HEGESCO

**Higher Education as a Generator of
Strategic Competences (HEGESCO)**

**Report on the Qualitative Analysis of
Higher Education Institutions and Employers in Five Countries:**

Development of Competencies in the World of Work and Education

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Abbreviations

- HE .... Higher Education
- HEGESCO .... Higher Education as a Generator of Strategic Competences
- HEGESCO contries… Countries included into the field survey: Hungary, Lithuania, Poland, Slovenia and Turkey
- REFLEX .... Higher Education as a Generator of Strategic Competences
- ICT .... Information Communication Technology
- NMCS.................. New Member and Candidate States of the European Union

Logic of Codes of Quotation

First two letters are referring to countries:
HU…………… Hungary
LI…………….. Lithuania
PL……………. Poland
SI ……………. Slovenia
TR……………. Turkey

Third letter indicates the implementation of interview in employer organisation or HE institution:
H…………. HE institution
E…………. Employer

The first number in the code indicates number of interview in particular country, so for example:
HUH1….. Hungary, HE institution, Interview number 1

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CHAPTER 1: Introduction

In recent times there has been a shift in social attitudes towards a large spectrum of professional workers and their training. In this process, examining the relation between general and specific competencies and the role of formal educational programmes in their development seems to have become a central issue of political concern in the field of education and the labour market. Traditional claims that the development of professional competencies urgently requires strong links to knowledge abstraction and scientific structuring are currently under test. In the interplay of actors responsible for the development of competences, policy makers and society at large seek answers to what extent the theoretical background gained during education enables later professional performance or transition from higher education to the labour market.

This issue can be encompassed by linking somewhat fragmented research areas, such as a) permeability between secondary and tertiary education and the relevance of the social background, b) the development of competences during tertiary education, c) the development of competences at work, and d) transition from tertiary education into the labour market and early career. The general framework of this report has been drafted in the intersection of these areas. This report explores the following key issues in a comparative fashion between *higher education institutions* and *employers* in Lithuania, Poland, Hungary, Slovenia and Turkey:

First, which are the key competences for graduates to function well in the work place and in society (Chapter 3)?

Second, which actors are mainly responsible for competence development (Chapter 4)?

Third, what is the balance between generic and specific competences, which are more important for the employability of graduates and how do employers experience the overall level of graduates' competencies (Chapter 5)?

Fourth, which are the most important teaching and training modes in higher education and the labour market for the development of these competences (Chapter 6)?

Fifth, which are the most important means of collaboration between employers and higher education institutions for competence development (Chapter 7)?

Sixth, which quality control mechanisms most importantly strengthen the development of competences (Chapter 8)?

Seventh, which path should higher education systems take to foster the development of competences (Chapter 9)?

All aspects resemble the key research questions that were raised in the large scale graduates survey among approximately 45,000 graduates five years after graduation in 19 European countries conducted in the REFLEX[1] and HEGESCO[2] projects. Upon the basis of 150 interviews

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[1] Short for Flexible Professional in a Knowledge Based Society. See www.fdewb.unimaas.nl/roa/reflex/

among higher education institutions and employers in the five countries studied, this report introduces three important elements.

First, the syntheses of interviews are integrated into general frames following the aims of particular chapters. These frames on their own present an important reference point related to key questions that are raised in each chapter. Moreover, the presented frames are also further used as an analytical tool studying the views of higher education (HE) institutions, employers, and to some extent the particularities of the countries studied.

Second, in the process of the analysis we identified "relevant issues". These elements were not included in the analytical framework or in the analysis, but were used as material for interpretation and contextualisation of results. At the end of each chapter we have provided a list of relevant issues identified in the interviews, as they might be considered important material for further follow-up studies even though their frequency did not provide a suitable basis for standardisation and comparison. *Third*, in Appendix 3 we present the summaries of all 150 interviews as we consider them an important complement to the general results.

In a nutshell, the results of the report follow two main research questions. The first is to explore how large the bias is between HE institutions and employers in the way they perceive the importance of competences, the means of their development and early transition of graduates from HE into the labour market. Within the frame of the HEGESCO project, a special short report was conducted that particularly addresses comparability aspects between this report (higher education institutions and employers) and a large scale survey among graduates. Secondly, the possible application and understanding of the general frameworks and results of analyses presented in the report might provide an important reference point in terms of strategic planning and follow-up research and activities related to HE and labour market systems.

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[2] Short for Higher Education as a Generator of Strategic Competences. See http://www.hegesco.org.

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CHAPTER 2: A Short Description of the Report's Methodology

This report is based on a carefully selected methodological approach designed in such a way to best complement the large scale survey among graduates conducted in the REFLEX and HEGESCO projects. In this way it follows triangulation principles[3] where the main common ground between a) qualitative and quantitative research and b) comparing different target groups are the main concerns. The general assumption therefore is that utilization of different research methods trengthens the objectivity of measurement, which is particularly hard to grasp in social sciences.

The aim of this chapter is to present all main steps in which the interviews with HE institutions and employers were codified into database which provides suitable ground for comparing views of employers and HE institutions so they can present a reference point to the large scale survey among graduates. The following methodological steps related to this survey were conducted in the Hegesco project.

1. Expert workshop for identifying the main survey issues: An expert workshop was undertaken during the Hegesco project meeting at Hacettepe University, Ankara, in January, 2009. Since almost all partners were experts in fields related to graduates' competence development (including the REFLEX coordinator) it was possible to adequately identify the main research questions related to graduates competence development in the way they retain its current political relevance, possible comparison of key research issues of the large scale survey among graduates of the REFLEX and HEGESCO projects, and sufficient comparison between HE institutions and employers. The initial ideas in these procedures were related to an assessment of acquired competencies, the identification of tools for competency development, an assessment of the key teaching practices, and issues related to HE strategy and quality management. The final structure of research questions and issues is provided in Appendix 1 of this report, while the major research structure is reflected in this report's table of contents.

2. Research plan and sampling: Already during the expert workshop (see point above) elaboration of general research and sampling plan started with an agreement that the survey will be performed in 5 New Member and Candidate States (NMCS) countries, namely Lithuania, Poland, Hungary, Slovenia and Turkey (we have labeled them as HEGESCO contries). In each country 30 structured interviews were foreseen, 15 among HE institutions and 15 among large employers. Human Resource Managers were considered as the most desirable interviewees in employers' organisations, while in HE, experts of Rectorates or members of Faculty management were envisaged as they would have knowledge of broad fields of study. Following the agreed premises all partners were requested to provide a detailed sampling plan for their country. All sampling plans included key elements, such as the name of the institution, the foreseen interviewee, a draft invitation letter in national languages, the name of the person who would perform the interview, a transcription plan (see the point below) and a time plan. For each

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[3] Denzin, N.K. (1978/1989): The Research Act. 3rd edition. Englewood Cliffs: Prentice Hall.

proposed unit we also agreed to provide data concerning a) the type of HE institution/employer organisation, b) the total number of students/employees, c) the main field(s) of studies/sectors, and d) the region and location. The HEGESCO partner countries elaborated a plan that to a certain extent corresponds to national particularities.

3. Survey implementation: Based on the consortium's agreement a general question framework was provided to each partner (see Appendix 1). When the interviews were complete, each partner was asked to codify the interviews in national languages to each of the nine questions and to prepare a short integral summary. After national transcription, each partner did a high quality expert translation summary into English. Carefully conducted English proof-reading was envisaged before the material was sent to the coordinator for codification. The requested summaries were provided for each question separately and the integrative summary was also included at the end. Following the methodology behind the employer and higher education representative's survey, the data collected in each interview underwent the same process in each country. The field work took place between February and May, 2009.

Even though of interviews were structured, each individual interview was carefully planned so that partners could acquire the necessary knowledge of the particular institutions in which the interviews would be held. Interviewers also had appropriate skills for conducting this form of survey. In order to safeguard the desirable quality, partners were asked to furnish the coordinator and the most experienced members of the consortium with the first three interviews. When necessary they received feedback with a request for further improvements.

4. Standardisation of values: Once the coordinator acquired all interviews from all partner countries (150 interviews in total) the process of standardising values began. The standardisation was performed sequentially for each of the nine answers. Following the standardisation procedure each question set was treated in a different way so the final result of this step ended either with a framework of standardised values or with a simple evaluation scale.

5. Codification procedure and the aggregation of values into frameworks: Once all frameworks or evaluation scales were developed, the research team proceeded with the codification of answers producing comparable results. This step was performed in close contact with partners. The outcome is clearly reflected from the content of the report in the following chapters. In cases when frameworks were developed, the codification procedure was conducted in such a way that it identified data with the most detailed standardised element corresponding to the meaning of the identified element and the context in which it appeared. Afterwards some elements were further clustered into aggregated values based on a sequence of workshops and contacts among the most experienced members.

6. Data analysis: Standardised values were entered into an SPSS database in such a way that each single unit (HE institutions or employer) incorporated standardised values (0, 1) and values related to the country and HEI or employer unit, which allowed multiple possibilities for data analysis. Owing to the relatively small number of respondents mainly descriptive statistics prevail in this report.

7. Review of survey elements: This qualitative survey enables different research possibilities. In this report we mainly presented and interpreted the results that were produced out of the analyses described in this section. However, we also furnished this report with two additional elements retained from the analysis. The first are relevant issues identified during the data analysis, which are integrated into each chapter as an elaboration of findings and/or in the review boxes at the end of each chapter. The second is related to the relevant summaries of all 150 interviews which can be found in the Appendix 2.

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CHAPTER 3: Key Competences of Graduates to Function Well in the Workplace and Society

3.1 Introduction and Framework

This chapter explores which are the most important competences for graduates to function well in the workplace and in society in general, as reported by higher education institutions and employers in the five countries studied. Upon the basis of the results of the fieldwork, Table 3.1 presents the general classification framework. Three levels of aggregation are demonstrated from the most general level (one digit on the left hand side) to the most detailed elaboration (multi-digit level on the right hand side).

Table 3.1: Framework of key competences as reported by HE institutions and employers

1. MASTERY AND FIELD SPECIFIC KNOWLEDGE	1.1 Mastery – general aspects 1.2 Field specific knowledge 1.3 Other aspects of mastery and field specific knowledge[a]	*1.1.1 Mastery of field or discipline; 1.1.2 Utilization of theory; 1.1.3 Analytical thinking; 1.1.4 Problem solving* *1.2.1 Technical specific; 1.2.2 People specific; 1.2.3 Teaching specific; 1.2.4 Economy and business specific; 1.2.5 Legal specific; 1.2.6 Other aspects of field specific knowledge[b]*
2. LEARNING RELATED SKILLS	2.1 Learning - general aspects 2.2 Self learning & development 2.3 Continuous learning	*2.1.1 Acquiring new knowledge* *2.1.2 Alertness to new opportunities* *2.1.3 Question others (ability to)* *2.1.4 Other aspects of learning[c]*
3. PERSONAL PROFICIENCY	3.1 Personal proficiency – general aspects 3.2 Team work 3.3 Time management	*3.1.1 Adaptation to new situations and flexibility; 3.1.2 Coordination of activities / organisation skills; 3.1.3 Motivating oneself and others; 3.1.4 Decision making; 3.1.5 Intercultural skills; 3.1.6 Creativity/new ideas; 3.1.7 Other aspects of personal proficiency[d]* *3.2.1 Team work – general aspects* *3.2.2 Leadership* *3.3.1 Time management – general aspects* *3.3.2 Ability to work under pressure*
4. COMMUNICATION SKILLS	4.1 Communication skills – general aspects 4.2 Speak and write in foreign languages	*4.1.1 Communication - General aspects* *4.1.2 Writing skills* *4.1.3 Oral skills* *4.1.4 Reading and understanding*
5. ICT SKILLS	5.1 ICT - General aspects 5.2 ICT – Specific aspects	
6. OTHERS[e]		

a) The most typical examples: understanding of international processes; ability to work in interdisciplinary fields; ability to have the basic knowledge in the field of study; appropriate practical skills from the given field of study…
b) The most typical examples: knowledge of sociology; specific methodological knowledge; terminology; use of drugs…
c) The most typical examples: modify herself according to changes in the working environment; to accommodate to new environment and developments in the field of study; ability to cope in new situations …
d) The most typical examples: ability of understanding processes; ability of abstraction; logic; curiosity; personal responsibility; honesty; reliability; drive for success; stamina; trustworthiness; tolerance; independent acting…
e) The most typical examples: experience; business culture; political loyalty; tolerance; self esteem; ethical values; procedural skills; research skills, …

This chapter, this chapter is split into three main sections. *First*, we compare results by the 6 major categories of competences as they are presented in the Table 3.1. In a country comparative manner we exploit their importance from the point-of-view of HE institutions and employers, respectively. Second, we look deeper into the main categories of competences and

present findings at the medium aggregation level, where we take into consideration 15 competence categories (see central column of Table 3.1). Third, we focus our attention on the competence cluster "Personal proficiency", which appears to be the most central competence item in our analysis.

3.2 Key Competences of Graduates - General Perspective

We start this section by exploring which three competence clusters are the most important in the five countries surveyed. The results are presented separately by HE institutions and employers. On average we can see a consensus between HE institutions and employers. In both cases personal proficiency appears to be the most important competency cluster, followed by mastery and field specific knowledge and communication skills.

Table 3.2: Most important competences' clusters, by countries/HE & employers

	Lithuania	Poland	Hungary	Slovenia	Turkey	Total
HIGHER EDUCATION						
Mastery and field specific knowledge	2	2	3	1	2	2
Personal proficiency	1	1	2	2	1	1
Communication skills	3	3	1	3	3	3
EMPLOYERS						
Mastery and field specific knowledge	3	3	2	2	3	2
Learning related skills	2					
Personal proficiency	1	1	1	1	1	1
Communication skills		2	3	3	2	3

Competences which relate to individual aspects of personal proficiency are the most important competences in both groups. Examples of these competences include the ability to adapt to new situations, coordinate activities and reach decisions, teamwork skills, leadership and the ability to work productively with others, time management skills and the ability to work under pressure (see the central and right hand side column in Table 3.1 under the cluster personal proficiency).

The second most important competence cluster relates to the mastery of certain fields or disciplines. Following the general framework, this category includes the ability of graduates to use their professional expertise. Examples of this item include the ability to use theories or solve discipline specific problems, or it relates to general knowledge of specific fields such as dealing with technical equipment, and specific tasks pertaining to people, teaching, economy and business, and legal fields. The third most important competence relates to different aspects of communication, such as writing and oral skills or reading and understanding.

From the perspective of HE institutions in individual countries, Hungary and Slovenia differ from Lithuania, Poland and Turkey. In Slovenia, competences relating to mastery and field specific knowledge are viewed as the most important, while in Hungary, communication skills, which includes the ability to speak and write in a foreign language as well as literacy skills in the mother tongue, are viewed as most important.

When examining trends at the national level from the point-of-view of employers the picture is more diverse, although consensus still exists in all countries that skills relating to personal proficiency are the most important. Communication skills and those relating to mastery are either second or third ranked in all countries with the exception of Lithuania. Employers in Lithuania state that competences relating to the ability of graduates to learn, which includes aspects of self-development and the acquisition of new knowledge, is the second most important competence cluster.

When looking at the data presented in Figure 3.1, a high degree of consensus exists between employers and higher education institutions about the importance of all studied competence clusters. The categories mastery knowledge, personal proficiency and Information Communication Technology (ICT) skills all correlate very closely. However, HE managers place a slightly greater emphasis on communication skills, learning related skills and ICT skills than employers.

Figure 3.1: Percentage of HE & employers' units who consider the selected competences as most important for graduates to function well at workplace and in society, by HE/employers
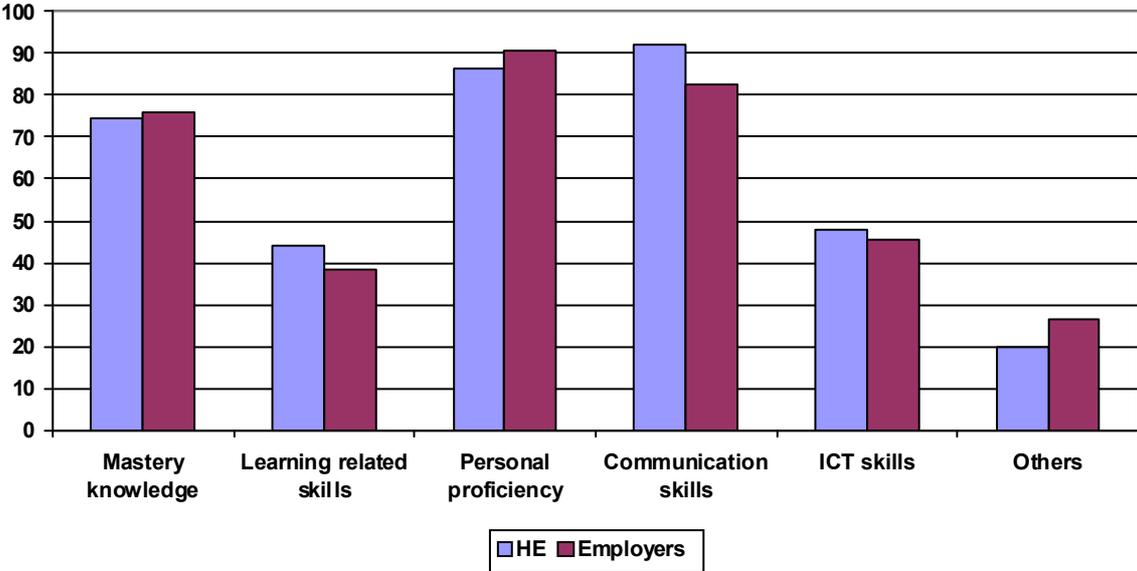
Communication skills see the largest variance between the different groups of respondents with almost ten percentage points separating the relative importance that employers (83-percent) and higher education managers (92-percent) place on these skills.

Whilst ranked the lowest skill set in terms of importance, the category "Others", which includes responses that were either miscellaneous or deemed to be more personal qualities or values, also sees some variance in comparison to other competence clusters. The competence cluster "Others" will not be discussed further in this report as these items demand a study on their understanding mainly focusing on competence aspects that respondents are not aware of. This would require a very different approach.

3.3 Key competences of graduates – detailed perspective

In this section we look at competences in more detail (the central column in Table 3.1 at the beginning of this chapter). First, we examine which three competences categories were reported as the most important by HE institutions and employers in a country comparative fashion. Second, we look at the average of all countries where we study differences between HE institutions and employers.

Table 3.3: Most important competences, by countries

	Lithuania	Poland	Hungary	Slovenia	Turkey	Total
HIGHER EDUCATION						
General aspects of mastery knowledge	2	2		2	2	2
Field spec. knowledge		3	3			
Learning-general aspects	3					
General aspects of personal proficiency	1	1	2	1	1	1
Team work	3				3	
Time management						
Communication skills		3	1	3		3
ICT general	3					
EMPLOYERS						
Field knowledge		2	2	2		
Learning-general aspects	1					
General aspects of personal proficiency	2	1	1	1	1	1
Team work	3	3		3	2	2
Communication skills			3			3
Foreign language		2			2	
ICT general					3	

As can be seen in Table 3.3, higher education considers general aspects of personal proficiency as the most important competence group. This cluster encompasses items such as adaptation to new situations and flexibility, coordination of activities and motivating oneself and others (see Table 3.1). The second most important competence as viewed by higher education institutions is represented by general aspects of mastery knowledge, which relates to the utilization of theory, analytical thinking and problem solving. Field specific knowledge, which encompasses knowledge in the technical, teaching, economic and legal fields, is also regarded as important in two countries. General communication skills are the third most important competence cluster. Less frequently reported competences for higher education managers include: self learning and continuous learning, time management, foreign language and specialist ICT skills.

When looking at key competencies from the perspective of higher education at the country level, personal proficiency takes first place in all countries with the exception of Hungary. In all countries mastery and field specific knowledge remain the second most important set of skills for graduates, again with the exception of Hungary. In Hungary, the most important competencies for graduates are regarded as communication skills followed by personal proficiency.

Considering the average ranking of employers, general aspects of personal proficiency again appear to be the most important group of competencies. Those skills that would allow graduates

to work as part of a team are second most important. Communication skills are ranked third. Less important competences for employers include: mastery knowledge, self learning and continuous learning, time management, and specialist ICT skills. In this sense, we can see quite some similarities with the view of higher education.

At the individual country level we can see that field knowledge appears to be very important for Polish, Hungarian and Slovenian employers. Graduates possessing the ability to work in a team are important for employers in Lithuania, Poland, Slovenia and Turkey. Turkey and Poland are two countries in which the least degree of consensus exists. For Turkish employers (besides general aspects of personal proficiency), team work, foreign language skills and ICT skills are important. While for Polish employers, field knowledge and foreign languages are ranked higher than teamwork skills. From the point-of-view of a comparison between higher education institutions and employers, Lithuania is the most diverse country where the least degree of consensus between these two groups exists.

Figure 3.2 presents a similar issue to that presented in Figure 3.1. However, it draws upon a more elaborated spectrum of competences, but omits country differences. General aspects of personal proficiency are the most frequently reported by both HE managers and employers (69-percent and 78-percent respectively). The second most frequently reported competence cluster for HE relates to general aspects of mastery knowledge (71-percent), while employers mention teamwork skills as the second most important cluster of competences (56-percent). Team work, communication skills and the ability to speak a foreign language were also considered as the most important with very minor differences among HE institutions and employers.

Figure 3.2: Percentage of HE & employers' units who considered the selected competences as most important for graduates to function well at workplace and in society
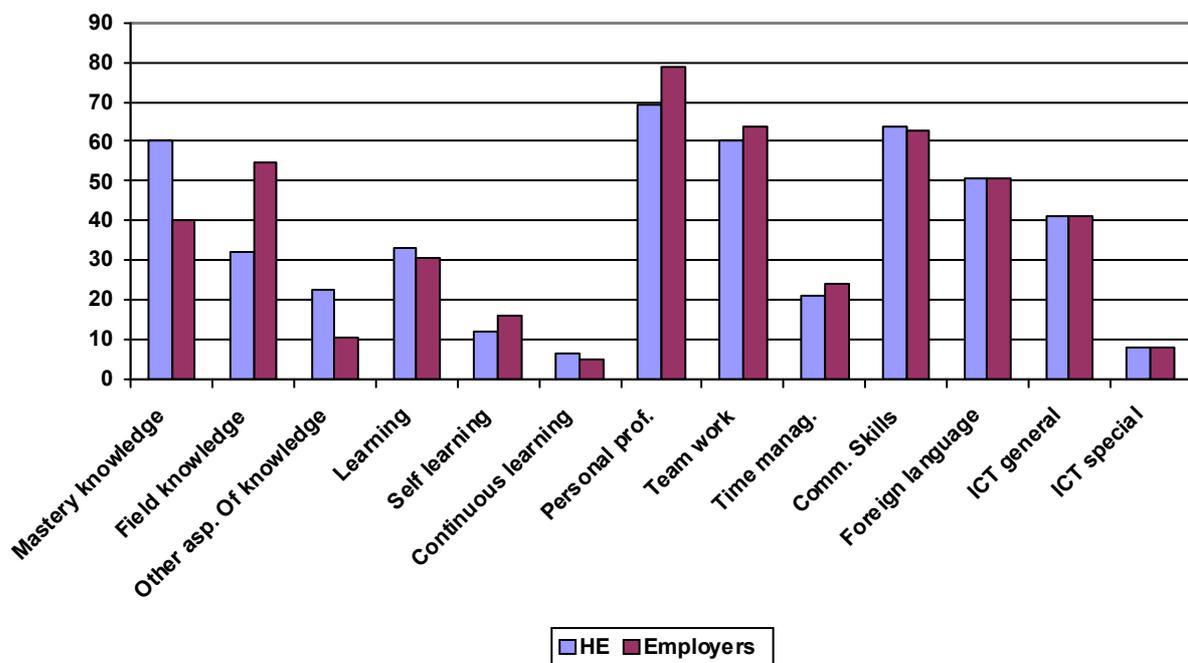
When comparing employers and HE institutions' views about the importance of competences, an interesting observation is that HE units place stress on general aspects of mastery knowledge

while employers place emphasis on field specific knowledge. Similarly, HE managers also more frequently reported communication skills as an important competence, while this is only mentioned as the most important skill in Hungary. Another minor difference can be seen in "personal proficiency", where employers place somewhat greater emphasis on the ability of graduates to function as part of a team than their counterparts in HE.

3.4 Key competences of graduates – personal proficiency

Personal proficiency has been reported from HE institutions and employers as the most important competence cluster. As can be seen in able 3.4, this cluster links a large variety of highly personal related abilities, such as the coordination of activities, organisation skills, decision making, creativity, teamwork and others. In table we study which three items in the personal proficiency competence cluster were reported as the most relevant for young graduates.

Table 3.4: Most important competences in personal proficiency sub-subcategory, by countries

	Lithuania	Poland	Hungary	Slovenia	Turkey	Total
HIGHER EDUCATION						
Coordination of activities/organisational skills	3				3	
Decision making				3		
Intercultural skills	2					
Creativity/new ideas	1		2			3
Other aspects of personal proficiency		2	1	1	2	2
Team work – general aspects	2	1	1	2	1	1
Leadership		3	3			
Ability to work under pressure		1				
EMPLOYERS						
Motivating oneself and others			3			
Decision making				3	3	3
Creativity/new ideas	2					
Other aspects of personal proficiency		2	1	1	1	2
Team work – general aspects	1	1	2	2	2	1
Leadership				3		
Time management – general aspects	3					
Ability to work under pressure		3				

In HEGESCO countries, HE institutions on average rated general aspects of teamwork as the most important competence for graduates to possess. This is followed by other aspects of personal proficiency, which, for example, includes "*having social skills*" [HUH13], "*entrepreneurship*" [TRH7] and a "*drive for success*" [SIH3]. The third most important competence is the ability of graduates to be creative and possess the ability to come up with new ideas and/or solutions. The least important reported competences for HE institutions in this competence cluster are adaptation to new situations, flexibility, motivating oneself and others, and time management.

From Table 3.4 we can see quite some consensus among countries. In all five countries general aspects of teamwork were reported as the most important competence with the exception of Lithuania, where creativity and the generation of new ideas are considered as the most desirable

feature in graduates. In Poland, the exposed competency was also the ability to work under pressure, which was not reported as much in other countries.

When looking at employers, general aspects of teamwork and an ambiguous group of different aspects (Others) were again reported as the most relevant. Examples of other aspects of personal proficiency for employers include "*use abilities quickly*" [TRE5], "*tolerance*" [LTE1] and "*independence*" [PLE2]. Finally, the third most important competence for graduates relate to decision making skills that were not considered as important in the case of HE institutions.

Accordingly, the least important competences in the personal proficiency competence cluster for employers are: adaptation to new situations/flexibility, coordination of activities/organisational skills, intercultural skills and general aspects of time management.

3.5 Conclusion

This section explores which are the most important competences of graduates in the early transition from HE to the labour market. In line with the main competence framework presented in the beginning of this section, we identified the following clusters:

> *a) mastery and field specific knowledge;*
>
> *b) competences related to learning; major distinctive subcategories identified are self learning and development and abilities of continuous learning;*
>
> *c) personal proficiency; major distinctive subcategories identified are team work and time management;*
>
> *d) communication skills with foreign language as the main distinctive subcategory;*
>
> *e) ICT skills.*

This framework is to some extent coherent with the Dublin descriptors[4] (general knowledge gained during formal education, ability to apply professional knowledge, interpretation and reflection of knowledge, communication and learning skills) and less with the Tuning framework[5] of generic competences. This is mainly due to different methodological approaches with regard to focusing on competence complexity rather than different phenomenological elaboration.

The framework in this report also differs from the general competence framework demonstrated in the Reflex project (professional expertise, functional flexibility, knowledge of other fields or disciplines and innovation and knowledge management). Nevertheless, we can see competence frames as complementary and not contradictory to one another; but the main conclusions drawn in this chapter are linked only to our own methodological constellation.

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[4] See http:// http://www.jointquality.nl/
[5] See http://unideusto.org/tuning/

Agreement on the importance of competences among HE institutions and employers

One of the key findings in this chapter is an indication of a large degree of coherence on the importance of graduates' competences from the perspective of HE and the world of work. In all five main categories of competences (personal proficiency, communication skills, mastery and field specific knowledge, learning related skills and ICT skills) the perspective of HE institutions was very similar to that of employers. Among HE institutions and employers personal proficiency was found to be the most important competence in all studied countries, followed by mastery and field specific knowledge and communication skills.

