoric of knowledge society which ideally can create and live with knowledge. A change may only be in rhetoric, in which case old values still prevail (Deem, 2001, p. 10; Ylijoki, 2003, p. 310). The political goal at the EU level has weaker connections to the reality of higher education policies at national levels. Thus national institutions address these issues creating their own strategies for a common EU goal. National culture is another factor influencing attitudes and depriving universities from being self-directed institutions. In many cases domestic politics downplays the importance of challenges which are posed by global developments. Bologna Process introduced structural changes. Still some regional and traditional structures are resistant to this change. Centralized systems, traditional university structures, ex socialist approaches might be still effective in decision making mechanisms. On the other hand good examples of national policies can be highlighted. In the Finnish case for example, in creating the knowledge society the strong role played by the state is rooted in four forms of legitimacy that is political legitimacy comes from the democratic political system, social legitimacy is gained through the social policies and wealth distribution of the welfare state, cultural legitimacy developed during the national project when Finland emerged as an independent nation state and economic legitimacy is gained because state supports the development of the market and aims to develop its informational infrastructure (Valimaa and Hoffman, 2008). Higher education systems of EU countries can be adapted such structures relevantly to their situations.

Given the shared view on the university's role to promote the creation and continuation of knowledge society, the big diversified mosaic of institutional culture and regional differences within Europe is viewed. As a general perspective universities are ready to be an engine for the creation of knowledge society. However, the level of preparedness for change also differs not only at national and regional but also at institutional levels. This diversification in the results rarely allows us to make comparison and generalizations. For example, universities in Northern and Central Europe are viewed more responsive and affluent in making decisions while universities in Eastern and Southern Europe remain traditional and less flexible as well as more dependent on central governments and national policies.

An undesirable case is with the strong belief on the elite role of the university which leaves no space for change and reform in the direction of promotion of knowledge society. In these cases knowledge society is not the subject of the university; rather the university is stuck to its own problems, economic, bureaucratic and managerial being too dependent to a higher authority. Academics have no commitment to the university: many academic staff works outside to subside their salaries. As the universities have no future vision and commitment to transformation, they have no power to influence the society, political will and economy. However, the global and external developments result in the challenges.

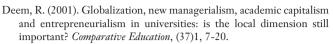
Global changes pressure universities to identify new tasks to overcome the strong separation between education and professional training and to start engaging in sub-standard (sub-HE) education levels, like vocational qualifications. Again, universities are to undertake and deliver research which is no longer irrelevant to labour market developments and to anticipate and counter-act existing and potential social exclusion for their graduates. The question is in what direction the universities of Europe are going to be transformed in amid of global and regional forces; central governments/national policies; the society and the academia.

Findings confirm the opaque and diversified picture of many universities still not fully in line with and implementing Bologna Process and Lisbon Strategy not only formally, but also in spirit; few, however, made best use and used Bologna Process to improve and fine-tune their own planning processes and quality assurance means. Global and regional influences (such as Bologna) are regarded as opportunities to solve the problems of the universities, mainly undertaking reformative changes in structures, cooperation and financial support. Many universities still struggle with the difficulties and challenges of the new environment and policy, and the ensuing social risks. In conclusion, a change in attitude and culture takes too long time to be fully responsive to the changes in society. Society is changing faster than the university. Non-university organizations are more responsive and adaptable to social changes. University tradition is strong and becomes an impeding factor in front of change and reform. There is a need to balance between the academic activity and the society. Still, and too much, universities arrange for reform and revision relying only on their internal resources and information. Undoubtedly, universities are in a transformation process; some of them dedicate to transform, however this "dedication is rigorous but not relevant" as remarked in the interviews.

In order to live up to the challenges and to answer the question how can a random university act to be responsive. New management strategies should allow diverse institutional forms between and within universities; focus less on administration, more assessment of added value when implementing the Bologna requirements; create effective feedback mechanisms with all stakeholders; act proactive rather than reactive; install project-based, flexible management; establish an operational budget for acquisition and innovation; and extend cross-national educational cooperation and making it intensive and innovative. Strategies for autonomy for flexible training; evaluation for transparency; inclusion of disadvantageous groups for social inclusion are also necessary strategies the universities in Europe should address. Accordingly to close the mismatch between qualifications sought and qualifications available, study programs should include social and problem solving skills development; and training of flexible individuals in mind and thought.

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