Agreement on the importance of competences among HEGESCO countries

As with the point above, the similarities between studied HEGESCO countries appeared to be more striking than differences. Following this line, we can draw certain speculations whether or not it is possible to develop a certain typology of graduates, or at least their country specific desirability from the side of employers and HE institutions. Such speculations would include:

- *Lithuanian graduates are expected to be creative with good intercultural skills, able to work in a team and coordinate or organise their own activities. This closely corresponds to what employers in Lithuania are looking for in graduates in order for them to function well in the workplace.*

- *HE representatives in Poland believe that graduates should possess the abilities to work under pressure and work with others. They should also have other aspects of personal proficiency and they should demonstrate leadership. With the exception of leadership skills, these competences are exactly those skills which are deemed most important by Polish employers.*

- *Hungarian HE management state that they believe team work skills and other aspects of personal proficiency are the most important competences graduates should possess followed by creativity and leadership skills. Employers however desire motivated graduates more than those that are creative and show abilities that are related to leadership.*

- *In Slovenia, HE representatives argue that graduates should be able to make decisions, be personally proficient and they should be able to work in a team, which is a view that is shared by employers. The only other demand made by employers is that leadership skills are also important skills that graduates should possess.*

- *HE representatives in Turkey have stated that they believe graduates should have abilities that relate to the coordination of their activities or organisational skills and they should be able to work in a team. The only demand made by employers that contradicts the view of HE is that instead of being able to organise, it is more important that graduates have the ability to make decisions.*

General and professional competences as a context to one another

Even though the main focus of this section was primarily oriented towards identifying the most relevant specific and generic competences, the importance of their inter-linkage was stressed during the field work in HE in particular. Some examples of this relation are:

> "*General skills have to be supported by specialist skills which are related to various areas of qualification acquired by students*" [PLH11].
> "*It is this general competence that allows the acquisition of specialist competences and reacting to ever changing expectations*" [PLH9].
> "*Related courses and learning activities should be augmented to the curricula to link the generic competences to professional specific ones*" [TRH5].
> "*To have the basic knowledge and skills about the field of study together with well developed generic competences would enable the graduate to be productive in society*" [TRH8].

These assumptions stipulate several new research challenges that were addressed only partially so far. The first is related to the question to what extent work tasks present the context of competence utilization or development. Secondly, it would be worth exploring to what extent generic competences present to one another the context of their development (e.g. team work as a generator of the ability to work under preassure). Third, should also explore whether certain competences are of such a nature that they cannot be developed at all in an educational environment. Lastly, also the question of whether HE institutions should emphasize ready made skills of graduates or they should prepare them for a lifelong career is related to the polarisation between general and specific competencies.

The relative importance of clustered general and specific competences

One of the overall impressions from this chapter is that HE institutions and employers alike perceive general competences slightly more desirable in young graduates than specific competences. This is a bit surprising since general competences are usually not explicitly incorporated into HE curricula. During the fieldwork we experienced numerous statements supporting this claim:

> "The ability *to present reports or documents to an audience became important over the last decades; students lack it, therefore a special importance is paid to develop this ability in the HE institution*" [LTH12].
> "*It is important that graduate would not only be able to discuss various topics but to mobilize him/herself and get into work*" [LTE6].
> "*In general, generic competencies are becoming more important*" [LTE8].
> "*The ability to make own meaning clear to others is even more important than mastery.*" [LTE15].
> "The *ability to learn quickly is a new job requirement. Life long learning is an important part of this process*" [TRE4].

However, the importance of professional expertise and field specific knowledge was not neglected, and in more vocationally oriented units of HE (in particular medicine and ICT are such examples) these skills appeared to be clearly more important in comparison to general competences:

> "*For a graduated person a proper vocational knowledge is essential*" [HUH4].

"*Medical education has really special professional competences, because medical science is extremely diversified*" [HUH15].

"*It is essential that doctors possess more than professional knowledge, they should have a broad view*" [HUE11].

"*On the basis of a different range of duties, technical knowledge is expected to be gained high during university education*" [HUE14].

In conclusion we can draw a question to what extent the indicated patterns of competence frames are stable across fields, sectors or economic cycles. As one interviewee reported, "*it is difficult to say if any competences can lose its meaning over time and become obsolete or any surplus of competences can be treated as an advantage*" [PLE2]. It is very likely that the frame we provided in this chapter needs to be elaborated in particular study program.

Box 1: Some relevant issues reported by *HE institutions* related to graduates' key competences

- The ability to present reports or documents to an audience became important over the last decades; students lack it, therefore a special importance is paid to develop this ability in HE institution [LTH12].

- HE institutions do not focus enough on general competences [HUH1].

- For a graduated person a proper vocational knowledge is essential [HUH4].

- Medical education has really special professional competences, because medical science is extremely diversified [HUH15].

- General competences allow for the acquisition of specialist competences and reacting to ever changing expectations [PLH9].

- The most important competences useful for a graduate entering the labour market should be divided into 2 groups: skills and abilities [PLH10].

- Generic competences are in the faculty's view the ones that are prerequisite, a base for entering in the world of work. Specific competences are needed for effective work in a special field [SIH2].

- Related courses and learning activities should be augmented to the curricula to link generic competences to the professional specific ones [TRH5].

- To have the basic knowledge and skills about the field of study together with generic competences well developed would enable the graduate to be productive in the society [TRH8].

Box 2: Some relevant issues reported by *employers* related to graduates' key competences::

- The emerged competencies are those which are related to competitiveness, which is tired up with codex of values. It is important that graduate would not only be able to discuss various topics but to mobilize him/herself and get into work [LTE6].

- Usually graduates evaluate their abilities too high [LTE7].

- All listed generic competencies are of secondary importance; nevertheless they all are important [LTE12].

- The ability to make own meaning clear to others is even more important than mastery [LTE15].

- An ability to learn quickly is a new job requirement. Life long learning is an important part of this process [TRE4].

- Of course these are the competencies all employees are expected to have to a certain minimum degree. But different departments demand the same competencies at different levels [TRE11].

- The competence which has lost its status is computer literacy (it has become a basic and widespread general competence) [PLE13].

- The competences appreciated by the employer are developed not only in the education process, but also through participation in the activities of public-benefit organizations [PLE5].

- The profile of the required competences has not changed in the last five years [PLE10].

- It's difficult to say if any competences lost meaning and became obsolete; any surplus of competences is treated as an advantage [PLE2].

- The ability to use basic computer software is nowadays an elementary competence, comparable to writing [PLE9].

CHAPTER 4: Responsibility for the Development of Competencies

4.1 Introduction

This chapter aims to identify the main actors responsible for competence development from the perspective of HE representatives and employers. In other words, this question investigates the views of HE representatives and employers regarding the extent of different actors' roles in the development of competences that are required by graduates. From the survey's results, we were able to generate a framework of four major actors that are considered as the most important for the development young graduates' competences:

   - education in general (all levels),

   - higher education,

   - employer, and

   - individual (or graduates themselves).

In the analysis we also tried to link the responsibility for the development of each actor (HE institutions and employers) to a particular competence domain, such as specific competences and professional expertise, general competencies, theory, and practical knowledge. However, the results were too ambiguous to draw any firm conclusions and links.

4.2 Responsibility for Competence Development – the Perspective of Higher Education

Based on the results (see Table 4.1) we can see that HE institutions view themselves as the most important actor for competence development. With regard to this point there is only a small variation among countries. All HE representatives of Slovenia and Turkey agree that HE is the most responsible actor when compared with education at all levels, employers or individuals. This ratio is more than three quarters in all countries. Therefore, it is possible to say that a very high percentage of HE representatives in HEGESCO countries consider competence development as their main responsibility rather than the responsibility of other institutions or actors. However, during the fieldwork we were able to detect large variations in terms of what type of responsibility this relates to. As addressed by one HE unit in Poland:

> "*The role of the university is the further development of general competences as well as teaching specialist ones. Specialist competences are also developed in the work environment, through volunteer service or work in self-study associations*" [PLH8].

In Poland even though approximately three quarters of HE representatives recognize the pre-eminent role of universities, education at all levels rather than universities is indicated as the most important factor for competency development. For example, the following quotation from a Polish HE representative emphasizes the importance of primary and secondary education in competence development:

"*Qualities like entrepreneurship, the ability to learn, team work and speaking foreign languages are developed at secondary school*" [PLH4].

However, still some HE representatives defend the idea that it is not the primary responsibility of HE institutions to develop any competences. In this respect, higher education representatives from Hungary and Turkey respectively expressed the view that:

"*Higher education is not able to develop any competence – and the improvement of competences is not the target of higher education*" [HUH4].
"*I think Universities priorities should be to teach universal fundamentals of the discipline rather than giving an education based on the demand of the world or business to a large extent*" [TRH14].

Even though these ideas were detected in very few cases only and are highly dependent on the understanding of the individual respondent's concept of competence, they represent the conservative stance of HE as a creator of pure science and consider HE as irrelevant for graduates' employability. However, during the fieldwork we have found very few claims that support this view. As can be seen from Table 4.1, the large majority of HE units perceive themselves as a very important actor for the development of competences.

Table 4.1: Number/Percentage of HE institution units who consider the selected actor as the most important for the development of competences, by countries*

	Lithuania	Poland	Hungary	Slovenia	Turkey	Total
HIGHER EDUCATION	(N=15)	(N=15)	(N=15)	(N=15)	(N=15)	(N=75)%
General Education	0	**12**	5	4	2	30.7 %
University	**12**	**11**	**12**	**15**	**15**	86.7 %
Employers	4	8	2	3	3	26.6 %
Individual	**11**	7	0	9	5	42.7 %

*Multiple answers possible.

HE representatives in HEGESCO countries also consider education at all levels as one of the most important factors for the development of competences. As two HE representatives commented:

"*Unfortunately students lack general competences which should have been acquired in secondary school – so during the first semester we have to make up the shortage of students' basic general competences*" [HUH2].
"*The university finds it very difficult to build new competences if there is no sound foundation built at previous stages of education. The problem also exists in teaching English – there is no way a student can go through a B2 level English course if they do not have a solid competence base from secondary school. Specialist competences are developed at university through work in self-study associations and practical training*" [PLH15].

However, there is significant diversity with respect to the importance of education at all levels among countries. For example, even though only two Turkish HE representatives consider education an important factor, this ratio rises to 12 in Poland.

Another striking fact that arises as a result of interviews with HE institutions is that most HEGESCO countries' HE representatives reported that the individual's responsibility for competence development is greater than that of employers in this respect. In this vein, HE representatives of Lithuania, Slovenia and Turkey reported that individual's responsibility comes

as the second most important factor after HE's responsibility. In other words, the individual's responsibility is recognized as a more important factor than the responsibility of employers for competence development in these countries. In Poland, HE institutions reported that employers are more responsible than the individual for competence development, but still, the percentage of HE representatives who consider employers or individuals as the most important actor are close to each other. According to some HE representatives:

> "*Generic competencies should be integrated in study programmes through specific, not 'taught' separately. A student is responsible for her/his study achievements and personal development*" [LTH11].
> "*Competence growth during the period of study depends on the student's individual potential and their involvement in the student self-government activities or the activities of other student organizations at the university or beyond*" [PLH11].
> "*Students' involvement in the activities of self-study associations, societies, students' self-government, volunteer service and the like helps develop general and specialist competences*" [PLH16].

In terms of the way in which HE representatives perceive the role of employers in competence development, the results of the interviews show that HE representatives do not consider competence development as the primary responsibility of employers. In other words, according to HE institutions, employers are the least important actor for competence development. Table 4.1 shows that a very low percentage of HE institutions in HEGESCO countries consider employers as an important actor for competence development. In four HEGESCO countries, namely Lithuania, Hungary, Slovenia and Turkey, less than one third of HE institutions consider employers as the most important contributor to competence development. This ratio is the highest in Poland. In terms of the comparative role of universities and employers, HE institutions in all HEGESCO countries expressed that they have more responsibility than employers for the development of competences.

In terms of the overall results for HEGESCO countries, it can be said that HE representatives assigned the most important role for competence development to HE institutions. Table 4.1 shows that approximately 85-percent of HE institutions consider universities as the most important actor for the development of competences. In their view, the second most important actor is the individual and the third is education in general. In accordance with the results obtained in individual countries, the overall results indicate that a very high proportion of HE institutions consider employers as the least important actor for the development of competences.

4.3 Responsibility for Competence Development – the Perspective of Employers

This section explores the position of employers towards the role of education in general, higher education, employers themselves and individuals in taking responsibility for competence development. The results are presented in Table 4.2.

Table 4.2: Number/percentage of responses of employers' units who consider the selected actor as the most important for development of competences, by countries

	Lithuania	Poland	Hungary	Slovenia	Turkey	Total
HIGHER EDUCATION	(N=15)	(N=15)	(N=15)	(N=15)	(N=15)	%
General Education	1	10	5	7	5	37.3 %
University	10	15	8	10	9	69.3 %
Employers	12	11	7	10	10	66.7 %
Individual	6	5	3	7	7	37.3 %

As indicated above, HE institutions in all HEGESCO countries think that universities have more responsibility than employers for competence development. However, that view is not apparent in the employers' interviews. In contrast to the shared view of HE institutions, there is no consensus among employers over the relative importance of universities and employers. In Lithuania and Turkey, employers believe that the most important actor for the development of competences is employers themselves, whereas in Poland and Hungary employers consider HE institutions as the most important actor. On the other hand employers in Slovenia believe that both parties have equal responsibility with regard to competence development. The following quotations from interviewees stress the role that employers assigned to themselves in terms of developing competences:

> "*Usually education does not develop these skills. So finally the workplace has to develop these competences of graduates*" [HUE1].
> "*HEI are not able to produce relevant learning outcomes of study programmes if it does not communicate with employers. Employers should be an open and active part, responding to the call of HEIs and giving opportunities to graduates to develop their competencies when working for a company*" [LTE2].
> "*HE institution's role is not to damage the talent of a student and to show the student the way how/where s/he should develop talent. The employer's role is to employ and develop the talent of a student/graduate*" [LTE4].

It is apparent from the interviews that companies give particular emphasis to special training activities for the development of employees' competences. As two employers indicated:

> "*The company also contributes to the development of employees' competences through a well established system of internal and external training according to the expressed interests of the graduate. During the recruitment process the company also pays attention to the candidates' interests, hobbies or social activities. The university should assist graduates in their personal development in the form of career counselling, consultations with people engaged in market monitoring and the organization of job fairs*" [PLE5].
> "*The company gives practical knowledge – learning by doing and internal and external training. The university should develop basic expertise (law), interpersonal skills (although some may be developed also in the course of work) as well as a lifelong learning attitude*" [PLE3].

But in general it is apparent from the interviews that employers recognize their mutual dependence with HE institutions. These claims are:

> "*A student/graduate has to have a goal and strive to achieve it. A HE institution is responsible for the provision of background knowledge. An employer is responsible for the practical development of a student during practical training and later for the professional development of the employee*" [LTE13].

"Expertise and specific competences should be acquired at universities, but the process of its generation should be limited to the basics. In depth development should occur in the course of work as a joint effort of the supervisor and employee" [PLE1].

In a nutshell, we can say that according to the view of employers the top two actors in competence development are universities and employers themselves. As with the results of the HE survey, the other indicated factors responsible for competence development are individuals and education at all levels. There is large variation among countries in terms of the role of individuals and education at all levels. In Lithuania and Turkey, employers consider individuals as the third most important factor in competence development, whereas education is considered as the third most important factor in Poland and Hungary. Slovenian employers give an equal weight to the role of individuals and education. In this sense, one can conclude that in terms of the evaluation of the responsibilities, employers share a similar view in Lithuania, Turkey, Poland and Hungary, respectively.

4.4 Conclusion

As far as the overall result is concerned, interviews with HE institutions highlight the fact that HE institutions basically find themselves as the main responsible actor for the development of competences. According to them, the responsibility of employers is ranked last amongst the cited actors. However, employers consider their role in competence development as equally important as that of universities. In contrast to the view of employers, HE respondents place a higher priority to the responsibility of individuals and education at all levels rather than that of employer's to foster competences.

Lastly, it is also interesting to note that Lithuania and Turkey are the two countries where HE institutions and employers assigned the most important role to themselves for competence development. Unlike these countries, in Hungary both parties consider universities as the most important factor. Similarly, in Poland both parties consider the role of education in general as the most important factor. The overall results are also in accordance with the pattern in Poland and Hungary, which is that both HE institutions and employers find universities as the most important actor.

Box 1: Some relevant issues reported by *HE institutions* related to responsibility for the development of competencies

- Generic competencies should be integrated in study programmes through specific, not "taught" separately. A student is responsible for her/his study achievements and personal development [LTH11].

- Departments, Study programme committees and teachers (in HEI) and students emphasised [LTH13].

- Teachers, administration (in HEI) and individuals emphasised [LTH14].

- Unfortunately students lack general competences which would have been acquired in secondary school - so during the first semester we have to make up the shortage of students' basic general competences [HUH2].

- The role of the university is the further development of general competences as well as teaching the specialist ones. Specialist competences are also developed in the work environment, through volunteer service or work in self-study associations. The university is open to various ideas suggested by students, who themselves develop their entrepreneur skills working on their own projects [PLH8].

- Competence growth during the period of study depends on the student's individual potential and their involvement in the student self-government activities or the activities of other student organizations at the university or beyond [PLH11].

- Students' trips, practical training, scientific and student movement at the university, clubs and associations are places where students can develop both their general and specialist skills [PLH12].

- Various kinds of activities outside school should also be remembered. A considerable difficulty in teaching engineers is the candidates' deficiencies in mathematics and physics (secondary school). The role of the university is helping to precise attitudes, develop specialist language, team work or cooperation [PLH10].

- It is important to shape students' attitudes through a model example set by the academic teacher [PLH14].

- The university finds it very difficult to build new competences if there is no sound foundation built at previous stages of education. The problem also exists in teaching English – there is no way a student can go through a B2 level English course if they do not have a solid competence base from secondary school. Specialist competences are developed at university through work in self-study associations and practical trainings [PLH15].

- Universities priorities should be to teach universal fundamentals of discipline rather than giving an education based on the demand of the world or business to a large extent [TRH14].

Box 2: Some relevant issues reported by *employers* related to responsibility for the development of competencies

- HEIs are not able to produce relevant learning outcomes of study programmes if it does not communicate with employers. Employers should be open and active part responding the call of HEIs and giving the opportunities for graduates to develop their competencies when working for a company [LTE2].

- The HE institution's role is not to damage the talent of a student and to show to student the way how/ where s/he should develop talent. The employer's role is to employ and develop the talent of

a student/graduate [LTE4].

- The grades are not important when looking for a new employee. When looking for a new employee an important feature is the study programme of graduation and his/her practical skills [LTE8].

- A student/graduate has to have a goal and strive to achieve it. The HE institution is responsible for the provision of background knowledge. The employer is responsible for the practical development of a student during practical training and later for professional development of employee [LTE13].

- Usually education does not develop these skills. So finally the workplace has to develop these competences of graduates [HUE1].

- The company also contributes to the development of employees' competences through well established system of internal and external training according to the expressed interests of the graduate. During the recruitment process the company also pays attention to the candidates' interests, hobbies or social activities. The university should assist graduates in their personal development in the form of career counselling, consultations with people engaged in market monitoring and organization of job fairs [PLE5].

- A company gives practical knowledge – learning by doing and internal and external training. University shall develop basic expertise (law), interpersonal skills (although some may be developed also in the course of work) as well as a lifelong learning attitude [PLE3].

- The candidates are often not aware of own competences to undertake a certain job – they usually link their professional position strictly to the study profile which is not necessarily a right approach [PLE8].

- More advanced specialist competences may be developed at work, the basic ones at university [PLE10].

- One of the most important competences – capability to operate in multicultural environment is formed in various places starting from the family, through intercultural contacts during studies – international internships and own initiatives, such as working abroad. Other specialist competences required for different positions: management, marketing, economy are formed during studies and developed at work [PLE2].

- The company also contributes to the development of employees' competences through a well established system of internal and external training according to expressed interests of the graduate [PLE4].

- The training unit – the Centre for Professional Education has been established [PLE9].

- Expertise and specific competences shall be acquired at universities, but the process of its generation shall be limited to the basics. In depth development shall occur in the course of work as a joint effort of the supervisor and employee [PLE1].

Arzu Akkuyunlu

CHAPTER 5: The Balance between Generic and Specific Competencies

5.1 Introduction

This chapter explores HE representatives and employers' position on the importance attached to graduates' generic and specific competences. Interviewees were asked how they understand the balance between generic and specific competences. By studying the results the following major categories were identified:

- *general competences are more important*
- *specific competences are more important*
- *both competences are equally important*

Another major issue of this section, which is highly related to the issue above, was the view of employers on the level of generic and specific competences that they experience graduates posses.

5.2 The Balance between Competences – the Perspective of Higher Education

Table 5.1 shows the number of identified answers of HE representatives' responses to the question of how they see the relative importance of the generic and specific competences of graduates at the country level and the total in percent for all counties.

Table 5.1: Number/Percentage of identified respondents of HE units on the balance of competences, by countries

	Lithuania	Poland	Hungary	Slovenia	Turkey	Total*
HIGHER EDUCATION	(N=15)	(N=15)	(N=15)	(N=15)	(N=15)	%
General important more important	2	6	-	1	4	22.8 %
Specific important more important	6	3	-	-	4	22.8 %
Both equally important	5	2	3	**14**	7	54.4%

* Percentage are calculated only on the basis of answers which enabled clear codification (N=57)

As can be seen from Table 5.1, in three out of the five HEGESCO countries (namely Hungary, Slovenia and Turkey) equal importance was the most frequently identified response. In other words, a majority of respondents in those countries favour the view that general and specific competencies complement each other. In the words of one HE representative in Poland:

"*General competences must accompany specialist ones. It is impossible to act in such a narrow field of activity that no general competences are needed. The specialist competences of today will soon transform into basic general competences. Linguistic, computer competences are already like switching on and off the light. General competences may make it considerably easier*

for a graduate to settle into the professional position someone will appoint them to in the future"
[PLH15].

As far as the overall results for HEGESCO countries are concerned, the interview results indicate that a majority of the HE representatives favour the idea that general and specific competences are equally important. Despite this fact, the overall results also show that approximately 20-percent of them find that general competences are more important than specific competences and approximately 20-percent of them reverse the ranking. Following this result one can conclude that in the majority of HEGESCO countries the overall results indicate that HE representatives consider both types of competences as equally important. HE representatives also believe that the balance between general and specific competences also depends on the field of study. As three respondents stated:

> "*The ratio of general and specialist competences depends on the faculty. At some faculties, when educating product research engineers, for example, specialist expertise is dominant, since expertise in the fields of chemistry and physic and familiarity with specialist trade terminology which will be useful in future work are very desirable. On the other hand, at faculties such as international economic relations or European studies, general competences are more useful*"
> [PLH6].
> "*There may be some exceptions in which subject specific competences are more important than generic ones; the most striking area is health related sciences. The graduates of health related programs should have subject specific competences more developed with respect to generic competences*" [TRH1].
> "*In an engineering education, general competences are important, but the most essential is the set of specialist competences that prepares the student to take up professional activities. It should be noted however that the student acquires theoretical knowledge, but professional conduct is yet to be learnt in a work position*" [PLH10].

One set of competences which are only mentioned by one employer, but which are worth considering, are emotional competences. According to one respondent:

> "*Today, it is becoming a common view that emotional competences are more important, because practical competences are basic ones taught in school*" [HUH10].

In some cases it was possible to find indication that there should be a division of labour between undergraduate and graduate programs in the sense that general competences should be developed during undergraduate programs and specific competences should be developed during study on a post-graduate program. The following quotations emphasize this point:

> "*Generic competences should dominate undergraduate studies and specific competences should dominate masters' studies*" [LTH7].
> "*Bachelor level programmes should develop more general competencies*" [LTH3].
> "*The difference in focus comes from the difference in the level of education, where at the undergraduate level generic competences are more important and at the master and PhD level the study focuses more on developing specific competences*" [SIH13].
> "*General competences should prevail in a graduate's education, because they determine flexibility on the labour market. General competences are an indispensable foundation for the acquisition and further development of specialist competences. Graduates develop or even build from scratch some specialist competences through an internal system of training operating within companies*" [PLH3].

In the next section we this topic examine the view of employers.

5.3 The Balance between Competences – the Perspective of Employers

Table 5.2 shows the number of identified answers of employers to the question of how they see the balance between generic and specific competences of graduates at the country level and the total in percentage for all countries. Similar to the results obtained for HE representatives, in three of the countries (Lithuania, Slovenia and Turkey) most employers conclude that general and specific competences are equally important. This ratio was mentioned by eleven out of fourteen employers in Slovenia, slightly under half of employers who responded to this question in Turkey and six out of fourteen in Lithuania.

Unlike employers in the three countries mentioned above, the number of employers in Poland and Hungary consider specific and general competences as the most important respectively. One interesting fact about these countries is that the ratio of employers who consider that both competences are important is close to the ratio of employers who consider specific competences as the most important.

Table 5.2: Number/Percentage of identified respondents of employers units on the balance of competences, by countries

	Lithuania	Poland	Hungary	Slovenia	Turkey	Total*
HIGHER EDUCATION	(N=15)	(N=15)	(N=5)	(N=15)	(N=15)	%
General important more important	3	3	4	2	5	28,3 %
Specific important more important	5	4	2	1	2	23,3 %
Both equally important	6	3	3	**11**	6	48,3 %

* Percentage are calculated only on the basis of answers which enabled clear codification (N=60)

In terms of the overall results for all studied countries, the highest percentages of employers think that both competences are equally important (approximately half of all employers). Approximately 30-percent take general competences as more important than specific competences and only 20-percent take the opposite to be the case. Therefore, it can be said that the majority of the employers claim that graduates should acquire both general competences and specific competences. As has already been established in previous chapters, they might present the context of development to one another. As one employers' representative commented:

> "*General competences are closely connected with the specialist ones and are equally important from the perspective of a candidate's aptitude for the teaching profession*" [PLE14].

Overall the results from employers are in accordance with the overall results obtained as a result of interviews with HE representatives. In other words, the highest percentage of both HE representatives and employers share the view that general and specific competences are equally important. In fact, this is the case for Slovenia and Turkey as well. If we compare Table 5.1 and Table 5.2 it is apparent that in the abovementioned countries there is a consensus between HE representatives and employers concerning the view that both competences are equally important. However, employers attached different levels of importance to specific and general competences in Lithuania, Poland and Hungary.

Like HE representatives, employers also believe that the balance between general and specific competences also depends on the field of study. In addition, employers also emphasised that another determinant of the balance between general and specific competences is the position at work. As can be seen from the following quotations many interviewees stress the importance of the field of study and position at work:

> "*The proportion between general and specialist competences varies according to the position. In positions connected with production, specialist competences are far more important, hence the ratio between general and specialist competences will be 40 % to 60 %, respectively. For the business and administration personnel, the ratio is 50 % for general competences and 50 % for specialist competences*" [PLE5].
>
> "*The higher a position is in the company organizational structure, the more important are interpersonal competences related to people management. Motivation, eagerness for development and learning are important generic competences at the entry stage*" [PLE7].
>
> "*The employee must have a high personal attitude and encourage the customer to establish direct contacts (what if someone knows a theory of selling very well but will look hostile and unwelcoming and the customer will be too frightened to approach such a salesman). Candidates for managerial positions must have also strong interpersonal skills as even an MBA diploma is not enough to supervise a team of people*" [PLE8].

As indicated in the introduction, another purpose of this chapter also covers the issue of the level of general and specific competences that graduates posses from the view point of employers. Figure 5.1 presents the percentage of employers' units who experience a shortage, the proper level, or a surplus of general and specific competences.

Figure 5.1: Percentage of employers' units who experience shortage, proper level or surplus of general and specific competences
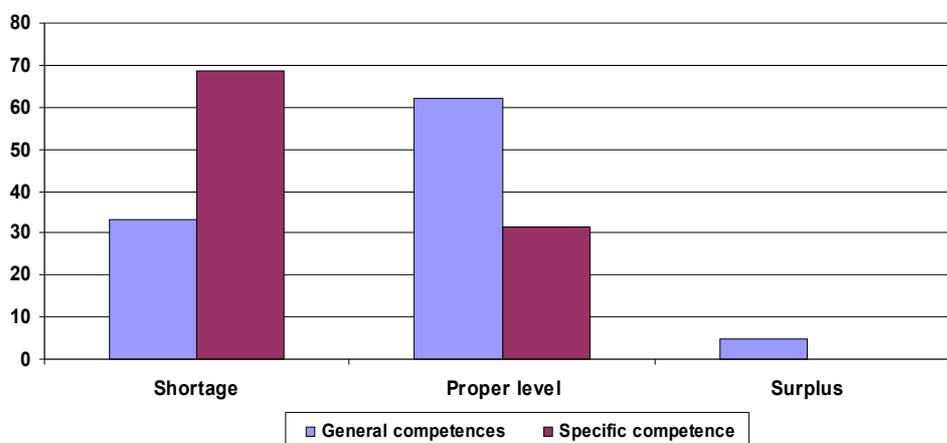
The overall results for HEGESCO countries show that a majority of employers think that university graduates are lacking specific competences. The ratio of employers who emphasize a shortage of graduates' specific competences is almost 70-percent. On the other hand, only 30-percent of employers think that specific competences of graduates are at the required level. None of the employers interviewed explicitly mentioned a surplus of specific competences.

As far as general competences are concerned employers' views are more positive in the sense that slightly over 60-percent of them consider that the general competences of graduates meet the required level, and 5-percent think that there is a surplus in the level of general competences. However, 35-percent of employers hold the view that the level of graduates' general competences is less than what is required, which indicates a shortage in the competence level. These two results show that a majority of employers experience a shortage in graduates' specific competences, but as far as general competences are concerned they think that the levels of competences graduates possess are at the proper level.

A widely expressed view is that graduates have low practical skills in the field of work. The following quotations from interviewees stress this point:

"*Graduates are good in theory and have low practical skills*" [LTE2].
"*Most usually fresh graduates lack practical skills. They know the theory well, but are not able to use it in practice*" [LTE3].
"*Most usually fresh graduates lack practical skills. They know the theory well, but are not able to use it in practice. Non-university types of HE institutions develop more practical skills of students, but university programmes lack them*" [LTE3].
"*University graduates evaluate themselves very high but they are not able to prove it in practice. Most of the graduates do not have enough required competencies. They have theoretical knowledge but lack above mentioned generic skills, practical experience and skills of stress management*" [LTE6].
"*Engineers: poor language skills. They studied too much theory and received less practical education. Companies will not hire a BSc engineer for they know only basic theory with no context; therefore at least an MSc is needed*" [HUE3].

> "*They are very well qualified theoretically but would need much more practical experience*" [HUE9].
>
> "*Graduates are very good at analytical skills, problem solving and decision making. They are not that good at dealing with stressful situations which are quite common in the field work, but this comes with experience*" [PLE2].
>
> "*Graduates learn, memorize too much during studies, later they do not remember, do not understand well meaning of acquired knowledge, and cannot apply the knowledge in practice, they lack negotiation skills and capability of work under pressure*" [PLE1].
>
> "*Big gap is between practice and theoretical knowledge that students acquire at the faculty is noticed. We also encounter a lack of knowledge of foreign languages*" [SIE4].

Additionally, in the interviews we attempted to find out the extent of the competences acquired in HE or the work place. Therefore, the employers' interviews also covered the following issues: *Can competences be taught in higher education or are they better acquired in the place of work?* and *How important is the subject studied, the institution attended, or the final grade achieved?*

As far as the employers' view on the first question is concerned, most respondents believe that specific competences can be acquired in the work place through different types of apprenticeship, but general competences should be gained in higher education. For example, the following quotations from employers from various HEGESCO countries emphasize this view:

> "*The problem is that HE institutions do not provide students with the newest achievements of science (in the field of specific competencies)*" [LTE11].
>
> "*An entrant could gain specific competences in work or during traineeship*" [HUE10].
>
> "*General competences are more difficult to develop in the company, they require more time and effort, and they are exactly the competences that facilitate the acquisition of specialist competences*" [PLE6].
>
> "*At the moment of recruitment – generic competences are of prevailing importance, however basic expertise is required as well. Later when the induction process is over the employee becomes a full time civil servant the stress shall be put to development of specific competences, becoming an expert in a given field who may provide competent services*" [PLE1].

As far as the employers' view on the role of subject studied, grade achieved and institution attended during the recruitment process is concerned, it seems that different countries' employers have different practices regarding the value they place on the grade achieved and institution attended. There is a large variation among countries even in terms of the importance attached to grades achieved and institution attended. In this respect it seems that the subject studied is a less controversial issue in the sense that a majority of employers accept the relevance of subject studies. The following quotations illustrate this point:

> "*When looking for a new employee, neither the HEI that the employee graduated from nor grade achieved plays a role. The study programme has a little importance*" [LTE2].
>
> "*When looking for a new employee, neither the HEI that the employee graduated from nor grades are important; the study programme is important since s/he has to have background knowledge of the field*" [LTE3].
>
> "*The HE institution is not an important feature, but the study programme which gives basic subject knowledge is important*" [LTE4].
>
> "*There is no difference between universities, but the personality of students*" [HUE11].
>
> "*The type of university is irrelevant in the recruitment process, although for certain positions there are preferences as to the study programmes*" [PLE15].

On the other hand, the type of university is interpreted as an important indicator of each graduate's potential and level of competence. The following quotations are an example of this view:

"*Grades are not very important, but if grades are low the employer does not trust the graduate. The HE institution of graduation is also important since the quality of studies differs from one HEI to another*" [LTE1].

"*The name of the HE institution is important since the quality of studies differs or the ranking differs. The study programme is important since the employee has to have background knowledge*" [*LTE11*].

"*There is a huge difference between students of different universities, thus the former grades really matter*" [HUE2].

"*The graduated school is important at the very beginning of the recruitment process*" TRE8.

"*In Turkey, higher education quality is not at the same level throughout all universities. For this reason the institution attended is very important*" [TRE3].

We can say that grades were not considered by employers as an indication of graduates' competences or potential. The view on the importance of the type of institution varies among countries probably due to different countries' practices on the entrance to university conditions and differences in their national HE policies.

5.4 Conclusion

As far as the overall results for HEGESCO countries are concerned, the interview results indicate that a majority of the HE representatives in HEGESCO countries (approximately 50-percent of them), as well as the overall results, consider that both types of competences are equally important. As far as the division of labour between undergraduate and graduate programs is concerned we have found a an indication that general competences should be developed during undergraduate programs and specific competences during post-graduate programs. Similar to the results of the HE representatives' survey, most employers concluded that graduates should acquire both general competences and specific competences. The overall results obtained as a result of the interviews with the HE representatives and employers show that both parties share the view that general and specific competences are equally important. Similarly both parties also believe that the balance between general and specific competences also depends on the field of study.

Overall the results for HEGESCO countries show that a majority of the employers think that university graduates are lacking specific competences. The ratio of the employers who emphasize the shortage of graduates' specific competences is almost 70-percent. There is a large variation among countries even in terms of the importance attached to grades achieved and institution attended. In this respect it seems that the subject studied is a less controversial issue in the sense that a majority of employers accept the relevance of subject studies.

Box 1: Some relevant issues reported by *HE institutions* related to the balance between generic and specific competencies

- If a programme is dedicated for particular job place, there should be more specific competencies. Bachelor level programmes should develop more general competencies [LTH3].

- Generic competences should dominate undergraduate studies and specific competences should dominate masters' studies [LTH7].

- There are two types of generic competencies development: a) basic modules for generic competencies development; b) modules of specific subjects when both specific and generic competencies are developed [LTH8].

- If we take university graduate, generic competencies should dominate. If we take a college graduate, specific competencies should dominate [LTH9].

- Today it is becoming a common view that emotional competences are more important, because practical competences are basic ones taught in school [HUH10].

- First degree studies general competences more, second degree studies should focus more on specialist competences [PLH2].

- General competences should prevail in a graduate's education, because they determine flexibility on the labour market. General competences are an indispensable foundation for the acquisition and further development of specialist competences. Graduates develop or even build from scratch some specialist competences through an internal system of training operating within companies [PLH3].

- The general and specialist competences ratio depends on the faculty. At some faculties educating, e.g. product research engineers, specialist expertise is dominant, since expertise in the fields of chemistry and physic and familiarity with the specialist trade terminology which will be useful in future work are very desirable. On the other hand, at faculties such as international economic relations or European studies, general competences are more useful [PLH6].

- General competences must accompany specialist ones; it is impossible to act in such a narrow field of activity that no general competences are needed. The specialist competences of today will soon transform into basic general competences. Linguistic, computer competences are already like switching on and off the light. General competences may make it considerably easier for a graduate to settle into the professional position someone will appoint them to in the future [PLH16].

- Specialist competences dominate the uniformed students' education. When people's lives, health, property and the environment are at play, they are the most important. Specialist competences definitely outweigh the general ones – the ratio is 80 %; efficiency is the key issue here. However, general competences are also important. In the case of civilian students, general competences are viewed as more important because of the specific character of the profession, which is the organization of local communities in emergency situations. The ratio is almost opposite – 70 % for general competences [PLH5].

- Thanks to the sound general competence base a student acquired at previous stages of education, the time at university may be spent on developing competences narrowed down to the field of science they study. A graduate equipped with the above-mentioned competences will soon adapt to their work environment and they will learn quickly through action to become a specialist in their company [PLH9].

- In an engineering education, general competences are important, but the most essential is the set of specialist competences that prepares the student to take up professional activities. It should be noted however that the student acquires theoretical knowledge, but professional conduct is yet to be learnt in a work position [PLH10].

- The difference in focus comes from the difference in the level of education, where at the undergraduate level generic competences are more important and at the master and PhD level the study focuses more

on developing specific competences [SIH13].

- The goal is not the balance but the highest possible level in all the fields [SIH14].

- If the students' generic competencies are not well developed they have problems at the second class [TRH7].

- Generic competences allow graduates to update themselves more easily and effectively in their own fields [TRH8].

- There may be some exceptions in which subject specific competences are more important than generic ones; the most striking area is health related sciences. The graduates of health related programs should have subject specific competences more developed with respect to generic competences [TRH1].

Box 2: Some relevant issues reported by *employers* related to the balance between generic and specific competencies

- The proportion between general and specialist competences varies according to the position. In positions connected with production, specialist competences are far more important, hence the ratio between general and specialist competences will be 40 % to 60 % respectively. For business and administration personnel, the ratio is 50 % for general competences and 50 % for specialist competences [PLE5].

- The higher a position is in the company organizational structure, the more important are interpersonal competences related to people management. Motivation, eagerness for development and learning are important generic competences at the entry stage [PLE7].

- The balance between generic and specific competences depends on position - the more specific position the more specialist competences are necessary. As an example may be given position of data interpreter (working with computer data solely, data input, analysis and processing) where specialist competences are overwhelming (practically 100%) Managerial positions and positions where contact with people is important require more generic interpersonal competences [PLE2].

- General competences are more difficult to develop in the company, they require more time and effort, and they are exactly the competences that facilitate the acquisition of specialist competences [PLE6].

- At the moment of recruitment – generic competences are of prevailing importance, however basic expertise is required as well. Later when the induction process is over the employee becomes a full time civil servant and stress shall be put to development of specific competences, becoming an expert in a given field who may provide competent services [PLE1].

- General competences are the base, the starting point for a candidate for work and they should have them besides specialist expertise [PLE12].

- In the case of teachers, specialist competences are connected both with the academic field they teach and with the teaching techniques. The knowledge they posses has to be modified, developed and updated continuously. General competences are closely connected with specialist ones, and equally important from the perspective of a candidate's aptitude for the teaching profession. [PLE14].

- The ratio between competences required from graduates is related to the position they apply for. General competences, such as good communication skills and team work, are important complementary components [PLE15].

CHAPTER 6: Teaching and Training Modes of Competence Development

6.1 Introduction and Framework

As we have indicated in the Chapter 5, HE institutions and employers perceive themselves as the main actors in the development of competences. The next question therefore concerns what they consider to be the most important teaching and training methods for fulfilling those responsibilities. In this respect, we asked HE institutions and employers about the teaching and learning modes emphasized in HE programs and in workplaces to develop the required competences.

The first general framework related to the most relevant teaching modes on competence development in HE institutions. The general level emphasizes three main groups: lectures and classes, active learning at university and practical learning in the work place. In a way, the first group represents individual based learning, the second group represents group based learning and the third emphasizes the practical side of learning which is generated through work placements or internships. Column 2 of Table 6.1 presents a more detailed classification of the general categories and thereby provides a list of specific modes indicated by HE representatives for lectures and classes, practical learning in the work place and especially active learning at university. Similarly, Column 3 shows the specific methods that are used for active learning only.

Table 6.1: Framework of teaching modes as reported by HE institutions

1. LECTURES AND CLASSES	1.1 Lectures and classes 1.2 Discussions/meetings	
2. ACTIVE LEARNING AT UNIVERSITY	2.1 Active learning – general aspect 2.2 Laboratory Classes 2.3 Team work 2.4 Assignments and evaluation 2.5 Presentations 2.6 Project work 2.7 Conferences and seminars 2.8 Practice classes 2.9 Other aspect of active learning at University[a]	2.1.1 Interactive learning 2.1.2 Problem based learning 2.1.3 E-Learning 2.1.4 Individual work with students
3. PRACTICAL LEARNING AT WORK	3.1 Practical training 3.2 Internships 3.3 Other aspects[b]	
4. OTHERS[c]		

a) The most typical examples: games of subject; brainstorming; stimulating students' activity; acquainted with tools…
b) The most typical examples: companies' expert lectures; involving the business environment; visits to companies; visits of practitioners
c) The most typical examples: applications to EC; excursions; rehabilitation programmes for patients, …

During the implementation of the employers' interviews we found that modes of learning in HE cannot be directly compared to learning in the world of work, and hence this environment stipulates the need to generate its own framework. Employers emphasized three different methods of training; mentorship, more institutionalized training programs and evaluation related activities. More specifically, training programs include a wide variety of practices ranging from internships to orientation programs (see Table 6.2).

Table 6.2: Framework of training modes as reported by employers

1. MENTOR(SHIP)	1.1 Mentor(ship) 1.2 Senior Staff 1.3 Team support	
2. TRAINING PROGRAMS	2.1 Internship 2.2 Training 2.3 Orientation/introductory program 2.4 Others aspects of training	2.2.1 General training 2.2.2 Rotation 2.2.3 Specialist training
3. EVALUATION RELATED ACTITIVITES	3.1 Evaluation / examination 3.2 Probation period	

In the following sections the most important modes of teaching and training that appeared as a result of the interviews with both parties are presented and elaborated.

6.2 Teaching Modes – the Perspective of Higher Education

In this section we look at the most emphasized teaching modes by HE institutions at the country level. We consider the middle level of aggregation (see Table 6.1).

Table 6.3: Most important modes of teaching, by countries/subcategories

	Lithuania	Poland	Hungary	Slovenia	Turkey	Total
Lectures and classes		1	2	1	2	1
Active learning – general aspect	2	2	1	3	3	2
Team work	1		3	2	2	
Assignments and evaluation		3			1	
Presentations	1				2	
Project work	3	2			1	3
Conferences and seminars				3		
Practice classes	3	3				
Practical training		3				
Internships					1	

Table 6.3 shows that HEGESCO countries do not constitute a uniform group in terms of the importance attached to teaching modes to develop the competencies of graduates. Lectures and classes are the most emphasized teaching modes for competence development in Poland and Slovenia, whereas Hungary, Lithuania and Turkey appear as countries where different active learning methods are more emphasized. In this sense, one can say that HE institutions in Poland and Slovenia still consider traditional teaching methods superior to active learning methods despite the increasing emphasis on active learning methods in recent years. On the other hand, the other three countries' HE representatives (Hungary, Lithuania and Turkey) favour the idea that active learning methods are more important than traditional methods for developing competences. According to some of those HE representatives:

"*Generic competencies are developed in the best way through active learning/teaching methods: group work, project and problem-based learning and oral presentations*" [LTH1].
"*Methods when generic competencies are developed best are seminars and practical assignments, e.g. students have group work for case study analysis*" [LTH8].
"*Our institution helps the students' analytical thinking ability, project based learning develops the organisational skills of the students and group assignments helps team work competency and the ability to work productively with others*" [TRH1]

However, as we have indicated in some of the previous chapters, some interviewees stress doubts on the relevance of traditional forms of teaching and learning for the development of competences. The following quotations illustrate the deficiencies of traditional modes of teaching to develop competences:

> "*Tests are common for the assessment of students achievements; the negative side of it is that students are not able to develop their thoughts, to communicate with a teacher, but they are able to "win a lottery" if they guess a right answer*" [LTH5].
> "*Generic competencies are developed in lectures at a minimum level*" [LTH13].
> "*Lectures are not the best for developing competences; project and problem-based learning are perfect for it. Success in the development of competences depends deeply on the personality of professors*" [HUH3].
> "*Lectures are compulsory, but this mode does not develop generic competencies*" [LTH2].

In line with the views above, there seems to have been a change in some cases from more traditional modes of lecturing to active learning methods. As two of the HE representatives indicated:

> "*We aim at developing generic competences with these modes of teaching and learning, such as self learning, ability to communicate with peers, organisation skills and use of ICT*" [TRH9].
> "*Therefore, the aim of the programme is to shift from teacher centred to student centred learning environment and use formative evaluation and summative evaluation together. Student-centred learning requires empowering individual learners, new approaches to teaching and learning, and new approaches to assessment.*" [TRH15].

However, there is a less common view about what should be the proper method of active learning. It is apparent from the interview results that different countries have stressed different practices and views about the best method of active learning for competence development. For example, general aspects of active learning are considered as the most important method in Hungary, whereas teamwork and presentations are cited as the main forms of active learning for competence development in Lithuania. Assignments and evaluation as well as project work appear as the most important methods for competence development in the view of Turkish HE representatives.

According to some HE representatives, the extent to which lectures and classes or active learning methods should be used depends on the field of study. Many interviewees stress the importance of this issue:

> "*Different types of teaching/learning modes are used in different faculties, e.g. social work department - competency based learning; faculty of medicine - lectures, practice, small group discussions and problem-based sessions, faculty of health sciences - lectures*" [TRH5].
> "*It depends on the field of study. Written exams are done as multiple choice or open end questions exams; the university has a general grading system and all exams are graded according to that general grading system of the study programmes*" [TRH12].
> "*Different types of teaching/learning activities are done according to the field of study. The learning and teaching activities are dispersed homogeneously to develop generic and subject specific competences equally*" [TRH2].

As was apparent from a few interviews, some HE representatives emphasize the role of lecturers in competence development:

> "*Success of development of competences depends deeply on the personality of professors*" [HUH3].
> "*The teacher's personality and their attitudes are consciously or subconsciously projected on students, who learn from the master how to build inter-human relations*" [PLH14].

An important point that arises as a result of the interviews is that even HE recognizes the importance of active learning at the university level, such as group work, they have difficulty in applying these methods owing to practical difficulties such as large class sizes. Some HE representatives expressed concern about these difficulties:

> "*Small-group teaching forms and project-oriented teaching are not used here - it is our weakness*" [HUH4].
> "*Lectures should constitute 1/3 of all classes, practical classes 1/3 and labs also 1/3. Unfortunately, due to economic reasons the ratio is slightly distorted – theoretical classes prevail. Developing professional competences is only possible in close cooperation with industry*" [PLH10].
> "*Obstacles are large groups of students and not enough cooperation between different lectures*" [SIH1].
> "*Due to the high number of students in the classes active teaching-learning methods are not used frequently in most of the study programmes in my university*" [TRH8].

In general one can say that HE representatives in HEGESCO countries do not emphasize in a large extent that it is essential for their students to gain some experience through an internship during their education. In other words, HE representatives in Poland, Slovenia, Hungary and Lithuania believe that competences can be developed best with the help of either traditional methods or active learning methods, but not practical learning in the workplace through training or internships. This fact is of course consistent with the previously indicated view of HE representatives which consider themselves as the most important actor for competence development.

In terms of the overall results for HEGESCO countries, Table 6.3 demonstrates clearly that in the view of HE representatives, lectures and classes are the most important teaching modes for competence development, general aspects of active learning is the second important mode and project work is the third important mode. Therefore, one can say that in general teaching methods are still traditional in HEGESCO countries and lecturing is perceived as a better method to develop competences than active learning methods. Figure 6.1, which shows the emphasized teaching modes for competence development, supports this argument in the sense that 60-percent of HE representatives consider lectures and classes as the most important mode of teaching for competence development. On the other hand almost half of HE representatives recognize the importance of team work and project work as effective tools for competence development. What is also striking in Figure 6.1 is that roughly 25-percent of HE representatives think that practical training and internships are important for competence development. This means that almost 75-percent of HE representatives ignore the role of practical learning in the work place.

Figure 6.1: Percentage of HE institutions who consider the selected teaching modes as most suitable for competences' development
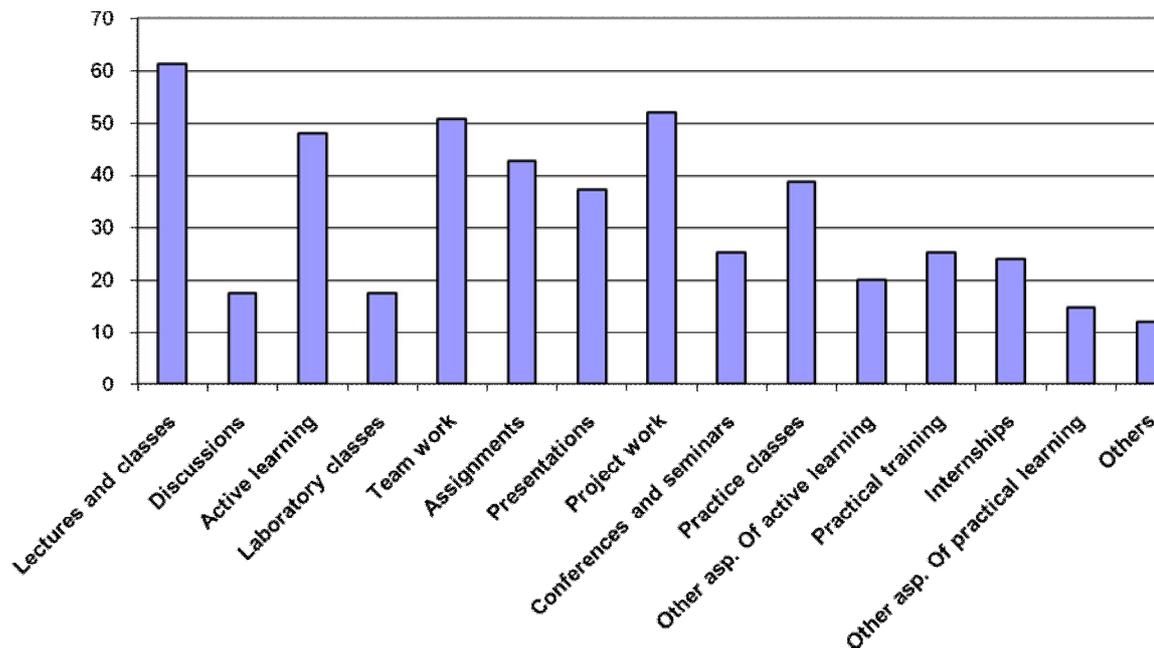
In a nutshell, Table 6.3 and Figure 6.1 together indicate that although there is some variation in terms of the importance attached to different teaching modes for competence development among countries, overall more traditional modes of teaching are considered as the most important modes for competence development. Despite this fact, it is apparent that the role of active learning modes of teaching are also recognized to a large extent by HE representatives.

6.3 Training Modes – the Perspective of Employers

In this section we look at the teaching and training modes from the perspective of the world of work in a comparable way. Table 6.4 presents detailed categories of training modes emphasized by employers at the country level. In contrast to the opposing view of HE representatives over the relative importance of different modes of teaching at the country level, there is a consensus among employers over the relative importance of different training modes. Table 6.4 shows that in all countries one subcategory of training programs is accepted as the most important mode for competence development. Mentorship as a mode of training new employees is the second most important mode of training in Poland, Hungary, and Slovenia, and it is third most important in Turkey. In this respect, Lithuania is the only exception in the sense that mentorship and orientation/introductory programs are accepted as equally important for developing the competencies of new employees.

Table 6.4: Most important modes of training, by countries/subcategories

	Lithuania	Poland	Hungary	Slovenia	Turkey	Total
Mentorship	1	2	2	2		2
Senior staff	2				3	
Team support					3	
Training		1	1	1	2	1
Orientation/introductory program	1		3	2	1	2
Other aspects of training	3					
Evaluation/examination		3				
Probation period	3					
Others		3		3		3

In terms of the differences in adopting different training methods, there is a variation among countries. Poland, Slovenia, and Hungary constitute one group of countries where training is accepted as the most important tool, and Turkey and Lithuania constitute a second group of countries where orientation/introductory program is accepted as the most important tool.

The overall results also show the same pattern in the sense that training is the most important mode for competence development and orientation/introductory program and mentorship together are the second most important modes. Figure 6.2 addresses the same issue in a more elaborated fashion, but does not present country differences. From the results we can see that 45-percent of the total employers consider training as most important mode of training. Slightly less than 45-percent of the total employers think that Orientation/introductory program and Mentorship are the second important modes of training.

Figure 6.2: Percentage of employers' units who consider selected training modes as most suitable for competences' development
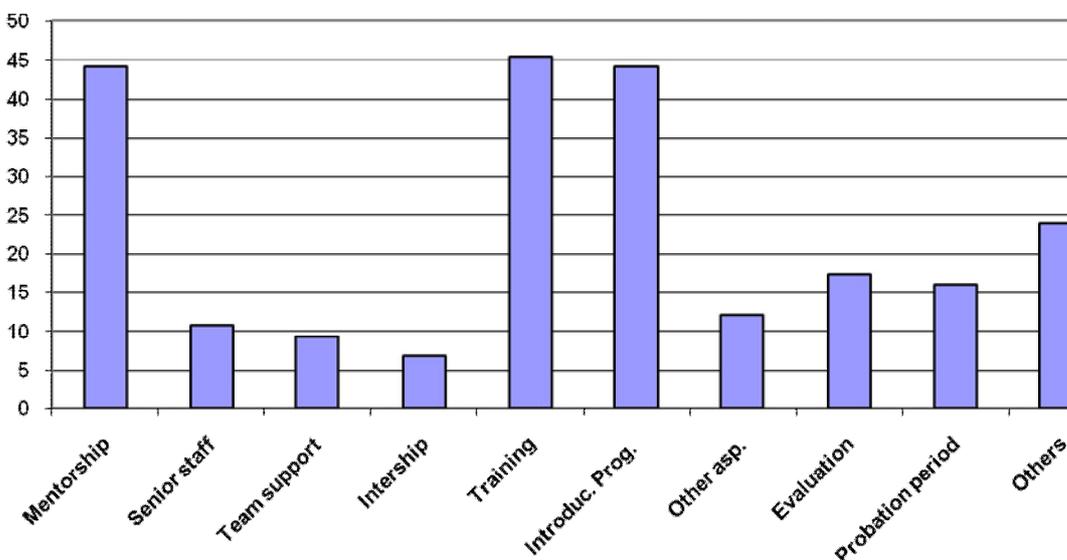
Both Table 6.4 and Figure 6.2 show that the most common practice used by employers for the development of their employees' competences is the organization of different training programs. In this respect, the results of the interviews show that companies are organizing trainee programs for a significant amount of time on various topics. As three respondents stated:

> "*The duration of the period depends on the employee, it is very individual in terms of personality and position (for certain positions it lasts 1 month, for others 6 months)*" [LTE3]
> "*The internship program lasts for 7 months with development trainings: 2 months developing generic competences, 5 months traineeship at a department (where they are going to work later)*" [HUE15].
> "*For 2009 these are our training for our employees; customer relations management, stress management, motivation, interview techniques, sales and marketing*" [TRE1].

It also seems that in some countries training programs become more institutionalized in the sense that professional companies are being employed to provide the relevant training programs. Following The following a quote from a Turkish employer is an example of this: "*We prefer to outsource these trainings to an education and consulting company*" [TRE2].

6.4 Conclusion

HEGESCO countries do not constitute a uniform group in terms of the importance attached to teaching modes to develop the competences of graduates. On the one hand, HE institutions in Poland and Slovenia still consider traditional teaching methods superior to active learning methods. On the other hand, Hungarian, Lithuanian and Turkish HE representatives favour the idea that active learning methods are more important than traditional methods for developing competences. There is also no common view about what should be the proper method of active learning for developing competences among those countries that favour active learning methods. Many HE representatives stress the importance of the issue that the extent to which lectures and classes or active learning methods should be used depends on the field of study.

In terms of the overall results for HEGESCO countries, and taking into account the fact that in view of the HE representatives lectures and classes are the most important teaching mode, one can say that in general teaching methods are still traditional in HEGESCO countries. Despite this fact, a significant proportion of the HE representatives recognized the role of active learning modes of teaching. In contrast to the opposing view of HE representatives over the relative importance of different modes of teaching at the country level, there is a consensus among employers over the relative importance of different training modes. In all countries one of the subcategory of training programs is accepted as the most important mode for competence development.

Box 1: Some relevant issues reported by HE institutions related to teaching and training modes of competence development

- Generic competencies are developed in a best way through active learning/teaching methods: group work, project and problem-based learning, and oral presentations [LTH1].

- Lectures are compulsory but this mode does not develop generic competencies [LTH2].

- Tests are common for the assessment of students achievements; the negative side of it is that students are not able to develop their thoughts, to communicate with a teacher, but they are able to "win a lottery" if they guess a right answer [LTH5].

- Some seminars were organized for university teachers in order to improve their pedagogical competencies on active methods (for better generic competencies development). Generic competencies are best developed during group work activities. Project assignments are rather usual method for master level studies. [LTH7].

- Methods when generic competencies are developed best are seminars and practical assignments, e.g. students have group work for case study analysis [LTH8].

- (In the opinion of the respondent) methods that should dominate are: project and problem-based learning, group work (usual) and group work in a multicultural environment. Balance should be found between individual and group work: not only develop skills of students' to produce a product, but to make them able "to sell" the product to an audience. The learning/teaching process should be outcome based, not process based. [LTH11].

- Unfortunately only about 10% of students are able and/or ready to do something by their own - we achieve great success with them. Others...majority of students can get their BA certification without acquiring any important competence [HUH2].

- Lectures are not the best for developing competences; project and problem-based learning are perfect for it. Success of development of competences depends deeply on the personality of professors [HUH3].

- Small-group teaching forms, project-oriented teaching is not used here - it is our weakness [HUH4].

- Various e-learning elements have been incorporated into regular teaching syllabus, but some inter-university forms are also taught with the use of this method [PLH12].

- The traditional model of engineering education lectures, classes, project-based classes and laboratories. Internships, which are valued by companies since they provide opportunity to select a candidate and train them for work in the company [PLH9].

- Lectures should constitute 1/3 of all classes, practical classes – 1/3 and labs also 1/3. Unfortunately, due to economic reasons, the ratio is slightly distorted – theoretical classes prevail. Developing professional competences is only possible in close cooperation with industry [PLH10].

- The teacher's personality and their attitudes are consciously or subconsciously projected on students who learn from the master how to build inter-human relations [PLH14].

- Obstacles are big group of students and not enough cooperation between different lectures [SIH1].

- Various type of teaching/learning modes are used in different faculties, e.g. social work department-Competency based learning; faculty of medicine-lectures, practice, small group discussions, problem-based sessions, faculty of health sciences- lectures [TRH5].

- Due to high number of students in the classes active teaching-learning methods are not used frequently in most of the study programmes in my university [TRH8].

- We aim at developing generic competences with these modes of teaching and learning such as self learning, ability to communicate with peers. Organisation skills and the use of ICT [TRH9].

- The aim of the programme is to shift from a teacher centred to a student centred learning environment and use formative evaluation and summative evaluation together. Student-centred learning requires empowering individual learners, new approaches to teaching and learning, and new approaches to assessment [TRH15].

- Problem based learning helps the students' analytical thinking ability, project based learning develops the organisational skills of the students and group assignments helps team work competency - the ability to work productively with others [TRH1].

- Different types of teaching/learning activities are done according to the field of study. The learning and teaching activities are dispersed homogeneously to develop generic and subject specific competences equally [TRH2].

Box 2: Some relevant issues reported by employers related to teaching and training modes of competence development

- The duration of the period depends on the employee, it is very individual in terms of personality and position (for certain positions it lasts 1 months, for others – 6 months) [LTE3].

- The internship program lasts for 7 months with development trainings: 2 months developing generic competences, 5 months traineeship at a department (where they are going to work later) [HUE15].

- For 2009, these are our trainings for our employees; customer relations management, stress management, motivation, interview techniques, sales and marketing [TRE1].

- We prefer to outsource these trainings to an education and consulting company [TRE2].

Helena Kovačič

CHAPTER 7: Collaboration between Employers and Higher Education Institutions

7.1 Introduction and Framework

In this chapter we describe cooperation between higher education institutions, students and employers. First, we look at the presence and importance of different forms of cooperation by country. Following this, we compare the view of higher education institutions and employers on the importance they place on these forms of cooperation.

We were able to identify seven clearly identifiable categories of cooperation between higher education institutions and employers. Two of them are developed out of subcategories, which in total form twelve clear forms of cooperation.

Table 7.1: Framework of forms of collaboration as reported by HE institutions and employers

1. PROGRAMME CREATION AND CHANGES	1.1 Program creation – general aspects 1.2 Common lectures 1.3 Research projects 1.4 Informal contacts
2. PRACTICAL TRAINING	
3. FINAL THESIS	
4. SEMINARS AND CONFERENCES	
5. INVOLVEMENT IN COMMON BODIES AND ASSOCIATIONS	
6. RECRUITMENT	6.1 Direct Recruitment 6.2 Career Days 6.3 Cooperation with Career Centres
7. FINANCIAL SUPPORT	
8. OTHERS[a]	

a) The most typical examples: common organisation of competitions; access to technological advancements; international exchange; exchange internet portal; employing practitioners from the world of work; promotion offices; implementation of common quality management systems…

7.2 Collaboration between Higher Education and Employers – Common Perspective

As can be seen in Table 7.2 HE institutions in different countries experience heterogeneous forms of cooperation. Among all countries Lithuania, Hungary and Slovenia are similar in the sense that they place the highest importance on practical training. Building relationships with employers through practical training is the main goal of many Lithuanian HE institutions. It is important for the students to "*perform the practice, to work*" and for the HE institution "*to get feed-back on the competencies of students*". Despite its importance, nowadays, owing to the economic crisis, practical training often remains a formality, lacking "*mentor that would assist a student*", "*employers resist from taking students to practices*" or "*they close their companies*". In Hungary, many HE institutions practice a compulsory traineeship period, which brings a "*rich information flow*" and "*greatly affects the forthcoming curriculum and course structure*". In Slovenia, practical training is important for HE institutions even though most of the time it is not foreseen in the program.

Table 7.2: Most important modes of cooperation between education and world of work, by countries

	Lithuania	Poland	Hungary	Slovenia	Turkey	Total
HIGHER EDUCATION						
Program creation – general aspects	3	2				3
Common lectures			3			
Research projects				3	2	
Informal contacts			2			
Practical training	1	3	1	1	2	1
Final thesis	3					
Seminars and conferences					3	
Involvement in common bodies and associations	2					
Career days			3		1	
Cooperation with career centres				2		
Financial support	2					
Others		1	3		3	2
EMPLOYERS						
Common lectures			2	3		
Research projects				3	3	
Practical training	1	1	1	1	1	1
Final thesis	2					
Direct recruitment	3	3		2		2
Career days					2	
Cooperation with career centres		2			2	
Others			3		3	3

Practical training is important in Turkey[6], but not as important as career days. Career days represent a direct link between students and employers and are an opportunity for higher education institutions to "*learn about the competences which the employers seek*".

In Poland practical training is only in third place in its importance. The reason for its lower importance could be connected to financial barriers, such as "*the university has to bear some related costs*" and is a consequence also of "*a lack of any tax relief for companies which accept trainees*".

On the other hand it is not easy to find a reason for Polish HE institutions placing highly ambiguous stress on the importance of "other" forms of cooperation. One of the reasons could come as a result of the limited financial resources for the cooperation between HE institutions and employees, where a lack of resources consequently means lower involvement of the employers and a "*reduced number of problems university students may work on*". It is difficult to say that the missing categories from the list are the reason for placing highest importance on the category of "others". Overall, higher education institutions emphasized practical training as the most important form of cooperation with employers.

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[6] The CAP (Company Action Programme) is just one of the many examples of how systemized practical training is in Turkey. It has proven to be a very "*effective way of cooperation with employers as well as a tool to develop many generic and subject specific competences of our students*" where student team works with a company on one of the problems of the company and at the end of the project offers solutions to the company.

The second most important category is represented by an ambiguous group of different means of cooperation (the category label is others). The heterogeneity of different means of cooperation between HE institutions and employers such as was particularly emphasized in Poland, but it is also present in Hungary and Turkey. The third most important mode of cooperation relates to the common generation of study programmes.

Variations between countries indicate no obvious patterns in placing importance in these countries to different forms of cooperation between HE institutions and employers. But if we go into details, some resemblance can be identified between countries. One similarity is shown between Lithuania and Poland, where the involvement of employers in program creation and practical training is detected as important forms of cooperation. What is also evident in both countries is the lack of resources on the side of HE institutions which occurs as a barrier for employers to become even more active participants in the education process. Reporting on the lack of finances in the HE area has also been detected in other cases.

Slovenia and Turkey also experience some similarities in the most important forms of cooperation between HE institutions and employers. In both countries, practical work is an important way of cooperating with employers, which takes the form of projects and/or training. In both countries, direct contact between the students and employers is also established through career days, the most important form of cooperation in Turkey, and career centres, which are becoming increasingly developed in Turkey.

The importance of cooperation between HE institutions and employers is not comparable between countries and must be interpreted individually, which means placing one form as important in one country does not mean it is any less important in other countries. These categories are: common lectures which place third most important in Hungary, informal contacts which place second important in Hungary, final thesis which place third important in Lithuania, seminars and conferences which place third important in Turkey, involvement in common bodies and financial support which place second important in Lithuania and cooperation with career centres which places second in Slovenia.

When we look at employers and their attitudes towards cooperation between employers and HE institutions, we see that in all countries employers are unanimous in their opinion of the most important form of cooperation with HE institutions. Like HE institutions, employers evaluated practical training as the most important form of cooperation. In Lithuania, practical training is an important direct contact between students and the employers providing an opportunity for the students "*to develop competencies*", for the company "*to get new ideas*" and "*to recruit best of them to the company*". Practical training is also often used as a basis for the second most important form of cooperation in Lithuania, which is direct recruitment. Direct recruitment is also important in general, as the second most important form of cooperation. It is less important in Hungary and Turkey than in the other three countries.

Even though the variation between the countries shows the use of various forms of cooperation, the category "others" places in total as the third most important form of cooperation. Interestingly, in Lithuania, Poland, Hungary and Turkey, employers report a lack of opportunities and offers from HE institutions to present employers' expectations from the students and competences needed. Therefore it is difficult to identify which other forms, besides the forms from the list, are important for employers. Their cooperation could take additional forms, like "*carry out a joint*

project, being an advisor to universities for curriculum development, organising joint meetings to discuss the needs of world of work in terms of the competences of graduates," as proposed in Turkey.

Employers from Lithuania, Hungary and Poland also report the rather passive role of HE institutions in their relationship. In Lithuania, "*the apathy of HE institutions' staff*" was recognized. HE institutions reported a lack of communication on the competences needed for the students between HE institutions and employers. A passive relationship with HE institutions is often a result of "*too much work*" on the employers' side.

Despite the similarities in employers' assessment of forms of cooperation between countries, no significant pattern is present in countries' variation. Like with HE institutions, importance is placed on both practical training and on the educational processes. Besides practical training, employers in Lithuania, Poland and Slovenia also find direct recruitment an important form of cooperation with HE institutions. For employers in Poland and Turkey, cooperation with career centres is the second most important means of cooperation with HE institutions. In addition to this form, no other direct involvement of employers in the HE institutions' procedures is important for employers in these two countries. In Hungary, common lectures are seen as an important means of cooperation for HE institutions and employers.

When we look at more elaborated categories of cooperation from the view point of all countries together, we see less variation between employers than between HE institutions (see Figure 7.1). With employers, only two categories are ranked as most important in only one country. These are: final thesis in Lithuania and career days in Turkey, both placing second in importance within each country.
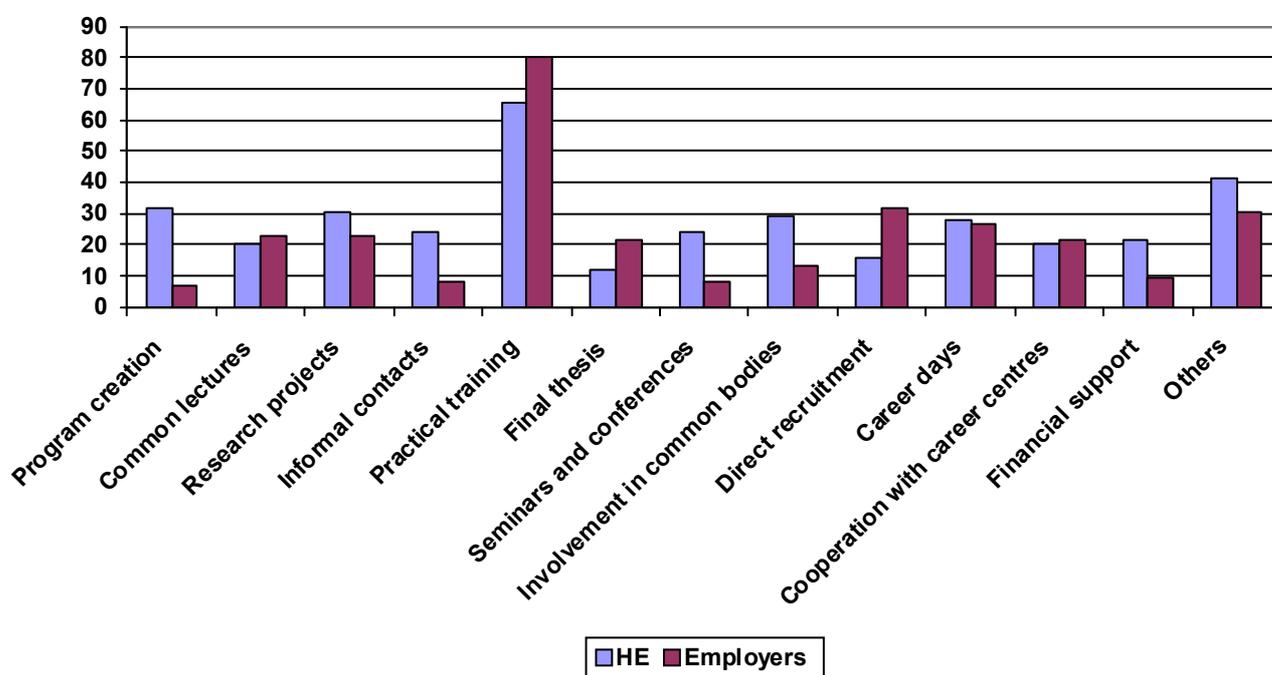
Additionally, Figure 7.1 can be viewed on the differences and similarities between different views on the importance of cooperation between employers and HE institutions. When we first look at the similarities between HE institutions and employers' percentages presented in Figure 7.1 they indicate some consensus in cooperation between HE institutions and employers in common lectures, research projects, carer days and cooperation with career centres. In addition, the involvement of both institutions in research projects importantly contributes to the skills of students. At the same time, the role of career centres and the organization of career days are an important opportunity for students as well as employers to cooperate and establish direct contacts.

Looking at differences, the assessments of the two actors on modes of cooperation significantly differ. What is most striking is the level of the importance employers place on program creation. In their opinion, the involvement of employers in the creation of educational programs is really low in its importance for the development of students' competences compared to the opinion of HE institutions. Despite their view on the importance of their cooperation in program creation, employers in all countries report that they do not have enough opportunities to present their expectations and their views on the competences necessary for student to enter the world of work to the creators of educational programs. Still, not much effort has been devoted to the development of this form of cooperation from either side.

Similar to program creation, employers also do not find informal contacts, seminars and conferences or involvement in common bodies and associations as important forms of cooperation. What they do find more important than their counterparts in HE institutions is practical training, direct recruitment and collaboration in students' final theses. Looking from the educational process point of view, we can see that employers are really more interested in

cooperating with students in the later stages of their education when students are more experienced, have greater competences and demand less time from employers. Putting less priority from the employers to time consuming activities, like seminars and conferences, involvement in common bodies and associations, also supports this assumption.

Financial support is also becoming an interesting form of cooperation, even though both actors have no reported importance to it. As resources for educational programs are becoming limited, HE institutions try to find additional support from their end users, employers. In some educational sectors, like biotechnology, employers are more interested in cooperation through financial resources, depending on their interest. This might be a reason HE institutions place higher importance on this form of cooperation than employers.

7.3 Conclusion

Integrating Table 7.2 and Figure 7.1, the similarities and differences of the importance of forms of cooperation between the two actors can be put into a clearer perspective considering some speculation on the country level basis.

In Lithuania, for example. HE institutions place significantly higher importance than employers on three forms of cooperation: program creation, involvement in common bodies and associations and financial support. Unlike the average, both actors agree on the importance of cooperating in final theses. In Poland, program creation is evidently the most important form of cooperation from the categories on the list for HE institutions, and direct recruitment and cooperation with career centres are important for employers. The situation is different in Hungary, where HE institutions and employers express a significantly similar view on the importance of the forms of their cooperation.

In Slovenia, two major differences are present. In the opinion of HE institutions, cooperation with career centres is a very important form of cooperation, which is not true for employers who instead prefer cooperation in the form of direct recruitment. In contrast to Slovenia, employers in Turkey place more importance on cooperation with career centres than HE institutions. For HE institutions, seminars and conferences are important forms of cooperation, which is not so in the opinion of employers.

Summing up, HE institutions and employers reported that practical training is the most important means of cooperation between these two spheres. Other means were reported to a lesser extent, but of these career days and career centres, program creation and research projects were reported most frequently.

Box 1: Some relevant issues reported by HE institutions related to collaboration between employers and Higher Education Institutions

- A goal of HE institution's cooperation with employers is to become aware of the required competencies for study programmes development [LTH2].

- The main goals of cooperation are to get places where students can perform the practice, to recruit students to work and to get feed-back on the competencies of students [LTH5].

- If some national subsidies for employers which invite students would exist, perhaps employers would invite students for practice easer [LTH5].

- The goals of HE institution's cooperation with employers are to have partners which accept students for practical work and become aware of the required competencies for new study programme development and quality assurance of the implemented programmes [LTH6].

- One of the problems of cooperation is finances when inviting employers to "work" at the HE institution, e.g. the fee for an employer working in a final thesis committee is poor, therefore it could cause a problem to invite an employer to take part in a committee [LTH6].

- First, it is difficult to get into contact with employers, to convince them to build a partnership. Second, when employers invite students for practical work, they should assure that a mentor would assist a student, but that is not always the case [LTH10].

- In Lithuania there is no culture of partnership between employers and HE institutions. It only starts developing; it needs time for settling down and a lot of work for HE staff to "educate" employers [LTH11].

- The problems that HEI face is material problems: there are too large groups of students of some specialisations that clinics are not able to invite them all at the same time [LTH13].

- The main goals of cooperation are to get the places for students' practices and to get a feed-back on the competencies of students [LTH14].

- There should be a national system for subsidies for employers who take students for practices [LTH14].

- The relationship should be strengthened to improve the quality of practice and study programme committees' activities [LTH15].

- In his opinion no further development of cooperation between College and firms is needed [HUH1].

- There is huge lack of engineers, firms usually ask us to train more graduates, to commend them potential employees, and they usually tell us what special and general competences of graduates they need [HUH2].

- In accordance with the "regulation of vocational support" firms have to support vocational training. Firms can give that amount either to the government foundation or directly to the educational institutes [HUH3].

- Firms are obligated to invest into innovation developments, also either via government-owned "innovation foundation" or directly with the education institutions. Students are involved in these projects [HUH3].

- Employers' need can not affect a lot on the education structure or curricula - our education is strictly regulated and tied by law [HUH5].

- The compulsory traineeship period is rich in information flow (indirectly between employers and university) which greatly affects the forthcoming curriculum and course structure [HUH14].

- The organization of practical trainings is a difficult organizational and financial undertaking, since the university has to bear some related costs [PLH3].

- Credits for practical trainings are awarded on the basis of the training logbook, reports or certificates

[PLH3].

- Barriers to cooperation with companies are related to the complexities of the intellectual property law [PLH8].

- The greatest barrier the university comes against is low activity of companies in the area of research and development. Limited investment mean limiting research and implementation work, and this in turn leads to a reduced number of problems university students may work on [PLH9].

- Barriers that the university comes against in cooperation with companies are occasional jumpy reactions to attempts of obtaining information for use in doctoral dissertations [PLH12].

- A barrier that the university comes against in its cooperation with business is the limited potential of companies for generating research problems [PLH14].

- Cooperation with the University career centre is relatively low [SIH7].

- Basically we can say that we do not cooperate with employers because we do not have practical work foreseen in the program. Upon experience, practical work would not contribute much to the learning process [SIH9].

- We plan to have a closer contact with employers through the website. Career days are the best practice we do in our university because it enables our students to have direct communication with the world of work. We learn about the competences which employers seek in our graduates in those meetings, discuss them and sometimes put them in our study programmes [TRH1].

- We do not find this relationship so productive; the feedback we receive from the world of work is not reflected enough to our study programmes. The most fruitful relation between our university and employers is the internship/work placement we do with the developed sectors in our region [TRH4].

- This relation could be improved by a career centre, which enables these efforts to be systematically, and effectively done at the university level; unfortunately we do not have a career centre at our university. One of the barriers in cooperation with the employers is that they want only basic subject specific competences to be included in the programmes and the university staff wants also to include subject specific competences in more detail [TRH5].

- The centre offers 15-20 different modules for the first year students according to their interests. Each student may complete 150 different activities connected to the world of work. At their graduation they receive a certificate from the career centre. HR staff and employers inform the university which department they need and which skills are important for them in the recruitment process. [TRH6].

Box 2: Some relevant issues reported by employers related to collaboration between employers and higher education institutions

- There is no formal contracts with HE institutions, cooperation is not active but performed occasionally. The employer was never asked to provide feed-back on the competencies of study programme. The biggest barrier is the apathy of HE institutions' staff [LTE3].

- Cooperation between the employer and HE institution is not very active formally. The main purpose of it is the employer's search of new employees [LTE4].

- In most cases the employer was an active part searching for cooperation. There is no need to cooperate with career centres of HE institutions; direct cooperation at the faculty level is more efficient if the employer wishes to get students for practical work. Cooperation between the employer and HE institutions is not sufficient. At the level of department, the employer interrogated HE staff in order to find the best students for direct recruitment - it was done once but HE staff did not have intention to develop communication. The employer's request to organize competencies' development courses for

employees was not heard [LTE5].

- There are two main aims for employer's cooperation with HE institution: a) to get students to perform practical work and recruit best of them to the company, b) to develop competencies of employees and to maintain certain level of competency at organization inviting when inviting new employees [LTE6].

- Employer faced two problems: a) mostly students are not interested, neither motivated to learn during the practice, they treat it as a duty, b) HE staff were not willing to provide courses for employees or the content of programmes proposed was obsolete [LTE7].

- The cooperation between school and HE institutions should be developed more. First of all the employer accuse himself for insufficient cooperation. The employer says that there are not enough human and time resources in school to develop cooperation properly: the topic is important and there should be a special position for this activity in school [LTE10].

- The main goal of cooperation with HE institutions is to get the best students who would work in the organization [LTE12].

- Cooperation between employer and HE institutions is based on students' practical training performance and research that HE staff do for the employer. The employer is not questioned on the required competencies of study programmes, but permanently gives feed-back on students' competencies after practical training [LTE13].

- The employer searches for new employees during students' practice, therefore direct recruitment is rather common [LTE14].

- HE staff and students should come and visit the factory more often to learn the practice and its changes. HE institutions should ask the employer for cooperation "in small portions" and more often [LTE15].

- Barriers are of a financial character, e.g. the university does not have enough money to furnish laboratories with state of the art equipment, hence some shortage of competences [PLE2].

- The company has never had an opportunity to present its opinions on its expectations or suitability of the competences taught at particular faculties during consultations with universities [PLE9].

- The company does not feel that it is a participant in the Bologna Process [PLE9].

- Until now the Firm has not articulated any remarks as to the creation of new specializations or its competence expectations [PLE11].

- Leaders have too much work. In the past the HR department did not put focus on that area [SIE3].

- Sometimes the universities are misdirecting the trainees. Therefore, they are demanding a lot from employers [TRE5].

- We have attempts but cannot apply these because of bureaucratic obstacles. The universities should also endeavour but we cannot see any willingness. [TRE6].

- In order to increase the cooperation following channels should be emphasized by both parties: carry out a joint project, being an advisor to universities for curriculum development, organising joint meetings to discuss the needs of world of work in terms of the competences of graduates [TRE11].

Arzu Akkuyunlu

CHAPTER 8: Quality Control Aspects in Higher Education

8.1 Introduction and Framework

In this chapter we look at the importance and means of quality control in higher education for competence development. Table 8.1 shows the framework of the main quality control mechanisms which appeared as a result of interviews with HE representatives. In general, the methods used by HE institutions can be classified as curricular evaluation, career centres, alumni activities, quality control systems, committees and boards and learning outcomes. Column 2 of Table 8.1 presents a more detailed classification of the general categories and indicates the more specific methods that are used in each category. For example, curricular evaluation-general issues, graduates/student evaluation, employers evaluation, teachers/staff evaluation and examination results methods stated by HE representatives during interviews are categorized under the heading curricular evaluation.

Table 8.1: Framework of quality control aspects as reported by HE institutions

1. CURRICULAR EVALUATION	1.1 Curricular Evaluation – General Issues
	1.2 Graduates/student evaluation
	1.3 Employers organisations' evaluation
	1.4 Teachers/Staff evaluation
	1.5 Examination results
2. CAREER CENTRES	
3. ALUMNI ACTIVITIES	3.1 Alumni – general activities
	3.2 Career follow-up
4. QUALITY CONTROL SYSTEMS	
5. COMMITTEES & BOARDS	5.1 Study Programme Committees
	5.2 Boards & Associations
	5.3 Special bodies[a]
6. COMPETENCE OR LEARNING OUTCOME APPROACH	
7. OTHERS[b]	

a) The most typical examples: bologna coordination committee; quality coordination committee; annual symposium, …
b) The most typical examples: monitoring undergraduates; surveys after completing traineeships, permanent pedagogic training, …

8.2 Quality Control Aspects in Higher Education – the Perspective of Higher Education

Table 8.2 presents the different quality control modes emphasized by HE representatives at the country level. It is apparent from Table 8.2 that the most widely used quality control mechanism among sample countries is graduates/student evaluation. In four counties, namely Lithuania, Poland, Hungary and Turkey, graduates/student evaluation is the most emphasized quality control method. Among these countries, Polish HE institutions also employ curricular evaluation and Lithuanian and Hungarian HE institutions employ employers' evaluation together with the graduates/student evaluation. Slovenia is the only country where graduates/student evaluation is not explicitly identified as the most important quality control mechanism.

Table 8.2: Most important modes of quality control as reported by HE managers, by countries

	Lithuania	Poland	Hungary	Slovenia	Turkey	Total
Curricular evaluation – general issues	3	1		1		3
Graduates/student evaluation	1	1	1		1	1
Employers' organisation evaluation	1		1	2	3	2
Teachers/staff evaluation		2				
Examination results			2			
Alumni – general activities			3			
Career follow up			2			
Quality control systems			2			
Study programme committees	2					
Special bodies		3	3		2	
Others		3	3	3		

However, there is no consensus among countries in terms of the second most important quality control mechanism applied. Graduate and student evaluations are the most important quality control mechanism in Lithuania, whereas teachers/staff evaluation, alumni activities and employers' evaluation are the second most widely used tools in Poland, Hungary and Slovenia respectively. In this sense, we can say that employers' evaluation comes as the second most important tool for quality control for HEGESCO countries since it was applied either as the most important tool (in Lithuania and Hungary) or as second most important tool (in Slovenia). The following quotations from HE representatives stress the importance of graduate/student and employers evaluation for quality assurance:

> "*Employers and graduates are responsible for the identification of needed competencies, students – for the quality assurance of the study process*" [LTH11].
> "*Students take part in the study committees and provide recommendations for the improvement of the study process* [LTH12].
> "*Study programmes are upgraded for different reasons: because of new national requirements, stakeholders (mostly employers and students) feed-back*" [LTH13].
> "*Students, staff, graduates and employers are permanently questioned*" [LTH14].
> "*One half of the students work and study at the same time, therefore their opinions are valued a lot*" [LTH15].

The other important conclusion apparent in Table 8.2 is that despite an increasing number of career centres in recent years, career centres and alumni activities were not reported as the main quality control mechanisms in HEGESCO countries with the exception of Poland.

Another fact that emerged as a result of the interviews is that it is becoming a common practice in HE institutions to establish committees and boards responsible for quality assurance. In this respect, higher education representatives from Lithuania and Turkey respectively expressed the following views:

> "*To learn about the competences necessary for the world of work we plan to establish a directorate of education, this is placed in the strategic plan of our university. Through this directorate work would be more productive for the departments and faculties in that they would have systematic feedback tools done at the university level and a good database for the evaluation of the generic and subject specific competences and the how and at which level they are developed by the study programmes*" [TRH4].
> "*Responsibility for study programme development and its quality assurance lies on the study programme committee, which functions according to legal university requirements*" [LTH1].

"There are 2 employers, 2 students, 2 professors and manager in a committee" [LTH3].
"Members of study programme committee are: HE staff, students and employers. The feed-back of employers, graduates and students is gathered permanently on the quality of studies; it is the responsibility of the department" [LTH5].
"Study programme committees consist of 6-7 members that are the institution staff, employers (some of them are graduates) and students" [LTH11].
"Committees consist of teachers, students, employers (in some cases employers are graduates of the HE institution)" [LTH15].

Therefore, one can say that even though there is a consensus among countries over the importance of the curricular evaluation as a quality control mechanism, there are differences among countries in terms of other most widely used quality control mechanism. Additionally, it seems that countries are also applying various quality control mechanisms in addition to graduates/student evaluation. This is probably due to the differences in their education systems as well as cultural differences among countries.

In terms of the overall results for HEGESCO countries, Table 8.2 demonstrates that according to HE representatives, three different methods of curricular evaluation are the most important mechanism for quality control. The last column of Table 8.2 shows that among these mechanisms, graduates/student evaluation is the most important mechanism and employer's evaluation is the second most important mechanism. Figure 8.1, which shows the percentage of higher education institutions who experience the selected mode of quality control, supports the above mentioned conclusion.

Figure 8.1: Percentage of higher education institutions who experience the selected mode of quality control
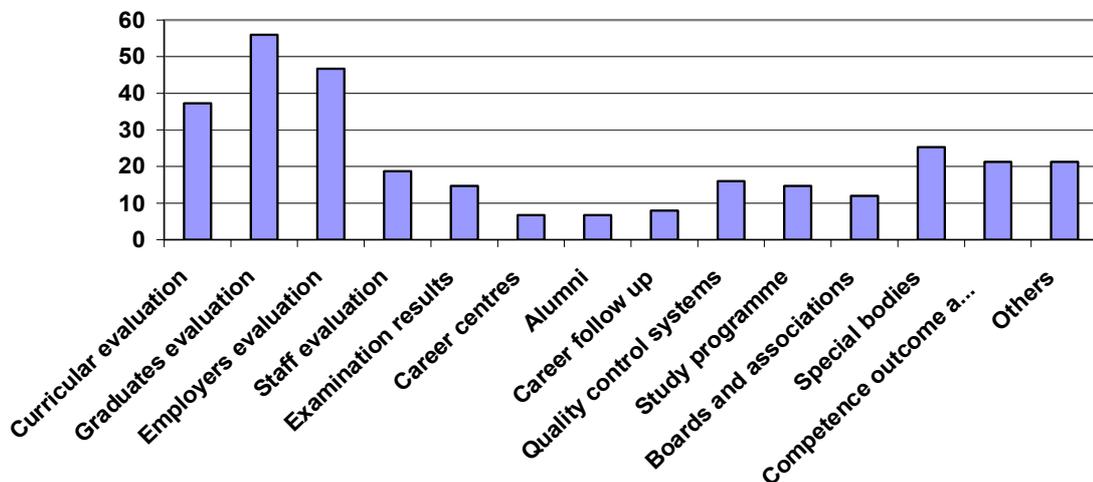
According to Figure 8.1, approximately 55-percent and approximately 45-percent of HE institutions in the sample countries used graduate evaluation and employers' evaluation as quality control mechanisms. Another mechanism that is used by 20-percent of HE institutions is a competence or learning outcome approach. As can be seen from Figure 8.1, career centres and alumni activities are the least applied methods in HEGESCO countries. In addition, it also seems that in some universities more institutionalized and integrative approaches are being adopted in terms of quality assurance. The following quotations are an example of such an approach:

"Monitoring the quality of courses and the quality of study process takes place at several levels. Competences are monitored for each year at the level of each program involved in the international accreditation process that has been successfully completed" [SIH3].

"Graduates' employability has to become a key mission for the universities. This has to be reflected to a greater extent in the design of the curriculum and become a main criterion of quality for our graduates' futures. As mentioned before, our curriculum has been revised every 6 years according to the results of implementations and current changes in the information area or needs of workplaces. To provide feedback on defining the level of acquired competencies, several assessment techniques have been used. According to learning outcomes (knowledge, skills and behaviours expressed in the Outcome Objectives) assessments are closely matched to the purpose, program objectives and intended teaching and learning activities and regular opportunities for formative and self assessment. Summative and formative assessment are integrated into the curriculum (essays, projects, rubrics, presentations, and feedback from their internship studies)" [TRH15].

Only a minority of HE representatives stated that either there is no quality assurance mechanism at all or even if exist not enough extent in their institutions. As three respondents stated;

"There is no development or consideration of a quality assessment methodology and tools" [HUH4].

"Formally we do not systematically monitor the competence of graduates. When they have created new programs, they have identified around 20 study profiles, which are of interest for our environment, and on this basis they have designed a set of objects and competences" [SIH7].

"The university gets some feedback from students and graduates, but not in a satisfactory form and amount" [PLH1].

However there is also a controversial view stating that *"We have formal quality control and monitoring - it takes a lot of administration without any benefit"* [HUH2].

8.3 Conclusion

It is apparent from the interviews that the most widely used quality control mechanism among sample countries is the graduates/student evaluation. Countries also apply other quality control mechanisms in addition to graduates/student evaluation due to the differences in their education systems as well as cultural differences among countries. Despite an increasing number of career centres in recent years, career centres and alumni activities are not considered important quality control mechanisms in HEGESCO countries except Poland. In terms of the overall results for HEGESCO countries, according to the HE representatives graduates/student evaluation is the most important mechanism and employer's evaluation is the second most important mechanism. Another positive development in this respect is that some universities are adopting more institutionalized approaches to their quality assurance issues.

Box 1: Some relevant issues reported by HE institutions related to quality control aspects

- Study programme committees consist of 6-7 members that are HE institution staff, employers (some of them are graduates) and students [LTH11].

- Employers and graduates are responsible for identification of needed competencies, students – for the quality assurance of study process [LTH11].

- Composition of study programme based on competencies; students' assessment criteria are also based on required competencies [LTH14].

- Students take part but are not active enough in quality assurance procedures [LTH14].

- Learning outcomes are identified as a result of cooperation with employers and out of teachers' research experience. The assessment criteria of students' achievement are developed according to learning outcomes [LTH15].

- The university gets some feedback from students and graduates, but not in a satisfactory form and amount. The main source of information and opinions are graduates associated in the Association of the University of Bielsko-Biała Lovers. Some organizational effort is being made to ensure a more steady flow of information from graduates. The university academics also influence the modification of the university teaching offer [PLH1].

- The study curriculum is flexible; lecturers may suggest a new subject, which is implemented as optional at first and if students show interest in this subject, its status changes and it becomes a core subject, while a different, less attractive one is moved to the optional group [PLH14].

- To learn about the competences necessary for the world of work we plan to establish a directorate of education, this is placed in the strategic plan of our university. Through this directorate the work would be more productive for the departments and faculties in that they would have a systematic feedback tools done at the university level and a good database for the evaluation of the generic and subject specific competences and the how and at which level they are developed by the study programmes [TRH4].

- Teaching staff puts the competences in the curricula according to the experience/information they gain/get from conferences, recent technological developments, recent literature [TRH5].

- Graduates' employability has to become a key mission for the universities. This has to be reflected to a greater extent in the design of curriculum and become a main criterion of quality for our graduates' future [TRH15].

- However, we need more than that, such as student self assessment (Self-Assessment is a relevant method/tool to assess and evaluate quality, to ensure and develop quality at the system and provider levels.), peer evaluation, observations our graduates on work place, interviews with students, and follow up studies etc. [TRH15].

Samo Pavlin, Ivan Svetlik

CHAPTER 9: Future Development of Higher Education

9.1 Introduction and Framework

This chapter aims to answer the question, in what way and how should HE institutions change in order to improve students' competence development? Table 9.1 presents the items under discussion in this chapter which also represent the general frame of future development in HE as reported by HE institutions and employers.

Table 9.1: Framework of the future development of higher education as reported by HE institutions and employers

1. PRACTICAL ORIENTATION	1.1 Practical work and general issues
	1.2 Traineeships and internships
2. COOPERATION WITH EMPLOYERS	2.1 Cooperation – general issues
	2.2 Visits from one to another
	2.3 Adaptation to employers' needs
3. FINANCIAL SYSTEM AND MATERIAL ISSUES	
4. CURRICULUM IMPROVEMENTS	4.1 Curriculum development – general issues
	4.2 Focus of fields of study
	4.3 Flexibility
	4.4 International orientation
	4.5 Teachers' training
	4.6 Specialisation
5. RESEARCH	
6. MANAGEMENT	
7. AUTONOMY	
8. OTHERS [a]	

a) The most typical examples: improvement of administration systems; building up relationship student – professor; diversification of studies; changing student mentality; improved system of student recruitment, …

In the following section we present in what way HE institutions and employers accordingly reported the main issues of competence development. The viewpoints are presented first from a comparative perspective, and then we look into this question from a more detailed perspective considering the average of all studied countries together.

9.2 Future Development of Higher Education

This section presents and discusses the future development of HE institutions from the point-of-view of HE managers and employers. In Table 9.2 we present the frequency of interviewees responses ranked from the first to third most frequently reported.

Table 9.2: Important fields for the future development of higher education, by countries

	Lithuania	Poland	Hungary	Slovenia	Turkey	Total
HIGHER EDUCATION						
Practical work and general issues			2	2	2	
Traineeships and internships			3	3		
Cooperation – general issues				2	1	
Adaptation to employer needs					2	
Financial system and material issues	1	3	1	2		3
Curriculum development – general issues	3	2	2	1	1	2
Focus of fields of study			3		2	
Flexibility	2			3	3	
International orientation						
Teachers' training	3		3	2	2	
Specialisation		3				
Research					1	
Management			3		1	
Autonomy		1				
Others	1	1	3	2	2	1
EMPLOYERS						
Practical work and general issues	2	2	1	1	1	1
Traineeships and internships		3	3			
Cooperation – general issues	2	2		3	2	2
Visits from one to another	3					
Adaptation to employer needs	3	1			3	2
Financial system and material issues						
Curriculum development – general issues			3	2		3
Focus of fields of study			2			
Specialisation			3			
Others	1	2	3		3	2

a) HE institutions perspective
The view of HE institutions in HEGESCO countries are most commonly categorised as "Others". The category "Others" includes a range of diverse responses, including: "*Both students and teachers should be interested in study process and be partners*" [LTH62], "*universities should change in every aspect*" [TRH8], and "*more universities, especially in their field*" [SIH7]. As a result of the heterogeneous nature of this category it will not be discussed in detail hereby, but this result gives a clear impetus for further research.

The second most frequently reported premise in the future development of HE relate to issues and general concerns of curriculum development. The key categories encompass a broader focus of fields of study, flexibility, international orientation, teachers' training and specialisation. Further concrete examples of these types of responses include: "*Limiting scolarization in favour*

of education quality" [PLH14], "*modification of study syllabuses*" [PLH6], "*change in curriculum*" [HUH8], and "*higher education programmes should be based to foster innovation at all levels*" [TRH15].

Financial system and material issues emerge as the third most important field for the future development of HE (this is the view of HE institutions). These types of issues include university funding and access to financial resources, as well as more practical issues, such as the availability of suitable laboratory equipment for scientific institutions, for example.

Issues of lesser importance for HE managers at the general HEGESCO level include aspects of practical work, the incorporation into study programmes or development of traineeships and internships, cooperation, visits from academics to employers and vice versa, adapting curricula to employers' needs, adjusting the focus of fields of study, … At the individual country level, the emphases of HEI development issues from HE also draw some possible speculations on national characteristics as indicated below.

HE representatives in *Lithuania* believe that "Financial system and material issues" and "others" are the most important fields for the future development of HEIs in Lithuania. In the words of one interviewee "*not enough financial resources are allocated for HE institutions from state budget*" [LTH2]. This is followed by "Flexibility", which is ranked in second place. This item concerns flexibility issues within and between study programmes. Some examples of these types of responses in Lithuania include: "*study programmes should allow more flexibility and the individual learning of the student should be emphasised*" [LTH4] and "*at university and national level – HE institutions should become more flexible in study programmes*" [LTH10]. General curriculum development issues and teachers' training are ranked joint third.

In *Poland*, issues addressing autonomy were frequently stressed. This issue was only weakly indicated in other countries. Autonomy refers to the ability of higher education institutions to make their own decisions concerning education and study syllabuses independently. Such responses include HE managers demanding they should have "*more freedom to shape study curricula*" [PLH15], be "*granted greater freedom to open specializations and study programmes*" [PLH3], and have a "*larger influence on the contents of teaching at particular major programmes of study*" [PLH7]. General issues of curricular development are ranked second in their importance in Poland, and financial system and material issues and specialisation are joint third. Specialisation refers to narrowing students' knowledge and skills into very specific disciplines within fields of study.

In *Hungary* we have found larger variations over the future development of HE. The first ranked category in Hungary is Financial and material issues. Some responses that address this issue highlight, for example, "*change financing of universities*" [HUH2] and the fact that "*higher education institutions are financed on the basis of the number of students…*" which has no bearing on the "*…effect of quality on it*" [HUH3]. The second most important issues concern practical work on one side and the development of curricula on the other. Finally, Hungarian HE managers in this study would also like to see changes in the development of traineeships and internships, a change in the focus of fields of study, and improvements in teachers' training and management.

In *Slovenia*, curriculum development is ranked first. Other important fields for HE development include practical work and general issues, financial system and material issues, teachers' training, and others. Traineeships and internships and flexibility are ranked third. Again, from the number of items that are jointly ranked in Slovenia, additional research should be performed to precisely identify in what way HEIs can be improved in the future in the Slovenian HE space.

Similar to Hungary, HE institutions in *Turkey* also have a very diverse view on the future development of HE. The most frequently reported premises were general issues of cooperation with employers, curriculum development and research and management. Flexibility also appeared as a very important concern in this country.

b) Employers' perspective

Turning our attention to *employers*, they most frequently reported issues that concern the practical experiences of graduates during their educational experience. This includes responses such as "*universities should direct their teaching processes more towards practical issues*" [PLE7], "*systematic and well prepared practical work of students*" [SIE3], and "*more practical courses for specific professional competences*" [TRE11] etc. In this sense, employers would generally like to see HEIs develop graduates' practical skills so that they are prepared for the world of work immediately upon graduation.

Adaptation to employers' needs, which includes responses that are linked to employers having a greater say in how study programmes in their field of work are structured, "cooperation – general issues", and the category "others" are jointly ranked in second place. There is some evidence that employers would like to become more deeply involved in decision making in the higher education process. Issues relating to the development of the curriculum are ranked third. Issues of lesser importance for employers at the general HEGESCO level include: traineeships and internships, cooperation, visits from one to another, adaptation of HEIs to employer needs, financial system and material issues, curriculum development, the focus of fields of study… Looking at individual country cases one can gain some general ideas on the country specifics.

Lithuanian employers have a very ambiguous view on the future development of HE falling away from the main categories identified but out of identified categories practical work is stressed most importantly. One employer in Lithuania commented on the failures of the Lithuanian training system for students that reflects one view of practical training in Lithuania:

> "*There is a problem in both sectors, in HE institutions and employers organizations – no one accompanies a student. Students who perform practice are treated as free labour force by most employers, HE staff do not care about students success/achievements during practice. Students are not motivated to do the practice well*" [LTE7].

Visits from one to another and adaptation to employer needs were ranked third in Lithuania. Visits to one another encompass the exchange of personnel from academia to employers' organisations and vice versa. This is necessary for teachers to learn the latest in innovations and techniques in order to ensure that students are taught in university the same standards that they will be expected to comply with in industry once they have graduated. Two respondents reported:

> "*HE institutions should invite more practitioners to lecture students, to revise the competencies of study programmes and not only to take part in various boards of HE institutions*" [LTE6].
> "*HE staff and students should visit more often employers' organization to get to know the practice and expand the field of research*" [LTE4].

In *Poland*, employers have often indicated the need to adapt their study programmes to the needs of business and industry. One respondent stated that universities should "*seek information from companies on how to adapt the curriculum to needs of the job market*" [PLE13]. In *Hungary*, employers would like to see the development of practical work most. One employer complained that the Hungarian HE system is "*lacking practical education*" [HUE5], while another stated that "*a more practical education is needed*" [HUE6]. Employers in Hungary interviewed in this study also believe that the focus of fields of study should change, which includes, for example, an increased focus on the development of generic competences (see [HUE3] in Appendix 2 for an example). Future changes to the system of internships and traineeships, specialisation in universities and curriculum development were also frequently mentioned.

Employers in Slovenia would like to see more practical work in universities as a priority, the curriculum developed further, and more cooperation between business and industry and higher education in that order. In *Turkey*, employers are more coherent about their view of the future development of the Turkish HE system than their counterparts in HE management. They state that they would like to experience more practically orientated education, more cooperation, and that future syllabuses should be adapted to what employers need in their individual fields.

In Figure 9.1 we look at more elaborated categorisation based on the collectivised responses of all interviewees in all studied countries.

Figure 9.1: Percentage HE and employers' units who consider the selected modes for the future development of higher education as very relevant
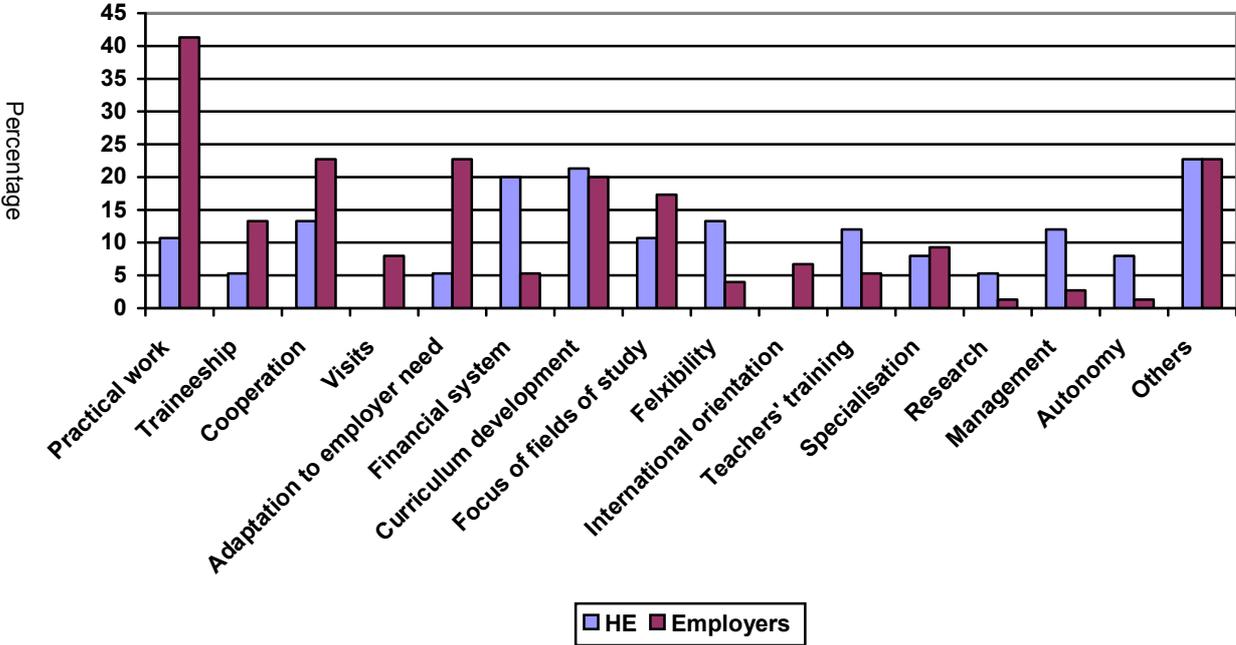
From Figure 9.1, HE institutions most frequently report curriculum development as a priority for the future development of HE with roughly 21-percent. This is closely followed by financial issues. The least mentioned item is visits to one another, which did not receive much attention from HE institution in this study.

Employers on the other hand emphasise practical work the most. 41-percent of employers indicated the importance of practical training and classes. Some responses include:

> "*The role of practical training in education is enormous – practical classes enable students to get familiar with the specific character of work under the constant supervision of a mentor*" [PLE7].
> "*The currently prevailing model favours theoretical over practical knowledge, and it should be the other way round*" [PLE15].
> "*It is not about the liquidation of theoretical subjects, which are very important for personal development as well as indispensable for students who intend to continue academic career, but to focus on possible applications of theory in practice*" [PLE2].
> "*Most of the lecturers are very far from the practices and aware of only the academic world*" [TRE2].
> "The *Bologna-process is a positive change, an improvement, for a compulsory traineeship is beneficial for students*" [HUE15].

In the world of work practical work is closely followed by cooperation and adaptation to employers' needs. This means that one in five employers would like to see their level of involvement in the education process increase in the future. The least frequently mentioned categories concern research conducted in universities and the degree of autonomy that universities can exercise.

The largest discrepancies among HE institutions and employers are in their perception of practical work and adaptation to employers' needs, which are significantly more important in the view of employers than HE institutions. Similarly, HE managers place a far greater emphasis on financial and material issues, the flexibility of study programmes and management than their counterparts in business and industry.

9.3 Conclusion

In this chapter we learned that HE institutions and employers reported various views of the future development of HE in order to improve acquired level of graduates' competencies. Even though the stress they placed upon identified elements varies in quite some respects, the common framework offers an excellent basis for future discussions among both groups (HE institutions and employers). The key areas identified in this survey as offering the highest potential of developing graduates' performance after they left study are:

- practical orientation and cooperation with employers;
- financial system and material issues;
- curriculum improvements;
- research;
- management, and
- autonomy.

From the field survey we can say that in general employers agree that HE institutions should be more practically oriented, they should seek stronger links with the world of work and more strongly rely on employers' needs. Even though these elements were also identified during the interviews with HE institutions the stress they placed on them in general was significantly lower. Higher Education institutions in general believe that they could perform significantly better if their

financial mechanisms would be improved, which would increase the quality of the curriculum, teachers' training, flexibility and better management systems.

Box 1: Some relevant issues reported by *HE institutions* related to future development of HE

- The approach to studying should change – there should be more focus on the students' competence profile. The Act on Higher Education should be modified to introduce more flexible forms of teaching. The Bologna Process leads to standardization and international comparability of education in the European higher education system. The ECTS points and diploma supplements stimulated students' and graduates' mobility. The bachelor or engineer's degree gives its holder sufficient competence to enter the labour market, the 2nd degree studies should add managerial competences to the basic ones and they should constitute the preliminary stage for academic research. [PLH6].

- Larger influence on the contents of teaching at particular major programmes of study the possibility of employing young talented teachers, doctoral students with a degree is limited (there are no vacant positions). The generation gap is a serious threat for the quality of university research and teaching. Abandoning multi-university employment of academics from public universities [PLH7].

- Public universities have problems with spending money; private schools find it easier to manage their financial resources [PLH14].

Box 2: Some relevant issues reported by *HE institutions* related to ration between BSc and Master studies as reported by HE institutions

- Knowledge is not a reason for Masters' studies but a need for the diploma [LTH1].

- Masters' graduates are more professionally and personally mature [LTH4].

- The bachelor's degree is a sufficient qualification to enter the labour market, although the second degree opens the path for an academic career and facilitates employment [PLH1].

- A diploma supplement enables students to seek employment in any country they choose. The second degree studies provide the opportunity to acquire additional qualifications, e.g. of a sport instructor for disabled people, they increase the specialist competence level and may be used as an argument in pay negotiations [PLH2].

- The first degree offers basic professional expertise, but the second degree studies serve extending general professional expertise for those who want to be active in the scientific area or acquire some more knowledge in the field of management [PLH4].

- The bachelor or engineer's degree gives its holder sufficient competence to enter the labour market, the 2nd degree studies should add managerial competences to the basic ones and they should constitute the preliminary stage for academic research [PLH6].

- The bachelor's degree should be seen as an intermediary stage – students should be granted the opportunity to study for the first and the second degree in two different places. The doctor's degree is really important if a person wants to stay at the university and pursue academic career [PLH13].

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CHAPTER 10: Conclusions

In general, HE institutions and employers in the five surveyed countries share a similar view and important mutual reference points on the process of how graduates develop competences during education and in their early career. In this report we sought answers to eight main questions presented below.

Which are the key competences of graduates to function well in the work place and society? In general both HE institutions and employers agree that a rather ambiguous group of competences related to personal proficiency, such as team work or decision making, are the most important for new graduates to function well in the work place. The other two most important competences reported are mastery of disciplines and field specific knowledge, and skills related to communication.

Which actors are mainly responsible for competence development? HE Institutions consider themselves as a far more important actor for generating graduates' key competences in comparison to employers. Employers consider themselves as equally important to HE institutions in generating competences.

What is the satisfaction with graduates' competences in the world of work? More than three out of five employers reported experiencing some kind of shortage of field specific knowledge of newly employed graduates, while more than half of them find graduates posses the proper level of generic competences.

Which are the most important teaching and training modes in higher education and in the labour market for the development of these competences? Two out of three HE institutions consider lectures and classes as the most suitable means of competence development. Approximately, half of interviewees consider active learning modes (e.g. problem based learning), team and project work as being key factors for generating competences in higher education. In the world of work employers consider the best means of competence development training, orientation/introductory program and mentorship. The overall impression during the fieldwork was that parallels between competence development in the world of work and education are very hard to be drawn, but we found an indication that HE institutions and employers are highly aware of the importance of different contexts (HE institutions and the world of work) and possible complementarities.

Which are the most important means of collaboration between employers and higher education institutions for competence development? HE institutions and employers reported that practical training is the most important means of cooperation between these two spheres. Other means were reported to a smaller extent, but career days and career centres, program creation and research projects were reported most frequently.

Which are the quality control mechanisms that most importantly strengthen the development of competences? The most important identified means of quality control in the survey were graduates, employers and curricular evaluations.

Which path should higher education systems take to foster the development of competences? The most important means reported by HE institutions that should contribute in the future to competence development were curriculum development, improvement of financial systems and

cooperation with employers. Employers have stressed a high relevance to practical work that was less frequently reported by HE institutions.

Even though the sample size draws severe limitations in the way of how findings can be generalised at the country level basis for Lithuania, Poland, Hungary, Slovenia and Turkey, it is worth looking at the general similarities and differences – this comparison provides an indication of the possible international scope of findings and the need for future surveys, in particular field specific.

Similarities among surveyed countries: The elements in which there is a strong consensus among countries are related to: a) personal proficiency and team work as the central competency clusters of newly graduated students; b) the perception of HE institutions of themselves as a key factor in competence development; c) the central role of lectures and classes and active learning as the most important teaching mode for competence development (as reported by HE institutions) and different training modes (as reported by employers); d) the practical training of graduates as the central element of cooperation between the world of work and education; e) graduates and employers evaluation as a central mode of quality assurance in HE; and f) agreement of employers in all surveyed countries that HE institutions should put greater emphasis on their practical orientation.

Differences among surveyed countries: The reference point in which we have identified significant variation among five studied countries are the following: a) the importance of key competences, such as communication skills or team work and foreign language, for example; b) the view of employers in the way of how they develop graduates competences; c) the importance of some teaching modes, such as the role of presentations or project work in HE, or the role of senior staff in the world of work, for example; e) the emphasise in the means of cooperation between two parties in the case of research or career centres; f) various elements in quality assurance as perceived by HE, while the most heterogeneous view among countries was detected in the identification of the development of HE.

Additionally, when comparing the general views of HE institutions and employers, the general conclusions can be best summarised from the aspect of similarities and differences. When looking first at **similarities**, the key findings can be summarised as follows:

Common frameworks: In the survey we were able to compile common profile frameworks of HE institutions and employers related to: a) key graduates competences, b) means of collaboration between HE institutions and employers, and c) the future development of HE institutions towards generating key competences. These profiles present a good starting point for dialogue between HE institutions and employers and can be used as an example for future dialogue and collaboration. This would be the case when more field or domain specific products would be developed as a result of common exercises.

Balance between specific and general competencies: In general, HE institutions and employers share a similar view on the importance of specific and general competences of young graduates. They both expect graduates to have higher stress on general competences, while they consider that real specialisation starts once graduates enter the world of work. However, and not surprisingly, we found that HE institutions stress a somewhat higher importance on the utilization of theory and scientific knowledge, while employers favour specific knowledge that is work

related. Lastly, when HE institutions and employers were asked on the relative importance of graduates competences a firm conclusion from both parties was that each type is equally important.

The importance of practical training as the key mode of collaboration: Both parties strongly agree that practical training appears to be a crucial element in competence development and a bridge between education and the world of work. Even though the perception on its implementation in study curricula varies between HE institutions and employers, such agreement enables and opens future doors to strengthen collaboration and "vocationalism" in higher education.

HE Curriculum improvements: Even though the general agreement between HE institutions and employers on the way of how the future development of HE should enhance the level of acquired graduates' competencies was not very high, both parties shared a similar view on the importance of curricular improvements in terms of professional orientation, flexibility, internationalisation, teachers' training and specialisation. Since the curricula is expected to present the cornerstone of HE's daily activities, this agreement in the context of other findings presented in this report indicates the need to further explore the expectations and views of other stakeholders in HE.

In this report we also identified several points in which HE institutions and employers do not share the same view. Looking at **discrepancies** might be as equally important as looking at similarities since they touch upon potential tension and a need for future development. The most obvious differences are:

Responsibility for competence development: As already indicated, HE Institutions consider themselves as the most important actor to furnish graduates with key competences, while employers consider themselves as equally important to HE institutions in competence generation. We can consider employers commitment to competence development in graduates early careers as positive. It calls for HE policies to support future attempts in involving employers into strengthening their orientation towards the world of work and the development of field specific competences.

Teaching and training modes of competence development: Based on the survey results it is clear that HE presents a substantially different context for competence development than it is reported from the world of work. While in HE the main principle of learning remains information process learning and reflection, the prevailing type of learning in employers' institutions is social learning and participation. This is clearly reflected in the reported modes in HE, which emphasize lectures and classes and active learning, while employers reported mentorship and different training types, not being so much aware of learning at work itself. These different principles of learning are also reflected in the way that each party perceives possible modes of collaboration among themselves.

Both sides, employers and HE institutions, have emphasized their strong points in the way they generate graduates' competences. This indicates the need for even stronger cooperation in line with the supporting policies, seeking for newer synergies, mutual learning at the system and individual levels and subsequent modernisation of approaches, especially in HE. This is strongly related to the future development of HE (see points below), where new cooperation modes are needed in line with enhancing advantages of competence development in graduates' early careers on both sides.

Cooperation between HE institutions and employers (selected aspects): Even though both parties agree that practical training is the central means of their cooperation in training new graduates, and they share a somewhat common view on the importance of career centres, we have also detected discrepancies. HE institutions would like employers to play a more important role in programme creation and research projects, strengthen informal contacts and play a more active role in common bodies, such as programme committees. Employers on the other side emphasized direct recruitment and involvement in final theses.

Future development of HE: The view of how HE should change in order to better equip graduates with strategic competences is strongly related to emphasizing practical work and adaptation to employers' needs. The prime concern of HE institutions in the future development of HE is mainly related to financial systems.

In a nutshell, employers' expectations on a more practical role of HE education results out of permanent tension between these actors and will expectedly remain or even increase due to technological innovations. It will demand faster adaptation and a stronger accent on the development of field specific competences, integration of employers into curricula or even gradualisation of HE in terms of required work experiences when proceeding between different study cycles.

Even though, we can presume that several specific competencies will never be able to be developed in HE. Trying to do so in too large an extent would even decrease some of competitive advantage of employers' organisations, as graduates would not be able to adapt to new situations and a competitive environment or fully explore their human capital in terms of knowledge and job creation. The way the inter-linkage between specific and general competences is combined and the way of collaboration between employers and HE institutions thus present in most fields of studies one of the key developmental concerns. As we have experienced during the fieldwork and the analysis of this report, the general impression was that general competences can be observed as a context for the development specific ones or vice versa. Hence putting a larger focus on the competence "incubation phase" would be beneficial for both parties.

We can conclude this report with a plea for further research related to competence development, triangulation premise, incorporating the different views of HE stakeholders with a strong comparative stress on country and regional specific settings and fields of study. The results of such surveys eventually produce a strong framework for dialogue between all HE stakeholders and disciplines in an international perspective.

Appendix 1

Higher Education Institution Representatives and Employers' Questionnaires: questions considered in this report

a) Higher Education Institution Representatives' Interview

Question 1

Which do you think are the most important generic and specific professional competences for graduates to function well at workplace?

Question 2

Who is responsible for the development of these competences?

Question 3

How do you see the balance between generic and specific competences?

Question 4

Which modes of teaching and learning are emphasised in your study program to develop these competences?

Question 5

How do you cooperate with employers (internships, practical work, applicative projects, direct recruitment from schools, cooperation with Career centres…)?

Question 6

Which quality control monitoring activities do you use to provide feedback that a certain level of competences is acquired?

Question 7

In what way and how should HE institutions change in order to improve students' competence development?

b) Employers' Interview

Question 1

Which do you think are the most important generic and specific professional competences for graduates to function well at workplace?

Question 2

Who is responsible for the development of these competences?

Question 3

How do you see the balance between generic and specific competences?

Question 4

How satisfied are you with graduates' competences (e.g. 4 groups): do you experience overall shortages, surpluses, balance?

Question 5

How do you cooperate with HEI (internships, practical work, applicative projects, direct recruitment from schools, cooperation with Career centres…)?

Question 6

Does your organization have systematic HRM practices to prepare new employees for their work and development? If yes, please describe it.

Question 7

In what way and how should HE institutions change in order to improve students' competence development?

Appendix 2

Summaries of Interviews

LITHUANIAN INTERVIEWS

Interview: [LTH1]

The most important generic competencies for graduates are the abilities to rapidly acquire new knowledge, to negotiate effectively, to come up with new ideas and solutions, to perform well under pressure, to work productively with others, to write and speak in a foreign language, to possess an alertness to new opportunities, and to practice analytical thinking. Higher Education (HE) institutions are responsible for the development of these competencies, as is the student him/herself. Generic competencies should dominate in university education. If a graduate possesses well developed generic competencies, s/he would be quick to develop specific competencies in the workplace whenever she/he feels the need to utilize them. Generic competencies are most effectively developed through active learning/ teaching methods, such as group work, project- and problem-based learning, or oral presentations.

The main task of cooperation with employers is to identify the competencies that are required and appreciated within the workplace. The employers should coordinate with curriculum development, be involved in the practical work of students and in the assessments of final theses (such as by providing the information for final theses and being a board member on final thesis committees). The best way to improve this cooperation is for university staff to be more active and to invite employers and graduates to collaborate using various forms of recruitment. When requesting cooperative services, staff should be clearly aware of the university's needs and reasons for the prospective partnership. In the university, all study programs are designed upon, and improved by, learning outcomes methodology. The responsibility for the development of study programs and their quality assurance rests on the study program committees, which must function according to university legal requirements.

In the HE institution, there is a "Centre on Competencies" that organizes informal and non-formal learning for the students, which corresponds to learning outcomes of the particular subject. In order to improve the development of students' competence, this should not be the task of HE institutions alone, but of all educational systems. The revision of the different educational levels in light of the Knowledge Economy should be put into practice.

Interview: [LTH2]

The most important competencies for graduates include the mastery of their own field, but also analytical thinking, the ability to perform well under pressure, to use time efficiently, to coordinate activities, to make their meaning clear to others, to assert their authority, and to come up with new ideas and solutions, as well as showing a willingness to question their own ideas and those of others and demonstrating a professional knowledge of other countries. Possessing the ability to effectively use computers and the internet is mandatory. Higher Education institutions, teachers, and students themselves are responsible for the development of these required competencies. If a graduate possesses full knowledge, s/he will be aware of how to work efficiently. Generic competencies are most effectively developed through group work, project assignments, practical work, oral presentations and discussions. Cooperation between employers and HE institutions is vital for the success of HE institutions, since three stages of students' practical work are performed within employers' institutions. The staff members of some HE institutions work and collaborate with outside organizations as a part time job, taking part in their associations, the publishing of articles or textbooks, and various other events. No established system exists for the recognition of students' non-formal learning at HE institutions. There is only a process of implementation of competency-based study models in universities. The responsibility for the development of

study programs and for their quality assurance is dependent on the department. The programs are developed according to state qualification requirements for particular vocations where competencies are indicated. Study programs are revised every year following the feedback of employers, students, and HE institution staff. This cooperation is not sufficient with either employers or graduates. Student feedback regarding the quality of studies is regularly gathered. The problems that HE institutions face include requirements for study programs that are too strictly determined and insufficient allocation of financial recourses from the state budget.

Bachelor's degree programs are sufficient for the smooth transition of a graduate into the labor market; nevertheless, specialists in certain vocations, e.g. teachers, should have master's degrees.

Interview: [LTH3]

The most important generic competencies for graduates to function well in society are analytical thinking, the ability to come up with new ideas and solutions, alertness to new opportunities, an ability to use time efficiently, a professional knowledge of other countries, and the ability to write and speak in a foreign language. Three groups are responsible for the development of these competencies: HE institutions, students and employers. If a program is dedicated to a particular employment field, there should be specific competencies related directly to that field. If a program aims to provide a general university education, then general competencies should be emphasized. Bachelor level programs should develop more general competencies, while master's level degrees should be aimed at developing more specific competencies related to a particular field. At the moment, e-learning is emphasized as an important method for competency development in respondents' HE institutions. Other important learning/ teaching methods are: oral presentations of group work and practical studies.

Teachers of respondents' HE institutions are active members of various associations and federations that are related to their field of research. This way, teachers obtain practical experience that they are able to use for curriculum development. They can also establish contacts with employers to support their HE institution with material utilities. Students often perform practical work within employers' organization. Employers are members of self-analysis groups, board members of final thesis committees and study program committees. Study program committees are responsible for program development in the respondents' HE institutions. Learning the outcome of a program helps to revise it regularly, at least once every three years, in order to insure constant improvement. A strategy for the implementation of learning outcomes in the teaching/learning process is being developed at the moment. Competencies and learning outcomes are being emphasized and assessment criteria are based on learning outcomes. The success of study programs relies on the cooperation between HE staff, employers and graduates, and their abilities to obtain feedback from employers and graduates and to improve the programs based on that information.

Interview: [LTH4]

The most important competencies for graduates are the mastery of own their field, the ability to come up with new ideas, an alertness to new opportunities, analytical thinking, and an ability to assert their authority. The responsibility for the development of required competencies rests on departments, professors, and on the students themselves. The proportion for the humanities and arts studies should consist of 60% specific and 40% generic competencies. Most common mode of teaching and learning in HE institutions is the individual work of students accompanied by a teacher. Other methods include practical work, project assignments, and the oral presentation of students' work. The staff at some HE institutions are employers themselves. Other employers are met at symposiums and workshops. Employers invite students for practical work and the best students are recruited for the employers' organizations. Employers take part in the activities of students' work review committees. Staff at HE institutions communicate frequently with employers in non-formal ways. In order to improve cooperation, HE institutions should permanently organize meetings and discussions with employers, rather than only occasionally. The biggest barrier that HE institutions face is the indifference of students. A system of recognition for formal and informal learning is not necessary since studies of humanities and the arts are based on practical work. Quality assessment techniques for studies are based on permanent revisions to the

output study process. Study program development and quality improvement is responsibility of a work group that consists of department staff. There are no formal questionnaires on quality issues available for students, employers or graduates. All stakeholder groups are questioned in non-formal ways. Since HE institutions are not numerous, quality issues in the study process are known. Study programs are not based on learning outcomes, but rather on learning aims. Assessment criteria are also based on learning aims. Study programs are revised once in a two year period.

Bachelor's degree program graduates are sufficiently trained to function well in a labor market; nevertheless, research shows that master's graduates are more mature on both a professional and personal level.

Interview: [LTH5]

The most important competencies for graduates are the mastery of their own field or discipline, analytical thinking, the abilities to perform well under pressure, to work productively with others, to come up with new ideas and solutions, and the ability to present products, ideas or reports to an audience. The development of graduates should be facilitated by HE institutions, teachers, employers and the students themselves. The ratio between specific and generic competencies should be equal or slightly dominated by specific competencies. The most constructive learning/teaching methods are lectures, group work assignments, problem-based learning, work placements, and oral presentations by students. There is very close, formal and non-formal cooperation with employers. The main goals of the cooperation are to establish venues where students can practice, to recruit students for work, and to get feedback on the competencies of students. If national subsidies for employers who invite students for training were implemented, perhaps employers would recruit students more willingly. Some employers provide HE institutions with material support, good students with scholarships; one of these established its department on campus. HE staff develop qualification courses for employees. Employers are members of students' final thesis defense committees and study program committees. The competencies of study programs, study modules, practice sessions, etc. are strictly regulated by EU directives. The HE institution is a member of an association that unites European HE institutions of this branch. Study program committees and departments are responsible for study program development and quality assurance. The feedback of employers, graduates, and students on the quality of studies is gathered regularly. Study programs are revised every year. The problem is that EU requirements for the qualification and national requirements for composition of study programs conflict somewhat; i.e., national requirements place an obligation for a certain number of credits in general subjects, therefore specific subjects cannot be expanded until the needed maximum has been obtained.

Interview: [LTH6]

The most important competencies for graduates are: mastery of their own field, analytical thinking, ability to coordinate activities, to mobilize the capacities of others, to come up with new ideas and solutions, to write and speak in a foreign language, and to have professional knowledge of other countries. A HE institution that provides studies and the student him/herself are responsible for the development of competencies. If a teacher performs teaching duties well, s/he develops both specific and generic competencies in the students at the same time. Generic competencies of students are developed using active teaching/learning methods: participation in research projects, internships, practical work, and problem-based learning. The main goals of the HE institution's cooperation with employers are to have partners that accept students for practical work and that are aware of the required competencies for study programs. Few employers have status as a patron of a HE institution and they provide it with material support. There is no system for recognition and validation of informal and non-formal learning of the students at the HE institution. In the HE institution there is a transition period of implementation of learning outcomes in the teaching/learning process. Required competencies are formulated out of teachers' academic experience, changes in the field of science, and employers' requests. Competencies are revised when staff learn what is needed. The responsibility for study program development and its quality assurance rests with the study program committee, which consists of teachers, employer, and students. There is an intention to

question students regularly in all HE institutions. More attention should be paid to the development of generic competencies at HE institutions. The relationship between teachers and students and their attitudes toward studies should change: both students and teachers should be interested in study process and should act as partners.

The Bologna process does not lead to standardization. There is enough room there for national identity and for academic freedom.

Interview: [LTH7]

The most important competencies for graduates are: the ability to work with people from other cultural environments, the ability to use computers and the internet, to presents products, ideas or reports to an audience, the ability to write and speak in proper Lithuanian, and the ability to come up with new ideas and solutions. One half of the responsibility for development of required competencies lies with the HE institution, the other half rests with the student. At the bachelor's level, generic competencies should dominate (70 %), while at the master's level, specific competencies (80 %) should dominate. Generic competencies are best developed during group work activities, oral presentations, and project assignments. Some employers become staff of HE institutions and give lectures. Employers invite students for practice and recruit the best students. Employers give material support, mostly for various events organized by the HE institution. Employers take part in study program committees and final thesis defense committee activities. Qualification development courses are developed for employees by HE staff. The system of recognition and validation of non-formal and informal learning with respect to student achievements functions at the HE institution. Study programs are developed and up-graded on the basis of science development and employers' feedback regarding required competencies. Study program committees are responsible for study program development and for quality assurance. Members of committees are teachers, students and employers (not all are active). Study programs are revised every year. Students are active in all university bodies. Students are regularly questioned on the quality of their studies. There is an internal quality assurance system at the HE institution that consists of 7 parts. At the moment, study programs are being revised and re-formulated in terms of learning outcomes;. students' assessment criteria are to be based on the learning outcomes. The admission system to HE institutions should be reformed at national level. Higher secondary education should be sufficient for labor market; a bachelor's degree is certainly sufficient.

Interview: [LTH8]

Personal development is a systematic process; all listed competencies make the system, therefore they all are important. At the highest level, the responsibility for the development of required competencies rests with the Rector of the HE institution and it continues to the teacher of a module as well as the student. The proportion between generic and specific competencies in bachelor's degree programs should be equal. The most often used teaching/learning methods are: lectures, seminars, laboratories and practical assignments, case studies, tests, group work, case studies, brainstorming, and oral presentations. Employers who graduated from the HE institution formed the Alumni association. Eight employers are Patrons of the HE institution and support it financially. Career days and "faculty days" are held every year. Twelve professional associations are established in the HE institution, which unite employers, HE staff, and students. Employers take part in the final thesis defense committees, invite students for practical work, and provide feedback to HE staff on required competencies. There is no system for validation and recognition of non-formal and informal learning of students. There are two types of committees: study field and study program committees, which are responsible for study program quality assurance. Activities of committees are performed according to legal requirements. Members of committees are: staff, students, and employers. Study programs are revised every 3-4 years. Development of a new study program is based on the employers' required competencies. The methodology of study program development is based on competencies; assessment of students' achievements is also based on competencies. An internal system of study quality assurance is based on the permanent questionnaires of students, staff, graduates and employers. The HE institution faces these problems: insufficient frequency of upgrading of

didactical qualifications of the HE staff, rather low motivation of teachers, and old equipment in laboratories. A bachelor's degree is sufficient for a start but for later professional development, a master's degree is necessary.

Interview: [LTH9]

The most important generic competencies for graduates are: analytical thinking, ability to come up with new ideas and solutions, to coordinate activities, to work productively with others, to work with people from other cultural environments, and to present products, ideas or reports to an audience. The responsibilities for development of required competencies rest with the students, teachers, the HE institution, and employers. The most often used teaching/learning methods for competency development are written assignments, problem-based learning, oral presentations by students, group work assignments, practical work, and lectures. Individual work of students is very important for the development of students' creativity. Employers are members of the HE institution's board, study program committees, and students' final thesis defense committees. Students practice at employers' organizations and look for information for their final theses there. A big event is Career Days. Employers give feedback on students' competencies after practice; they recruit good students to work. Some employers provide scholarships for the best students and develop them as their future employees, occasionally providing the HE institution with material support. The system for cooperation between employers and the HE institution is established, but HE staff should be more willing to develop it properly. There is a system of validation and recognition of informal and non-formal learning of students in the HE institution. In the HE institution, the strategy for implementing learning outcomes in the teaching/learning process is being developed. The process is slow since the HE staff does not accept novelty quickly. The responsibility for study program development and its quality assurance rests with the study program committee and department. Employers are asked to predict the competencies that will be required in 4 years' time and provide feedback when revising the program. Stakeholders are not questioned regularly but occasionally. A bachelor's degree is sufficient to start in the labor market, but employers should encourage employees to participate in lifelong learning.

Interview: [LTH10]

The most important generic competencies for graduates to function well in society in the priority list: mastery of your own field or discipline, ability to work productively with others, ability to rapidly acquire new knowledge, analytical thinking, ability to write reports, memos or documents, willingness to question your own and others' ideas, ability to come up with new ideas and solutions. The HE institution and the student are responsible for the development of these competencies. In the HE institution: the first responsible body is the study program committee, which is responsible for the study program development, its learning outcomes, its coherence to labor market needs, and quality assurance of other parts of the program. In the program realization process, responsibility rests with the head of the department, and further up with the administration of the HE institution, etc. University graduates should acquire background subject knowledge; they do not become specialists in a particular subject. Every teacher knows best which method of teaching/ learning best ensures that students will acquire the intended learning outcomes. The HE institution developed a methodology for the identification of learning outcomes of stakeholders: study program committees were established and their functions and aims were legally declared. Members of committees are: teachers, students, and employers. Learning outcomes are identified as a result of cooperation with employers, and out of teachers' research and international experience. Employers and graduates are questioned regularly on their opinion of graduates and required competencies. Students give a feedback regularly on the quality of didactics and are also members of study program committees and of faculties' boards, etc.; they interact with the study process.

HE institutions should become more flexible in study programs and provide more choices for students. Standardization leads to comparability, which is positive. On other hand, it could stop creativity of study programs designers, which is negative.

A bachelor's degree program is not a sufficient qualification to function well in the labor market with a technical background.

Interview: [LTH11]

The most important generic competencies for graduates to function well: ability to use computers and the internet, ability to come up with new ideas and solutions, willingness to question your own and others' ideas, ability to write and speak in a foreign language. Other important generic competencies are: ability to listen to others and understand their thoughts, ability to capture ideas from various forms such as visual presentations. The responsibility rests with the HE institution and the student. In colleges, more attention is paid to the development of specific competencies, since the college graduate is preparing for a job placement. Nevertheless, generic competencies should be underlined more. Dominant modes of teaching/learning are lectures, individual practical assignments, and oral presentations. The methods that should dominate are project and problem-based learning, group work (usual) and group work in multicultural environment.

Employers take part in study program development and quality assurance activities; they invite students for practical work, take part in the board of final assessment procedures, in conferences organized by the HE institution, and they occasionally support HE institution with material utilities. Big employers recruit students/ graduates to jobs in their companies. The HE institution organizes Career Days where large numbers of employers participate. The biggest obstacle is the absence of a partnership tradition.

A competency-based model for study program development is implemented in the HE institution. Learning achievements of students are assessed using criteria-based assessment methods, when criteria are developed through learning outcomes. Study program committees consist of HE institution staff, employers (some of them are graduates), and students. Study programs are up-graded every 2-3 years.

The model of studies should be improved. The HE institutions are not sufficiently autonomous in construction of study programs, this does not allow flexibility and individualization of studies. The challenge is for European counties to succeed in the development of study programs based on competencies and their assessment.

Interview: [LTH12]

The most important competencies for graduates of technical science are: mastery of their own field, analytical thinking, and ability to rapidly acquire new knowledge and to coordinate activities. Ability to negotiate effectively is important for graduates of social sciences. Ability to present reports to the audience has increased in importance over the last few decades. Ability to use computers and the internet is of obvious importance. On the HE institution side, the responsibility rests with the faculty board, the study program committee and the department. In the study programs for technical science, specific competencies should account for 75 % of the program. Applied lectures, research projects, group work and practical work are the most common modes of teaching/learning in the HE institution. Oral presentations are emphasized at the moment. There is a Qualification office at the HE institution that performs validation of non-formal and informal learning for full-time and part-time students. There is a transition period of implementation of learning outcomes (instead of learning aims) in the teaching/learning process at the HE institution. Competencies of the study program are formulated out of the teachers' academic experiences, changes in the field of science, international practice, and employers' requests (employers and graduates usually are the same persons). Faculty study committees are responsible for study program development and quality assurance. Students take part in the study committees and provide recommendations for the improvement of study process. The competencies of study programs are to be revised every 2 years. Students are questioned regularly on the quality of studies. HE institutions should renew (with more young teachers) pedagogical staff. The study program requirements do not allow flexibility in programs. Material utilities and methodological material for teaching/studying should be renovated. On the students' side – they should be motivated more to study. Standardization determines the length of studies. If bachelor's studies last for 3 years – this duration would not be sufficient to acquire the needed competencies.

Interview: [LTH13]

The most important competencies for graduates to function well in society are: mastery of your own field, professional knowledge of other countries, analytical thinking, and ability to perform well under pressure, to work productively with others, to coordinate activities, and to present products, ideas or reports to an audience. Responsible bodies for competency development are the HE institution's departments and study program committees, teachers, and students. At least 30 % of studies should develop generic competencies and 70 % of studies should focus on specific professional competencies. Generic competencies are developed during group work and project assignments. Special importance is paid to practical and problem based work. There is no system for validation of non-formal and informal learning in the university, but there is a system for recognition of learning in a college type HE institution. Study programs are upgraded for different reasons: new national requirements or stakeholders (mostly employers and students) feedback. At the moment, study programs are in the process of revision and are being restructured in terms of learning outcomes (instead of aims). It is intended that students' assessment criteria will be based on learning outcomes. Revising study program feedback on required competencies (learning outcomes) is gathered from employers/ graduates. The HE institution has strong alumni associations. The cooperation with employers is important for identification of required competencies of learning outcomes and for invitation of students to practice. Students are active members in all HE institution bodies. Students are regularly interrogated about the quality of study modules. There are not any great problems that should be solved at the HE institution. This respondent is familiar with the problems in other HE institutions, which are management of student practice and their lack of practical skills. A bachelor's degree is sufficient for the labor market but this depends on the person and the field of subject. Standardization of the Bologna process is useful since it allows free movement of students and transparency. Standardization should be developed at the level of learning outcomes, but not at the delivery of study/ learning content.

Interview: [LTH14]

The most important competencies for graduates are mastery of own field, ability to perform well under pressure, to coordinate activities, to use time efficiently, to work productively with others, to use computers and the internet, to write, speak in a foreign language, and to work with people from other cultural environments. The responsibility for the development of required competencies rests with the teacher, administration of the HE institution, and the student. The proportion of generic and specific competencies should be of 30 – 40 % for generic, and the rest for specific. Important learning/teaching methods are practical training group work assignments, written assignments, oral presentations by students, laboratories, and simulator training. There is very close cooperation between employers and HE institution. The main goals of cooperation are to get the placements for student' practice and a feedback on the competencies of students. Employers provide support for the material base of the HE institution and scholarships for some students. Students are directly recruited after studies since the employers' are lacking specialists. Employers take part in final assessment committees and in the feasts and various events organized by HE institutions. The HE staff provide qualification development courses for employers. Study programs are developed according to the requirements of international conventions. The composition of the study program is based on competencies; students' assessment criteria are also based on required competencies. There is ISO quality management system in the HE institution; it regulates all of the processes. Study program committees and departments are responsible for the development and quality assurance of the programs. Students, staff, graduates, and employers are regularly questioned. Study programs are revised once a year according to the changes at the international/ national level and the feedback of stakeholders. Students should get better vocational information at secondary schools; this would bring more motivated students. The Bologna process brought about the recognition of the HE institution's diploma and provided graduates with the possibility of obtaining jobs all over the world.

Interview: [LTH15]

The most important competencies for graduates: mastery of your own field or discipline, alertness to new opportunities, ability to work productively with others, and to write and speak in a foreign language. The student should be motivated for development of competencies. A teacher has to provide help for the student, to choose the right methods for teaching. There should be more specific competencies than generic, since the college provides a student not only with the qualification degree of Bachelor's but a qualification itself. The following modes of teaching/ learning are important for generic competency development: participation in research projects, group assignments, oral presentations by students, internships, and work placements.

Employers take part in study program quality assurance and quality improvement processes. Employers are members of the HE institution board; they provide the HE institution with support for material utilities, invite students for practice, applied research projects, practical projects, and they take part in the final qualification exam committees. Direct recruitment of students after their practice in employers' organizations exists. The barriers: openness of employers; practices: employers resist taking students for practice during periods of economic crisis or they close their companies. The HE institution has developed a methodology for the identification of learning outcomes of stakeholders: the study program committees were established, their functions and aims are declared. Committees consist of teachers, students, and employers. Learning outcomes are identified as a result of cooperation with employers, out of teachers' research experience. Assessment criteria of students' achievements are developed according to learning outcomes. Permanent feedback from employers on required competencies is obtained. Students give feedback regularly on the quality of didactics. The program curriculum is upgraded regularly, following needs. The HE institution should improve the management of students' self-contained assignments.

The Bologna process leads to standardization, not in terms of content but in a quantitative way, - it is positive. The negative point is the risk of losing the HE institution's own individuality, but HE institutions could find ways to express themselves. The degree of professional bachelor's is sufficient for a graduate to function well in society.

HUNGARY

Interview: [HUH1]

The general observation of the interviewee is that students require not only professional skills, but also other added competencies in order to successfully find their place in the labor market. One of the most important things for success is the capability to adapt to the circumstances given by the workplace. In general, many young people are not able to find jobs within their professions. In the field of HE, much depends on which school one attended and how well one took advantage of professional opportunities and learned practical skills. According to the respondent, it should be everyone's responsibility in the education system (starting even from pre-school teachers) to help develop needed competencies and this applies just as well to colleges. The development of several competencies like computer skills, team work and foreign languages should play an important role in the training. From the three mentioned competencies, College XXX teaches only one foreign language successfully. Due to the reconstruction of the curriculum, because of the Bologna process, IT courses per week have been lowered and there are few possibilities to focus on team work. In most work places, one can get by if they do not speak a foreign language, but it can be a bigger problem if one's computer skills are not sufficiently adequate. Around 5%-10% of students get involved in school related projects and task and they are motivated, but otherwise students cannot be forced to improve their skills and competencies. One of the disadvantages of the credit system is that students have a lack of motivation: they'll just complete a course in the following year. The cooperation between employers and the college can be called quite successful: students go on internship, employers hire students even for a couple of weeks for a bigger event. The school receives regular feedback on the students from hotels and event organizers, but this is mostly a one-sided communication: students to give evaluations. This kind of cooperation exists not only on a formal basis, but also through personal relationships of the teachers at the college.

Interview: [HUH2]

According to the interviewee, one of the key skills needed to find employment is usually just plain logic to help students get around in the world: a way of thinking and the capability of implementing acquired knowledge into practice. This means that giving them a general overview of how things work is sometimes enough. Apart from foreign language skills, knowledge and computer skills on being able to simulate various things can be just as important. One of the biggest problems is that newly accepted students lack many of the skills and much of the knowledge that should be the task of secondary schools and the teachers are responsible for filling these basic cracks in their knowledge. Therefore, the issue is really to help students acquire general competencies, while building specific competencies is a much smaller step overall. Around 10% of students can be actively involved in research, making it possible for skills and competencies to also be developed this way. For the most part, cooperation between companies is based on personal contacts (i.e., former students get a lead position and they have positions for those freshly graduating). There are other contacts with professional associations and with companies supplying the college with their promo-equipment. There is generally a lot of feedback from companies that suggests that more students with these kinds of skills are required, but also that education should be more thorough. These suggestions are usually integrated into the curriculum, as well those arising from the annual faculty meeting for quality assurance. The quality assurance of the school is one of the earliest that has been developed, although it requires a lot of administration. The trouble with the Bologna process arises due to financial reasons and for mass education this is even more typical. The restructuring of financial circumstances would be the most ideal. The bachelor's degree is mostly adequate, few apply for Master's for financial or other reasons. The field of HE is still not one of the most popular fields to study, although the demand of the labor market is high, not only in Hungary but also all over Europe. The schools provide a Career Centre for students, but Career Expos and informal relations dominate more in finding employment after graduation.

Interview: [HUH3]

Foreign language knowledge, IT knowledge, cleverness(meaning good problem solving competence), common knowledge of economy and law, and affinity for technical tools are important. Those most responsible for the development of general competencies, such as foreign language and IT knowledge are the parents and teachers in secondary school. Although general skills and competencies are required in order for one to be successful, there are no classes really developing these kind of skills. College is instead responsible for the professional orientation of the students and the development of professional skills. Both theory and practice is taught in college, but while the theoretical lectures serve in getting the students interested, practical classes are able to immediately help develop skills needed to be successful later on in the career. Of course, a lot depends on the personality of the teacher. There are several types of cooperation with employers. 1) Hungarian law binds companies to invest in professional training. The companies can either pay this as a kind of tax or donate the investment to institutions so that new equipment needed for training can be purchased. 2) Again, the law binds companies to invest in innovations. The companies can again pay this as a type of tax or can call upon institutions for these innovative tasks. Many students get involved in this kind of innovation. 3) The college has a type of cooperative training whereby the degree is granted only after the seventh semester. Students have the opportunity to work four days a week at different companies and they eventually graduate after four years, but they will already have had a year of work experience. There is also feedback from companies, and based on this feedback, the curriculum can be easily modified. Non formal education (being part of student associations) are only recognized in case of recommendation, but not in case of grading. Institutional quality assurance is not that strong, few graduated students give feedback on the perspectives and more surveys tracking the alumni are required. The feedback of the labor market is based on cooperative training and we try to keep track of the trends that define labor market standings. There are a lot of financial problems concerning education; the headlines have been introduced. More small groups would be required and it would be better if bigger connections could be highlighted. One of the biggest problems with the Bologna process is that the function of the bachelor's and Master's degree is not that obvious. The college has attempted to maintain the values of the old system, which was a lot better, where practical training was more important. Therefore, those graduating with a bachelor's degree have a high possibility of succeeding and they do not want to continue to acquire a Master's degree. Another key factor of success in our field is to come from a institution with a name.

Interview: [HUH4]

The interviewee takes into account the general competencies that all graduating students need: intelligence, creativity, outstanding communicative, comprehensive and leadership skills, but the university is not responsible for developing these skills – the professors need to deal with a large number of students, so first of all developing these skills and competencies is the task of elementary school and second of all, of secondary school. More important is the fact that the students become outstanding professionals, thus the key question is that students acquire professional skills and competencies, and have general insight on the daily trends and news of their profession. In order for students to acquire these skills the university organizes a broad selection of courses dealing with extensive fields. There are a lot of lectures, but unfortunately practical courses, seminars and projects are not working as well as they should. Internship is the key to the future: students acquiring bachelor's degrees need to work in the field for a semester. The university has a lot of connections and contracts with other institutions and companies, and there are a few faculty members who are placed outside of the university and are integrated into other companies and institutes. The quality assurance at the university is three-fold: 1) the usual exams and colloquiums in the courses, 2) the university also keeps track of its former students and what kind of employment they found after graduating, 3) survey on the work of the professors, which unfortunately cannot be made public, and only those getting the best results can be reported, although this third aspect is a very important part of improving the training. The bachelor's degree does not seem sufficient for finding work in the labor market, since there are too many people being trained. Those who are the most likely to succeed, are the ones who have established personal contacts in the field: those who are selected by professors working in several other places or have been interns at a company and are going back after graduating.

Interview: [HUH5]

The interviewee states that one of the most important characteristics of students during the five year training is maturity, which is one of the most important things when starting out in the labor market. Basic competencies, which are rather required nowadays and are not an advantage, include foreign language knowledge and basic IT skills. A jurist needs to love and believe in justice, but apart from that, good communicative and rhetorical skills, logic, capability to think in abstract concepts. One of the biggest problems of the past ten years is that secondary school does not teach students basics skills needed at the university, as it is supposed to do and also the family has an important role in the development of children. The responsibility of the university concerns the special competencies and those three years after acquiring the degree and the specialty exam. There are both lectures and seminars in the training, but it all really depends on the professors as to how much the students profit. There are also internships and research seminars, although the latter is only for post-graduate students. There is a large focus on oral exams and as part of problem-solving orientation, students need to solve legal cases. There are a lot of internships from a broad selection of legal work. A Career Centre has been organized and Career Expos as well. No incidence with non formal learning has been recorded. As part of the quality assurance, a committee has been formed with cooperation of the student council to examine the work of the department. There are also regular surveys on the work of the faculty. There is also an informal feedback from the labor market regarding how well our former students are being accepted. Law education is an exemption from the Bologna process: those graduating will have a Master's degree. The aim is to have graduates who can fill any legal job, with specialization depending on further training. Around 90% of graduates are able to find work within a half year, so it seems to be worthwhile. Speaking languages and having IT skills are an advantage, and we should not forget about family ties and those contacts that have been established during training.

Interview: [HUH6]

What is most important is for the students to have usable knowledge, knowledge that they can apply easily and to have a basic knowledge of the European Union. Apart from this, they need to be creative and know how to work independently. Of course, each major has its own set of subjects that are important to study and important to be up-to-date on. Higher education is an important place to develop competencies and also different kinds of training and courses (i.e.: foreign language, IT). There are not many possibilities to develop creativity and independent work attitudes; this would only be possible with smaller groups, but sustaining these small group sessions is difficult. There is also a Training Week, where special competencies can be developed. A Career Centre has been established, through which companies can acquire interns from college. Feedback is also important from companies, especially since a private college is much more vulnerable in the market. Each sector expects something different from the training. The relationship between the labor market and education is not always ideal, but at least as a private college, the adaptation to new needs is easier than in a state institution. In general, a HE school should try to ease closer to the labor market and companies. Another kind of cooperation is when companies suggest different topics for a thesis paper, providing the students with information and support. Although integrating non formal education and recognizing it would be helpful to develop competencies, it is not a possibility at the moment. In the case of quality assurance, the college applies ISO standards. The Career Centre organizes this, as well as follow-ups. There are also strategy meetings, where the strategy of the institution is planned. The college also has a system where, with complicated tests, the competencies of the students are evaluated by HR specialists. In order for the Bologna process to be more successful, there should be more small group training, more competitions, and students should receive tasks that are more practice-oriented. A degree in Hungary still has its value, and employers are waiting for graduates with degrees, but also competencies, which the college's graduates have. Grades are not important, only where one acquires the degree. Family ties may also play a key factor in finding employment.

Interview: [HUH7]

Graduates need to speak foreign languages, but this cannot be acquired at university. For professional work, team work, independency, and cooperativeness are needed. IT skills are also important. Although there are few courses at the university focusing on communication skills, this should be the responsibility of secondary schools to help develop these. Student teaching develops communicational skills, as well as student associations and mentoring systems. General knowledge and skills are essential to complete the three year training, due to the growing number of students. Most of the courses are taught in small groups and in labs, students also learn to work in teams. There is not any possibility to have research seminars at the bachelor's level, as in the case of the Master's degree. There is a high level of cooperation with employers: there are contracts with companies and internships at firms. Both professors and company executives take part in formulating the outcomes of the degrees. There has always been a constant contact with the industry. The cooperation exists on many levels: cooperative training, joint research, joint projects, funding and creation of internship placements and jobs. Non formal education is generally required: having one's own research and self-training. General examinations and competence tests give an overview of the skills of the students, and the administrative system can give feedback quite easily. Informal contact with students and former students are also a kind of feedback. The biggest problem with the bachelor's degree is that as much as possible is packed into the training. This type of training needs a couple of years so that its possibilities and borders can be mapped out. There is a lack of labor force in the field, and career expos are a great success. The differences between different schools will disappear with time.

Interview: [HUH8]

IT skills and speaking a foreign language are sometimes more important competencies than are professional ones. For professional skills: a sufficient knowledge of mathematics. All sciences build on math, so it is important that students already have the basics learned by the time they begin university. Students are expected to acquire general competencies by the time they enter university, it is the responsibility of the secondary school to help students acquire these. The university's task is to promote specific, professional competencies: teaching creativity, team work, and IT skills is not the task of a university. For these specific competencies, there are classical forms of development lectures and seminars. During the writing of the thesis and lab work, team work is also a key issue. The relationship with the labor force is not as successful as those of neighboring universities. Although a Career Centre has been established, the university has a difficult time, since it is a scientific university and has few contacts with the actual labor market. The thought of integrating the needs of the labor market has already been comprehended, but no initial steps have been taken, although right now there is not even a need, since those students who were able to complete the training in three years are the best and are to be accepted into Master's training. Personally, XY thinks that the labor market's demand should not be necessarily integrated into the curriculum. It seems that no one is participating in any kind of non formal education, since they do not have time for it. As for quality assurance, there is a possibility for students to evaluate the work of the teachers, although this system still needs perfection and each major has an educational committee, but there are no real methods surveying the output of the training. Although there is an interest in the follow-up of the graduates, these statistics do not really exist. There is also vocational training support, where large companies fund the university. There is no use for the Bologna process: the old system could also have been restructured so that it would train up-to-date professionals. The flexibility and mobility make teaching a lot harder: less flexible structures should be introduced. The problem is that we train students for abroad, while no one from abroad wants to come here and learn because of the language barriers. There is also a financial problem: practical training is more expensive, but student normative time for Master's training is more. Students graduating in natural sciences will probably have no problem. The prestige of universities still exists, but so does the prestige of the grade of the degree.

Interview: [HUH9]

The role of the university is to train the students graduating: general education (being well-read), foreign language knowledge, knowledge of the state, and being comfortable abroad. The desire to acquire certain skills

should be the responsibility of public education, while the university should make it possible to acquire these. The university should provide competitiveness. It is generally difficult to select between the competencies that are the most important. The usual methods are used and the university also tries to have personal contact with those who attend the courses. Of course, there are also internships and knowledge has to be implemented into practice. The university has an extended network and is also one of the main employers in the region, and can provide jobs for those graduating in the region. The trouble is that there is a large gap between theoretical and practical training in general. Not many steps have been taken to reconcile this gap, since everyone is pointing at the other; there is no cooperation. In most cases, students are used to do manual work and that is not the point of an internship. One of the biggest problems of the system is that students think that it is the degree that has value, not the skills that are developed while acquiring the degree. There is no feedback on those graduating, since this is no one's interest. The Bologna Process is not all that bad, but it just came about too quickly. The schools of higher education were not prepared for it and there is a large amount of uncertainty. A large number of new educational institutes have also been formed (vocational training, distance learning). This normative based funding works against quality. The main problem is that the general quality of education is decreasing – and this is the responsibility of public education and higher education as well. It may be possible that those majoring in languages will be able to find employment just as easily. The system lacks problem-orientated postgraduate training. Relations and contacts are more important than they seem and it also matters in which school, with what grade, the degree was acquired.

Interview: [HUH10]

The college's goal is to supply students with usable and practical knowledge: official communication, correct spelling and clear phrasing. It is important for the students to be able to prepare for the tasks of the labor market, so the college presentation skills and debating skills are also in focus. The development of special competencies is also part of the curriculum. Most importantly, it is the school's responsibility to prepare the students for the demand of the labor market; therefore, the constant access to information on the circumstances and contact with the labor market are essential. According to the college, students need to have professional and emotional competencies. Professional competencies in the case of marketing management are the following: communicational skills, team work, rules of social interaction. It is generally accepted that while professional skills are the basics, there has to be a greater amount of emotional competence as well. During the curriculum, general competencies can be developed. Well known lecturers are invited. There is also an obligatory four month internship, where the student must work 5 days a week and 8 hours a day. The Career Centre keeps contact with the participants of the labor market; they organize a career expo each year. There is a network of contributors, companies, firms, and ministries who help students prepare for job interviews. Although non formal education is realized, the main goal is to achieve the standards given by the college. Regarding quality assurance: graduates are part of a follow-up and keeping in touch is a key factor in this. In most cases, the Bologna Process caused some difficulty; colleges were in a good position, since they were younger institutions and needed to change their well-structured system. This new system works well with the colleges. It is becoming less and less important where one acquires one's degree. A degree is starting to be considered to be a basic requirement, and it is becoming more important what happens in interviews and whether there is any kind of professional experience.

Interview: [HUH11]

Regarding general competencies, good communicational skills, cooperativeness, own opinions and a capability to work in a team are all important. Curiosity and openness are also important as well as IT skills and knowledge of a foreign language. As for special skills, it is important to have self knowledge and also to have humbleness concerning the profession and a sense of loyalty to colleagues. Everyone at college is responsible for the development of both general and specific skills. There are several courses in the curriculum whereby students can participate in projects and also in self-development classes. There are seminars, which teach the right behavior for pre-school and elementary school teachers, several instances of field work are conducted. There are several ways of cooperating with employers: during training, students visit many schools. Successful cooperation could mean that after the student teaching ends, students are offered permanent jobs there. The college also

holds training courses for schools and pre-schools, as well as summer schools. If the labor market requires some alterations in our curriculum, the college attempts to restructure accordingly. Non formal education is supported: students have opportunities to show their talents and interests in competitions and sometimes some of these efforts are also calculated in forms of credits. There are several types of finals, where the knowledge and skills of the students are tested, and also after student teaching, students fill out a questionnaire on how well they could apply what they have learned in college. There is also the possibility to follow-up former students and there are other organizations that give feedback on the achievements of the students. This kind of follow-up is also done by the Career Centre. All of this kind of feedback is integrated into the curriculum. In the case of the college, students acquire a profession and it seems to be working. The aim is to create a more compatible system, where students can switch on and learn. It is hard to find employment: a lot of students go to England. Contacts play a key role and also where one acquired the degree. Unfortunately, this means that what grade one obtained at graduation means less and less.

Interview: [HUH12]

In the case of general skills, it is important for graduates to have an insight and openness towards daily economics, a political standing, and good communication skills, and knowledge of foreign language is less important. All professions require different competencies, therefore it is hard to name them. Higher education should be competence based and it would important to have skills in addition to professional ones: students should be made to find out information about their own interests and they should be taught how they can reach it and not what they can reach. It should be the responsibility of the university to teach these competencies, but this all depends on the teachers and professors - and not all think in this way. Of course, the family also has an important role, since students have to be ready and capable to find out information for themselves after secondary school, but this role is becoming more important for higher education institutes. Each course has a description: what kind of competencies does it develop. Teachers are pretty open concerning this new type of teaching and there is special emphasis on the issue of professional communication and the development of this both in oral and written form. There are problem oriented small groups, where the students need to solve a problem in the end with consent. There are also individual problems, where students have to continue individually and on their own. In each classroom, there is internet so teachers can step beyond their own PowerPoint presentations and it also encourages them even to have more interactive lectures. There is cooperation with employers, although the level can always be enhanced. Students have possibilities to do internships and also there are several scholarship programs. In other cases, institutes work as outsourced parts of departments of the university, where research is conducted. There could be more professional forums, where company leaders and professors meet and set down guidelines for the future. Although there was a larger survey and follow-up on the possibilities on the labor market and what employers expect of graduates, not much has been done to improve circumstances, since the structure is not very flexible. In the case of those majors where there are few students, there is more personal interaction between the faculty and the students: these things become more obvious and there was even the suggestion to integrate them into the grading. Awarding non formal education means giving those students research jobs and tasks, which are more agile. Students only receive their normal grade as feedback. There is also a survey on the work of the professors, although students need to be motivated to fill these out, and the already mentioned survey on the opinion of the employers. The disadvantages of the Bologna process are starting to show since there are not enough sufficiently good students to continue to the master's degree. Quality is not one of the most important aspects of admission As well, there are a lot of uncertainties concerning what graduating students can do with a bachelor's degree. The most important aspect of finding employment is: good grades and additional experience during university and where one acquired the degree.

Interview: [HUH13]

As general competencies, graduates should be able to express themselves freely, should know their own borders and they should have a positive attitude toward lifelong learning. As part of the Bologna Process, nine concrete professional competencies were named: the ability to evaluate the capability of students, to inspire and develop skills of students, to work with social psychological methods to inspire teamwork among students, good planning

skills, good evaluation techniques, easy-going with peers, openness to new methodological techniques, the capability to apply methods and insights. It is important to have a competence-oriented college, but it also depends on the personality of the student, if this is adequate. General and specific competencies need to be 50%-50%. There are several methods to increase competencies: self-development training and the theory-practice ratio has been changed for the benefit of practice. Student teaching and the mentor systems seem to develop competencies and kind students. The main idea in the new system would be to develop a basic school network, meaning that the college needs to have contact with public educational institutions. This is just being developed and cooperation is needed from both sides. There is also the concept whereby public education institutes provide teachers to mentor students and also it is important to keep contact with the regional pedagogy centers. Until now, the college only had contracts, but with little content: there was no feedback and it was rather one-sided. It seems that schools are starting to change and seek contacts with higher education institutes. The general feedback from employers is that students are well prepared theoretically, but still have flaws in actual practice: students need to learn how schools work in general. Although it is not recognized, a lot of students do different kinds of civil activities and those who have more experience will be more successful. These students are usually the organizers and motivators in the group. There is a well planned quality assurance system, where the courses are evaluated and a new development is to survey the satisfaction of the students on different types of training. There are advantages and disadvantages of the Bologna Process: it all depends on which field of study we are considering. The professors need time to adjust to project work and cooperative teaching. Nonetheless, a bachelor's degree is generally not adequate. Students attending higher education institutions should do everything in their power to benefit from the institution. In the region, it is very hard to find work, only around 2/3 of the graduates find employment. It is important that students should walk around with eyes wide open and should develop their ICT skills even more and should prepare themselves for lifelong learning.

Interview: [HUH14]

The basic knowledge needed is IT skills well grounded on mathematics. With these competencies, students can become professionals. With an emphasis on theory, graduates learn how to apply this knowledge when finding employment. Foreign language knowledge is also important. The employers are more apt to develop the general skills of graduate students, since the university cannot supply students with workplace circumstances. Within the university, there are a couple of projects in which students can develop more general skills, like team work and precision, independent work, and communication. The university is responsible to further develop professional skills. Although the professors teach specific professional skills, the goal is to develop other competencies and that is why cooperative training was introduced. By general studying, competence is developed, and this also occurs as students initiate project work, which is typical of the university. These projects are sometimes promoted from outside the university: the projects can help students develop skills needed for the labor market. There is an intensive relationship between the university and the faculty, one of the biggest indicators of this is the cooperative training, where students need to adapt into a real team. The employers give regular feedback on the students. Master's training allows more possibilities to accept non formal educational forms and knowledge that students have brought with themselves. Students do not really have time for informal learning: it is hard enough to compete with the training. There are several methods for quality assurance, both through formal and informal channels. At the end of the cooperative training, employers give feedback on the students. The Bologna Process did not bring particularly large changes in the training, the only problems are the larger numbers of students entering the first year and employers who think that this new kind of degree is equivalent with the former one. Students have no problem finding employment, and the demand for graduates is still high. The problem is rather that the output is slow: students do not finish their training in 3 years, but remain longer as students.

Interview: [HUH15]

Freshly graduated students need to have knowledge in many fields: science, linguistics, music and sports. There should be a given amount and level of professional competency that students need to have when graduating, but it is hard to define these things. The university should develop professional skills. It is hard to talk about general skills, since these vary in a lot of cases. As for professional skills: it seems that too much theory has been

implemented in the curriculum and students lack enough practice. Since the curriculum is huge and broad, there is really no capacity to develop general competencies, although there are a few courses where there is team work. Problem solving competencies can be developed. The cooperation with employers is a tough question, since the Ministry determines how many places there will be in different specializations and this usually does not meet the demand of those graduating. Those unable to get resident positions move on to the labor market. The only feedback received is from those hospitals where there are residents. There is also the mentor-tutor system, where there is constant feedback on residents, even if it is not a daily feedback. In general, there is no time for students to participate in non formal education; they cannot spare a moment of their time, since they will not be able to keep up. Although there is some form of quality assurance, it is not a well organized and in-depth one; there is a very large number of students graduating each year from the whole university. Since the Ministry is responsible for the resident positions, the university does not have to keep track of the labor market, since it gives good theoretical education and even experience can be learned quite quickly. There is much positive feedback from abroad. The Bologna Process would ruin the training, no matter where the training was divided. It is not easy to find employment, since there is heavy competition for the available resident positions. Since the whole system is objective, grades count the most as does the prestige of the school.

POLAND

Interview: [PLH1]

General competencies are developed at all stages of education; they are: efficient time management, efficient cooperation skills, ability to acquire new skills, good communication skills and ability to communicate one's thoughts clearly, IT literacy, and speaking foreign languages. At university these competencies are developed further and combined with specialist ones. The first degree study should focus 60 % on developing general competencies and 40 % on specialist ones; for the second degree, the ratio is reversed. The methods used in the teaching process reflect the specific character of a given study program, e.g., there are more practical classes in engineering and pedagogical courses, while the humanities courses put more emphasis on written work. The aim of the university cooperation with companies is to secure practical training for students and to get feedback on the teaching quality and the adequacy of student competencies. The business circle opinions are reflected in the study curricula modifications, creating new major programs and specializations. The university has no system of discovering and recognizing students' non-formal education, although there are individual cases of non-formal competence recognition. A system of quality management has been implemented (students' questionnaires, class observations, periodical employee evaluation). The University gets some feedback from their graduates on their careers and the study curricula. The first study degree prepares well for employment, the second degree gives the career an additional boost. The Bologna Process has increased students' mobility. The system of education should be more flexible, to react quickly and precisely to signals from the surrounding environment.

Interview: [PLH2]

Being sensitive to suffering and open to another human being is a very important competence for a rehabilitation graduate. These competencies as well as other generic ones, which are as important in a graduate's profile as the specialist ones, are developed throughout the process of education and in the family. A student's involvement in public benefit and self-study association activities develops both specialist and general competencies. The teaching process is mostly realized in small groups; this type of study requires direct contact with students and continuous monitoring of their competencies. Teaching effectiveness is verified through the analysis of students' performance and the opinion of the environment in which they do their practical training. The basic aim of the cooperation is securing the possibility of practical training for students, and conclusions drawn from trainee observation and conversations with medical personnel result in the changes of the study curriculum. An important element influencing the development of the teaching process is collecting and analysis of the feedback from graduates. Study curricula are approved by the Faculty Board, and course syllabuses are continually modified by lecturers. The barriers that the university encounters due to the changed rules of financing medical services are the demands that the university should pay for training students in medical institutions; this has to be changed in the nearest future. First degree studies give a sound preparation for practicing the profession. The Bologna Process has increased students' mobility; they can move to other institutions within the framework of, e.g., the Erasmus program. The diploma supplement enables students to seek employment in any country they choose. The second degree studies provide the opportunity to acquire additional qualifications, e.g., of a sport instructor for disabled people; they increase the specialist competence level and may be used as an argument in pay negotiations.

Interview: [PLH3]

General competencies developed at all stages of education should prevail in a graduate's competence profile. Specialist competencies are developed at university, but their further perfection takes place in the work environment. The university uses classic teaching methods (lectures, also by practitioners, practical classes), but also project-based teaching. Students are evaluated on their knowledge (examinations, tests), but also on their

skills – specific activities and procedures, presentation of reports etc. There are individual cases of recognizing competencies acquired in the non-formal course of education, but mostly in sports classes. Students do practical training supervised by the university and direct supervisors representing the institutions accepting students. Information obtained from training supervisors on students' skills, knowledge and attitudes are an important basis for evaluation of study curricula. The university reacts to changes in its environment and it modifies its teaching offerings accordingly (opens new study programs, specializations or post-graduate courses). Faculty teaching committees work on modifications to study curricula. The decision to open a new program is taken by the university Senate, but has to be approved by the Minister. The university has implemented procedures for quality management (students' questionnaires, class observations, academic teachers' evaluation, study of graduates' opinion on the teaching results is in preparation). Educational institutions should be granted greater freedom to open specializations and study programs. The Bologna Process leads to standardization and increases students' mobility. Students should be allowed to move freely between study programs at one university or even beyond, as reasonable.

Interview: [PLH4]

Due to the changing dynamics of the environment, an important quality in a graduate's profile is the ability to acquire new knowledge closely related to the work position, ability to spot new opportunities, speaking foreign languages, straightforward communication skills, and understanding instructions, procedures, and documentation. The MU graduate's competencies are specialist ones preparing them to take up managerial positions immediately after graduation, which is certified by two diplomas. In the course of study, students obtain additional certificates for specific professional competencies. Teaching methods are typical of a technical university, but the school has the most technologically advanced training equipment, so the students are trained on the equipment used currently, but also they get to know the appliances that will be installed on ships at the time when they take up command. Students obtain credit for practical training after completion of the practical training course and upon presentation of the logbook registering the accumulation of specialist competencies to the university committee. At the end of their education, they are assigned a practical task on a simulator, which tests their competencies in practice. The university has a teaching quality certificate issued by Lloyd Register, and it is periodically audited by the EMSA. Information on competencies is obtained through informal contacts with ship owners, but it is also collected by the career office. Technical universities should introduce certification of competencies acquired by students of specific specializations. The first degree studies (if the study curriculum is realized in a reliable way) are sufficiently trained to take up professional activity.

Interview: [PLH5]

Specialist competencies dominate fire fighters' education: apart from the engineering knowledge, the student also obtains officer and operational knowledge, learned in theoretical classes and during 1000 hours of practical training. The following competencies are developed: ability to act under pressure, ability to use authority when needed, analytical and quick thinking, ability to mobilize others and a highly developed sense of the humanitarian mission as well as leader competencies. Traditional engineering teaching methods are complemented by simulations of emergency situations, decision games, virtual practical training, training ground service and classes, together with classes on operating the equipment. Competencies are evaluated in action, but also in examinations, credits, and tests. The university cooperates with its environment and enables its students to participate in research projects; it organizes practical training both in Poland and abroad. Feedback on competencies is obtained through the career development centers. The system of recognition of non-formal education is not widespread, but it is not totally excluded, either. The system of quality management has already been formalized and has a well-established position. Specialization modeling and major program creation are the results of the market demand analysis and diagnosis.

Higher education institutions are not flexible enough. Standardization of education serves increasing student and graduate mobility. Universities should be given more freedom in creating new study programs. The bachelor's

degree study gives sufficient education to enter the labor market, while the second degree facilitates a professional career.

Interview: [PLH6]

General competencies useful in the labor market are: analytical thinking, speaking foreign languages, ability to spot new possibilities, mobility, ability to work in an international team. General competencies should be developed at all stages of education, in the family, and at university. Specialist competencies depend on the faculty; they are developed at university, during contact with employers but also out of the student's own initiative. The aim of the cooperation with companies is organization of practical training and internships for students; on the other hand, companies provide feedback on the quality of the developed competencies. This information is used to modify study syllabuses and contents of particular subjects. The university authorities are aware of a certain discord between the education offerings and the expectations of employers, and for that reason, efforts have been made to create a system for identification of competencies preferred and sought after in the labor market. The university does not have an established procedure for discovering and recognizing students' non-formal teaching. There is system of monitoring the students' competencies, which includes a measurement of current changes in the competencies taught at particular courses, as well as the obligation to write diploma dissertations for the bachelor's / engineer's degree. Contrary to that already in operation, the teaching quality control that is being implemented at the moment links a teacher's work evaluation results with their remuneration and the system of awards. Work on creating new major programs of study, specializations and on modifications of the contents taught to students has been initiated at the level of faculty; there are cases, however, where the authorities of the university have initiated new major study programs. The first degree study gives sufficient competence for entering the labor market, while the second degree studies should be taken up by students developing managerial competencies. The Bologna Process leads to standardization, which is absolutely necessary for taking up studies at other universities in foreign countries. On the other hand, however, there are concerns that standardization will destroy the individual character of a given university, academic staff, or student.

Interview: [PLH7]

General competencies important for a graduate are: good communication skills (including foreign languages), openness towards colleagues and surrounding people, the ability to learn, and professional honesty. An important generator of these competencies is the academic teacher – their personality, attitude, and the relationships they form with students. At university, a student should acquire the necessary basic skills of associating and linking incidents and events, analyzing and drawing conclusions. General competencies should constitute a greater part of the competence profile. Traditional and modern teaching methods are used in the teaching process. The university is not quite satisfied with the scope of cooperation with companies; it comes against barriers of financial and organizational nature. The aim of cooperation is to organize practical training for students as well as to obtain information about the students' and graduates' competencies. Information on competence expectations are obtained through informal contacts between the university authorities and business circles. At the university, there is no official system of recognition of students' non-formal teaching. However, there are occasional instances of awarding credits for such skills, although they are of incidental nature. The university has an efficient System for Ensuring Teaching Quality, which is continuously being perfected. It includes students' questionnaires on all the academic teachers, class observations, and periodical employee evaluation by their direct superior. The information from the system is used to modify the study syllabuses.

The system of higher education should have greater freedom to determine the contents of teaching at particular major programs of study; teaching standards should be more flexible. Undoubtedly, a positive feature of the Bologna Process is students' mobility, both within the country and amongst foreign centers. A serious problem of the Polish system of education is a generation gap and a rigidly determined teaching load. Young talented people are intercepted by foreign centers or industry.

Interview: [PLH8]

General competencies, developed at all stages of education, are the basis for developing specialist ones. The latter are developed at university during traditional lectures and classes but also during field training. Specialist competencies are also developed in the work environment, through volunteer service and work in self-study associations. The university is open to various ideas suggested by students, who themselves develop their entrepreneurial skills by working on their own projects. The university puts emphasis on general education, an example of which is creation of a humanities package for students of science and in the reverse – a package of science subjects for students of humanities. Students are involved in university research subjects, they organize conferences and seminars. Lecturers are not only the university academics, but the university also invites visiting lecturers from foreign institutions or practitioners from Poland. The university is the host for a Business Incubator. Barriers to cooperation with companies are related to the complexities of the intellectual property law. The aim of cooperation with companies is students' practical training, but also getting feedback on competence expectations and the graduates' competence verification. The university educational offerings reflect the expectations of employers and candidates (for all study degrees), and it offers highly specialized post-diploma courses, and has started new programs and specializations. Graduates entering the labor market after completing the first degree studies increasingly more often choose to study for the second degree at a different university. The first degree graduates enter the labor market, but often come back to study for the next degree because they cannot find employment.

Interview: [PLH9]

The concept of lifelong learning is extremely important for development of both general and specialist competencies. Specialist competencies should be developed in the context of academic fields and not study programs. The project-based teaching method is increasingly more popular at the university for developing both kinds of competencies. General competencies should prevail in the graduate's postulated competence profile (2/3). Specialist competencies accumulate in the work environment, and for that reason the university encourages students to take practical training placements or long-term internships. Cooperation is related to the realized research and development projects, which also involve final year students. The signals on teaching results and postulated expectations of the labor market reach the university in the form feedback from employers. This, in turn, is an impulse to introduce changes in curricula and syllabus contents. The greatest barrier that the university encounters is the low activity of companies in the area of research and development. The quality management system is being modified; the planned changes focus on giving an employee motivation for better quality work. A model of improving the educational offer and adjusting it to employers' expectations has been developed on the basis of following the graduates' career development; it will soon be implemented for all faculties. The first degree studies prepare students for entering the labor market on condition that universities have prepared themselves carefully for teaching the subsequent levels. The Bologna Process principles will disseminate if the whole academic community changes their way of thinking.

Interview: [PLH10]

The university develops specialist competencies, which constitute 2/3 of the competence profile. Project-based methods, laboratories, and practical classes are the most effective in the process of developing these competencies. At the level of a university, generic competencies are not developed but modeled, e.g., specializing in foreign language, professional ethics, engineer economic thinking, or presenting work results in public. Specialist teaching is supported by students' practical training, work in self-study associations, and students' own initiatives. Students are involved in research and implementation of projects realized by the university, for the needs of industry. Companies recruit future employees at universities, when they are still students, by funding them allowances; they also provide equipment for specialist classrooms and labs. Opening new study programs or specializations is initiated by entrepreneurial associations and other business

organizations. Teaching results are evaluated on the basis of these bodies' opinions as well as on the basis of the feedback from graduates who have been functioning on the labor market for some time. The university is working on a quality management system. The elements already implemented are student questionnaires, class observations, and periodical employee evaluation. The evaluation results are reflected in the motivation system. The procedures for measurement and recognition of non-formally acquired competencies have not yet been developed; however, there is an acutely felt need for such actions. Universities should retain their autonomy; the first degree prepares for entry into the labor market. The Bologna Process leads to diploma internationalization and increases student mobility.

Interview: [PLH11]

Competencies indispensable for school of economics graduates, enabling them to function in the labor market are: strategic thinking and problem identification and solving. These form a base on which other competencies specific for individual specializations are built. Active teaching methods stimulate students' competence development; case studies and managerial games, which develop general competencies, are popular. Students are engaged in work commissioned by the business environment; they actively seek companies that would accept them for practical training. There are certain difficulties in the university-business relations, as far as allowing students access to materials for diploma dissertations or constructing case studies are concerned. Students' opinions on the academic staff quality of teaching are reflected in the motivational system. As part of the quality management procedure, the university conducts class observations and periodical comprehensive evaluation of academic staff. Teaching result analysis through following the graduates' career development is a basic element of study curricula improvement as well as syllabus and teaching methods modification. The final shape of the curriculum is influenced by students, companies, and the university staff who have permanent contacts with professional practice. A wide range of post-diploma courses, which are highly valued in the business environment, is an example of this – it often happens that a company will commission the university to prepare a tailor-made course for their employees. University management should be decentralized. We should analyze the sources of success of leading world universities. The Bologna Process has its merits, but also many difficulties, which should be solved systematically. The first degree is sufficient qualification to enter the labor market, it also provides the base on which further competencies may be built.

Interview: [PLH12]

The university educates very determined secondary school graduates, who have clearly defined objectives from the start of their studies. The university consciously promotes certain attitudes, knowledge, and skills. The way students' affairs are managed (virtual faculty office), as well as e-learning, introduce students to effective time management and careful selection of their study path. During the first degree studies, students are equipped with the general competencies necessary for an economist, and they develop the entrepreneurial attitude. During the second degree studies, classes focus on specialization of competencies. Students have considerable freedom to choose classes they want to take, and to a great extent their choice is influenced by the attractiveness of the teacher's methods. Cooperation with the Partner's Club secures work places for students and graduates, as well as annual sponsoring for the school. For many years, the university has been offering outstanding students a possibility to realize their educational path in cooperation with a consulting company providing international certification. The cooperation results in valuable feedback on teaching results and the level of competencies. The basic barrier that the university encounters in its relationships with business is a certain mistrust as far as revealing economic data is concerned. Direct contacts with graduates are another source of information on teaching results. In order to ensure high quality, the university is maintaining continuous monitoring of teaching, which consists of student questionnaires, class observations, and following graduates' professional careers. Designing new study programs is initiated by external impulses, and so are post-diploma courses. Efficient introduction of the university strategy has to be preceded by clear strategy for higher education approved at the highest decision levels in the country. The bachelor's degree may be sufficient qualification for entering the labor market; it all depends on what a given young person wants to do after graduation and their professional ambitions.

Interview: [PLH13]

The ability to learn and acquire new knowledge is very important in an engineer's education. Modern teaching methods facilitate acquisition of new competencies (e-learning, distance learning). In the competence set of a technical school graduate, general competencies should prevail. Competencies are acquired during lectures, project-based classes, laboratories, and in field training, but also through participation in self-study associations, student movements, and during practical training and internships. Students of all study degrees are engaged in research work commissioned to the university by the industrial environment, and diploma dissertation subjects answer the industry needs or spring from a student's interests. Specialist competencies are also acquired during practical training. Companies express opinions on students' preparation for work (during summing up of practical training), and trade corporations issue formal opinions on individual study programs or specialization curricula. Graduates with six months of work experience are a valuable source of information on the quality of the study program they recently had completed. All of the collected comments are reflected in study program curricula evaluation, and in creation of new programs, specializations or post-diploma courses. Adjusting the education offerings may be done in the form of opening new specializations (simpler procedure and shorter time) and post-diploma courses. The prerequisite of graduates' better preparation for the labor market demands is making the university structure more flexible and granting it more independence. Introducing the Bologna procedures increases students' mobility between domestic education centers and facilitates international exchange. The first degree studies enable graduates to enter the labor market, but it should be treated as an intermediary stage.

Interview: [PLH14]

Adaptation skills are especially important in the dynamically changing reality. Mathematics and physics are excellent tools for developing learning competencies. Speaking foreign languages and communication skills should be developed at all stages of education. For Engineering, highly specialized education requires cooperation between the academic world and industry. The university has good relations with companies; they provide feedback on teaching results and demand for new competencies. The teaching process is implemented with the use of modern technological solutions; however, direct relationships between students and a lecturer – master should not be in any way limited, since no method can replace teaching by setting an example. Practitioners are also invited to participate in the teaching process – they can share their experience. Students may build up their specialist competencies during practical training and while working on their diploma dissertations. Students are engaged in the work on research projects. The university has some experience in recognition of non-formal learning. Competencies acquired in this way may be validated by the faculty dean after consultation with an expert in a given field. The university's main authorities encourage extended activities in this respect. Teaching results monitoring is conducted on the basis of graduates' opinions and conversations with business environment. Work is in progress on a research tool to monitor competence growth. Teaching quality is monitored and evaluated. The procedure comprises collecting students' opinions on the quality of classes, employees' periodic evaluation and teaching process transparency. Autonomous universities should be granted more freedom to model their teaching process and to manage their resources. The first degree studies do not guarantee the professional qualifications that Polish industry expects.

Interview: [PLH15]

Competencies relevant to the labor market are developed throughout the whole process of education. Engineering competencies are built upon this base. The university has good contacts with companies; within the framework of the agreements signed, companies conduct certified training courses at the university, practitioners are invited to lecture. Students have no problems in doing their practical training, and frequently their diploma dissertations are connected with the company with whose specific character they were able to become acquainted. The university does not have procedures for recognition of competencies developed through non-formal learning. A teaching result monitoring system is being prepared; at present, feedback from graduates on employers' competence expectations reach the school through private contacts or via the graduate association.

Companies also voice their opinions on student and graduate competencies during informal contacts. The university monitors teaching quality in the form of student questionnaires that evaluate teacher performance after each course and in the form of class observations; results of both measurements influence the employee periodical evaluation. Both the business environment and students have their say in study curricula evaluation. Study curricula are worked on by faculty teaching committees, which have to obtain faculty boards' approval for every change they want to introduce. The university should have more freedom to shape study curricula. First degree studies prepare an engineer for production but are not sufficient qualification for work in research, implementation or development centers. The Bologna Process runs into a lot of important legal problems, and Polish lawmakers have done nothing about it.

SLOVENIA

Interview: [SIH1]

At the faculty level, various modes of teaching are used, but classical, older models (lectures, seminary work) are still presented more frequently than active learning models. The main obstacles for this situation are large groups of students and not enough cooperation between different lecturers. Generic competencies are developed in study programs through specific foreign language courses, seminars of information literacy; acquiring new knowledge is developed with the preparation of texts under tight deadlines. In the future, more effort will be centered on the development of productive cooperation with others. Cooperation with employers mostly consists of practical work and problem solving seminary work of students. Individual communication with employers is assured through practical training coordinators in each study program; there is some direct recruitment from the school and employers can publish their posts on the faculty web page free of charge. The faculty has also developed a network of career advisors that take part in the Career center. Employers' boards are not presented.

All formal tools for the recognition and validation of non-formal learning or competencies acquired at work are developed, but the interest for recognition and validation between the students is very low. To get feedback, faculty uses questionnaires from various stakeholders and cooperates with the students' representatives who are also members of all faculty boards. For the quality evaluation, self evaluation reports are used.

The faculty believes the most important prerequisite for cooperation between HEI and employers is that the faculty members cooperate in the study process at the faculty level, so that the study programs will produce excellent graduates.

Interview: [SIH2]

Most important specific competencies for the students are expertness, communicativeness and proper, respectful behavior. The view of the faculty is that the generic competencies are the ones that are prerequisite; a base for entering in the world of work. Specific competencies are needed for effective work in a special field; with them, the individual can be more rapidly involved in the work, is capable of linking together the tasks of various fields and has the knowledge required to do the work. Faculty report that employers are, in general, very satisfied with the specific competencies of their students, and together with the employers, they share the view that more leadership and management knowledge is needed when students finish the degree, mostly because they cooperate with others and take leadership positions in the organizations. They also see the faculty and the employers as mutually responsible actors in the development of students' competencies.

Various modes of teaching are used, and they mostly depend on the number of students in the classroom. In the case of large groups, classical models of teaching are used, but these are combined with visits from people who work in practice. In smaller groups, there many discussions, presentations, much team work and working in small groups (of 2-3) students. The main obstacles for the use of active methods are large groups of students. Interactive e-learning is developed, but at this point not very much used.

Cooperation with employers mostly consists of practical work, problem solving seminary work of students, or lectures of practitioners. The employers are involved in the evaluation of programs and take part in discussions at the faculty management level.

All formal tools for the recognition and validation of non-formal learning or competencies acquired at work are developed. Faculty also uses University questionnaires, self-evaluation reports and its own tools to get feedback from various stakeholders concerning the quality of lectures, teaching staff, the learning outcomes, and the competencies of students. An employers' board is not presented. Faculty cooperates with the University career centre and has its own career point.

In the faculty view, the most important issue for cooperation between HEI and employers is that the programs and lectures be more goal-oriented. On the other hand, greater differentiation between HE professionals and university programs is needed (different content and methods of teaching used).

Interview: [SIH3]

Analysis of required competencies was done in cooperation with graduates, employers, and students of the Faculty. They emphasized in particular the ability to adapt to new situations, ability to solve problems, capability to work independently, and knowledge of a second foreign language. Basic computer skills, the ability to apply knowledge in practice, decision making, creativity, initiative and entrepreneurial spirit, interpersonal skills, drive for success, teamwork, management and implementation of projects, and communication were mentioned, as were the ability of analytical synthesis, leadership, concern for quality, knowledge of the international environment, the ability to organize and plan, and the ability to learn, the ability of critical thinking and self critics, and to act in accordance to the code of ethics. Among the more specific, however, basic knowledge in the profession for which the students are studying, research skills, respect for diversity and multiculturalism, understanding other cultures and people were ranked highly.

Current thinking is that more players are responsible for the development of competence. Certainly the study program and the people who prepare the study programs, the faculty, and the students themselves are responsible. Specifically, through the careful selection of lectures, they can develop competencies.

They have three year long Bologna programs. The first year is common to all students and in it the students acquire basic knowledge, and then they choose the courses and take program specific and optional subjects.

There are different modes of teaching: lectures and other forms of instruction, such as exercises in small groups. Students work concurrently and take responsibility for their studies; they also take part in teams. Much work is done in cooperation with visiting experts from the practice. Programs also have a great deal of computer skills training.

There is a career center that provides study practice and individual contracts with large companies who in this way seek contacts with their best graduates.

The field of quality assurance is very broad. Monitoring the quality of courses and quality of study process takes place at several levels. There is the Commission for the quality of the Chamber that prepares self-evaluation reports. They also monitor the student satisfaction, which is performed through a University survey. Competencies are monitored for each year of each program. Last year, analysis of all programs was done because the university was involved in an international accreditation process and this year they asked for American accreditation.

In the past two years, the greatest challenge has been problems of institutional nature. Situations where it is necessary to create courses without well-known rules have been encountered, or there is a situation where study programs have already been designed and have had to be changed because the institutional framework is constantly changing. At the moment, the priority is in the doctoral program.

Interview: [SIH4]

The faculty is characterized by the following general competencies: the ability to ensure the integration of social networking that is extremely important in the field of social science and this means communication, the knowledge of social processes and laws, and sociology. Specific competencies in the fields of expertise, such as knowledge of models of certain functions, and social tasks, are also relevant.

The development of competence is primarily the responsibility of the teacher. The old rule says a teacher can teach what he can and what he understands. If a teacher does not have sufficient professional knowledge, then we cannot expect that students will acquire the competence that they need. This is the problem of obsolete knowledge of teachers.

Teaching ex-chair is emphasized. The university is very computer-equipped and uses active teaching methods that provide students with the knowledge of the tools that are now in use. This means that students are immediately acquainted with the tools to be used, with practice, but on the other hand, it also means that this knowledge is quickly obsolete. Students are trained so that they can immediately take part in the work.

The university cooperates with employers in many ways: they have direct access to the tools, particularly to ICT, so they get to use all of the novelties. The second way is that the employers participate in the conducting and development of the study programs and they identify problems with the economy, especially in the part-time study programs. The third way is via their conferences. They have problems in ensuring practice.

Last year they have shared interviews of a sample of a few thousand of their students. Therefore, they know for each subject, for each professor, what are the developments and what are the advantages. The employers and university work well together and participate in the self-evaluation processes. The university has a board of employers. Employers are also involved in programming. When the Bologna reform was implemented, the university started from the knowledge base and from it they identified the competencies. They included the employers, students and professors. Now, a set of lectures is shrinking due to financial reasons.

The university sees challenges in the field of practice, in an even greater opening of HE space and its integration with the environment in which they operate, in ensuring the continued acquisition of new knowledge of students and teachers, in overcoming situations that we are witnessing now, when a set of lectures is shrinking because HEI are facing financial difficulties.

Interview: [SIH5]

General observations are that the entire university education in the area of the teaching profession is too concerned with how someone will learn specific content, and it lacks knowledge on how to teach the content. In the study reform process, the curriculum was reviewed to create a study program that would give the students the technical knowledge and the proper and appropriate ways for passing it on to students when the graduates would be teachers. In addition to technical knowledge and teaching skills, they stressed the need for communication, the understanding of the individual, by use of modern pedagogical approaches, following the transfer of knowledge.

In a way this is a little too specific. All of the methods used are also used at other faculties, but besides that there are more exercises, which take place outside the seat or the Faculty (in the pool, in the mountains, surfing,

kayaking, and skiing in the mountains). Here it is very difficult to achieve consensus with the Law on Protection at Work and norms that are required by the university.

In the new Bologna program, there will be more study programs. The university is working closely with the Alliance of sports educators, and participating in their annual symposium, and cooperating with most of the sports associations in Slovenia. In this way, they receive direct information on the ground regarding what is going on and what the problems are that arise. They also cooperate with the Olympic Committee and the Union of the sports teams and they would want this cooperation to be even better, especially in the area of job creation. They cooperate with the university career centre in Ljubljana. They discusses the practical problems and on the other hand, the content of our training and retraining with the employers.

They have much practical training and they recognize all the training that students acquire during their practice in study programs. The purpose of the faculty is not to teach someone to ski, play basketball, etc.., but to teach the students how to be able to teach, either at school or in clubs.

The work of teachers is measured by means of questionnaires developed by the University. They monitor the competencies of graduates through cooperation with the Association of sports educators, in the meetings of the Executive Committee, so they see what they may be missing, what would be worth to pay more attention to in the future. The faculty teachers and assistants are also more embedded in the work of sports clubs. In this way, they receive information in many cases on an individual level.

The Bologna reform is viewed as generating radical changes. These require a different type of funding. Many faculties are already making reforms of the reform. Nevertheless, they believe that they have to change from two to four programs and, in this way, open up job opportunities for their students. They see the challenge in successful implementation of the new programs that have been developed and, in particular, to assure the financial resources that will allow the implementation of these programs. They also believe that with the new programs, students and graduates will be offered greater employment opportunities and also the possibilities of horizontal and vertical transitions will be enhanced.

Interview: [SIH6]

The most important feature is that the student is able to constantly learn. In mathematics, as in physics, this means the accumulation of knowledge. Typically, in the first year, students are trying to get to a certain level of perception; in the second year, the lectures repeat and they try to give students a higher level of perception. In the forefront is the ability to abstract the perception and integration of knowledge. This means that the teachers want to show the students that different problems are only different aspects of the same structure. The main quality of these graduates is that they are capable of rapid, long time, and several times in life, to learn something new. Also, the employers do not expect the students to come to them very prepared, but are happier if the students are aware of methods, if they know how to tackle certain problems in a certain abstract manner. The students develop competencies such as practical knowledge in the field of computing, specific skills for teachers in high schools; they strive for presentation and communication competencies and the ability for presentation in a foreign language. They are somehow more directed to the general, generic competencies so that the students can develop their ability of abstract problem solving.

The forms of teaching are lectures, exercises, laboratory exercises, auditory exercises for groups and seminars. About half of the teaching is based on the lectures. Groups are small, from 16 to 30 students. In higher classes groups can consist only of 5 students. In the first year, students have regular classroom lectures and tutoring hours that are a kind of group instruction. Later, students learn to work alone.

The most permanent way of cooperation with employers is working practice. The faculty have many personal communications with employers.. Communication is very personal, and in this way the faculty receive information about how to complement and update their programs.

Apart from direct contacts with employers, there is also an evaluation mechanism for what a student has leaned, in the form of the degree examination. In this examination, the student must demonstrate that he knows the majority of the total study material. Whether the student has attained a certain level of understanding that is expected and if he is able to independently process and present this material are both determined. The student is evaluated on whether s/he has reached generic competencies, abstract understanding, and has developed communication skills, and, especially in physics, whether he is capable of presenting lessons in English. Alumni meetings of physicists also take place. In the teaching program, control is implemented through constant contacts and permanent pedagogical training.

The key challenge is to develop courses that will provide the students with the knowledge and understanding of issues for further analysis. Many challenges will come with the Bologna programs. Since there has not yet been experiences with it, it is difficult to comment on the process.

Interview: [SIH7]

Computing is a basic science for many different skills and therefore care is taken that graduates can work in different areas. Students acquire knowledge and skills in the field of informatics and computing, and the knowledge that they get in the interdisciplinary collaboration with the Faculty of Administration and the Faculty of Mathematics and Physics. There is a strong academic group in the area of computer science and informatics. The aim is to give students a good theoretical base and interdisciplinary knowledge through the cooperation and guidance on the specific content. The students are to be developed into good computer engineers, which means that they know how to program, and how to use and develop systems of artificial intelligence. Computer science can be a very important contribution to the development of other areas. Therefore, the students are given the knowledge that is hard for them to acquire outside the faculty.

The faculty may not be providing the development of all competencies that the students will need. The development of those skills that the students will need in a specific occupational field is emphasized and these are difficult to be developed by the student himself. Much work is done in collaboration with the industry, users, and employers. There are career seminars but in the end it is the students themselves who are responsible for the development of their competencies.

Next year the Bologna system will be introduced. At present, lectures, laboratory work, group work, and projects are being used. Much work is carried out with the involvement of people from enterprises and the economy; guest speakers from the industry and from abroad also participate.. Direct co-operation runs through the projects with the companies and organizations in which the students learn about the working environment and find employers.

For non-formal knowledge acquired, there are no special rules. For now, no cases exist in which someone would come and want to exercise the knowledge gained. On the other hand, the items and skills that are acquired by students are recognized in the programs of foreign universities. Formally, there is no systematically monitoring of the competence of graduates. Occasionally, questionnaires are sent out in which the graduates are asked how they are satisfied with the competence acquired in their studies. However, a large number of graduates retain contact through collaboration with industry. The Alumni Club of graduates has been instituted and the hope is that in this way more information can be gained. The employers look for these graduates. The problem is also

that many of these students work before the completion of their diploma and if they do not finish their study, they hardly advance in their jobs.

With the creation of new programs, around 20 study profiles were identified, which are of interest for the environment. On this basis, a set of objects and competencies has been designed and teachers and professionals were involved in the identification process. In the design of new programs, all available knowledge was used; the reactions of the environment were taken into account. There probably is a need for more universities, especially in this field, because the demand for these graduates is very high. However, the new faculties should be very interdisciplinary, and must follow different objectives. This means that it is not reasonable to duplicate programs and develop the programs that offer the same content, but it is reasonable to offer something new and different. The faculties should also offer different levels of knowledge.

Interview: [SIH8]

Two competencies are the basis of social work; the work in a team and communication. Many of these students are sent abroad, so that they get knowledge of a foreign environment, and they learn how to operate in different environments. In this way, the students exchange the knowledge on methods and of adapting the methods in different environments. Since social work is not an isolated area, the students also acquire knowledge in the fields of psychology, economics; they get familiar with the various users and with the use of specific methods.

In their opinion for the competence development various actors are responsible: the academics, professors at the Faculty, the practitioners; people who work in social work, the third group are the users. Generic and specific competencies must be balanced and the theoretical and the practical knowledge in a specific area must be respected. In the study programs, exercises, field and project work and lectures are used. Most of the students also conduct research projects carried out by the professors and they get a lot of practical experience.

When new programs were developed, this was done in cooperation with all of the stakeholder groups (social workers, users, professors, students). The programs are in accordance with many opinions because they were supplemented, changed, etc. according to comments from these groups of people. The experiences of colleagues in other schools were considered, as was how they took into account all of this information when designing programs. For all of the strategic issues that were performed, all external staff is regularly invited to give opinions, they are also regularly invited to give lectures to the students, and they cooperate with all employers in the area of social protection. In this way work is brought to the students. The university is beginning to understand the problems and the faculty is becoming increasingly attracted to particular types of work. In the second year of study, the students are informed about the different areas (work with the old, young, groups, communities...), of social work. The students are encouraged to learn about different areas, to develop a sense of what they want. They also have their career center, in which many students participate. There is no formal system for non-formal learning, but there are increasing numbers of students who come for signatures for Nefix (index of non-formal education).

The university gave the initiative to students to produce a questionnaire for quality control. Students are also invited to give professors qualitative feedback on their work, about the lectures, what they are missing, what would they recommend to the professor regarding the approaches in the subject. Last year, all people in the faculty worked together for a year on the question of what might work in the field of social work, what should be changed, what were the new needs, what was missing. They cooperated with users, employers, and students. They prepared self-evaluation reports for the University and they conducted a University survey to monitor the study quality.

In higher education, the process of change runs constantly. It is hoped that with the reform of study, the area of social work will acquire an increased reputation and professionalism. The importance of the presence of faculty in a wider area, in public, and in communicating with the outside environment is recognized.

Interview: [SIH9]

For a graduate of law, the most important knowledge base is a broad legal background, not just on legal issues but also on other fields of social sciences. Also important for work is an exceptional value system. The breadth of education and thinking is more important than pure application writing skills.

The faculty is responsible for the development of generic competences; praxis is responsible for the development of specific competences. Students can take the state examination after certain practical work. Without additional resources, practical work in small groups is not possible within the study program at the moment.

During years of employment, graduates start to tackle more serious questions which require knowledge provided by the faculty. At this point the depth of knowledge received in higher education comes to light.

The main purpose of the ex-cathedra lectures is to provide students with a basic theoretical background. Other ways of teaching are seminars, practice and problem solving.

Basically, we can say that we do not cooperate with employers because we do not have practical work foreseen in the program.

We do not have much experience in evaluating the acquired level of competences and no real surveys. But we do have informal feedback from our colleagues from praxis.

The study of law is a national study; European integration provides us with a higher level of comparability, as we have introduced some European law into our national legal system. This is still a small part of the Slovene law.

Each legal system has its own specific characteristics. Study programs of law concentrate on national verification whether it is via state examination or entrance examination. If you look at the other side, the implementation of the program is different due to the differences in the legal systems because most EU legislation is in the hands of the national legislator. Adding a national element to the program is specific for this program.

Interview: [SIH10]

The most important generic competences are general knowledge, communication skills, foreign language, innovativeness and literacy. On the other hand, the most important specific competences are general knowledge in electrical engineering and additional fields (automatics, electronics, energetic, mechatronics, telecommunications) and an engineering attitude towards problem solving. The faculty is responsible for the development of specific and part of the generic competences. Every individual is also responsible for the development of other generic competences. The relation between the two groups of competences is in balance.

The modes of teaching and learning which are emphasized in the study program to develop these competences are team work, solving project tasks and oral presentations of project results to the class.

Students are involved in practical learning which is part of the regular program; all students have the possibility to be involved in a research and development work in laboratories, also in connections with companies. Informally attained knowledge contributes to the performance of student's formal study obligations at the faculty.

Constant cooperation and gathering feed-back from companies that employ our graduates are the main quality control and monitoring activities used to provide feed-back that a certain level of competences is acquired.

Higher education institutions should provide work in smaller groups, with a maximum 70 students per lecture and perform practical work with no more than 15 students. The new bologna study programs are substantively modernized and lead to internationally comparable educational. We think the renewed programs would have to constitute a sufficient qualification for the labour market.

Interview: [SIH11]

The most important generic competences are ability to take responsibility for your own occupational development, learning by evaluating and reflecting on your own work, leadership and organization skills. The most important specific competences are awareness of different modes of learning for reaching learning outcomes, understanding development characteristics of pupils and adjustment to certain groups of pupils (with special needs).

Responsibility for the development of these two groups of competences is in the hands of the professionals at the faculty, public institutes, free time activities, informal education and the individual students. Generic competences should be developed at all courses of the program, but specific competences are connected more to the selected fields.

In our study programs, we focus on cooperative learning, problem solving, discussions, experience based learning, literature study, practical capacity building, practical research. Students take placements in different public institutes (depending on their study program). During their placement, students take notes in their diaries, where they describe preparations for their work and analyse the work that they did. After their placement, a detailed analysis is made of the work done.

We do not have any special procedure for recognizing and validating the non-formal learning of students.

We receive feed-back from schools which employ our graduates, use survey questionnaires filled in by our students, regular reflection of the teachers, follow the placement procedure of the students, evaluate knowledge at the exams and hold consultation with students.

Suggestions for improvements: introduce quality monitoring of students' work, the establishment of tutorship teacher-student; reduce the number of students per teacher and increase the responsibility of the students for the development of competences.

Undergraduate programs are only the middle point. The student is competent for teaching only after finishing the second stage.

Interview: [SIH12]

The most important generic competences are critical reflection, ability to learn, initiative and independent judgment. Specific professional competences depend on the professional or scientific field of study program. No doubt, specific competences are developed within the study program. Partly this is also true for generic competences, where modes of teaching and learning are important.

It is difficult to specify exact proportions. In our view, generic competences should gain in the new study programs at least the same importance as specific ones.

Modes of teaching and learning depend on the study program and also on the course, but throughout we emphasize experimental, project and seminar work, at the higher levels research work is also emphasised.

Cooperation with employers mostly prevails at the organization and implementation of practical work and in the field of applicative project for the economy. We also plan to increase the cooperation with the career centres.

Our faculty's study committee decides on the validation and recognition of non-formal knowledge and skills attained before the enrolment.

We attain feed-back information through formal and informal contacts with employers. At the annual symposiums we carry out surveys and round tables on graduates' qualifications.

The important factors are time, financial resources and also the qualifications of the pedagogical staff. The fact is that the Bologna process intensifies international comparison in the fields where exchange is well developed.

It depends on the job demand whether a degree is a sufficient qualification for the labour market. For less demanding tasks the answer could be yes (higher education programs), for more demanding absolutely not (university programs).

Interview: [SIH13]

The most important generic competence is basic knowledge at the maximum theoretical and applicative level. Specific competences are related to the specific study programs, such as specific methodological knowledge, terminology and different ways of presenting.

To a certain degree education in general is responsible for developing generic competences. Higher education is responsible for development of generic and specific competences. Both generic and specific competences are important.

The use of different modes of teaching and learning depends on the study program. Especially the use of modern modes depends on the subject: interactive chat room, solving problems with the help from tutors, visits to the companies and experts from the companies. In the first year ex cathedra presents 40% of all the teaching.

In praxis we have two ways of cooperating with employers. Firstly, we have established a Steering Committee for economics and business programs with the representatives of employers also included. Secondly, the council of the faculty works as a senate consulting body, where 21 employers are present.

Certain non-formal knowledge is recognized as a student practice at some subjects as seminar work. Optional subjects are also recognized.

Besides direct feedback from employers we have introduced an appraisal system at the point of graduation through the AACSB system. Here all the competences of graduates are evaluated.

The University of Ljubljana in general achieves good results; maybe some faculties should consider introducing systematic changes in line with attaining learning outcomes. The Bologna process contributes to a lesser comparability and compatibility of study programs from different institutions. In the students' opinion, the master level is not necessary but we think it is and we should check this inconsistency.

Interview: [SIH14]

Generic competences are talent, hardworking, general education. Specific competences are general knowledge, creative problem solving, adaptability, confidence, positive thinking.

For the development of generic competences responsibility is in hands of the family, school and good professors. The faculty is responsible for specific competences development.

The goal is not the balance but the highest possible level in all the fields. There are shortages in general knowledge and in own prejudices. The balance is not a special problem.

We carry out seminar modes of studying. The professor has the role of a mentor and tutor, students learn to work in teams and we stimulate personal contact in all years of study. We also organize workshops by making contacts with the local community and experts and we also perform a real project.

Students have obligatory praxis, once at the construction site and once in the bureau. We cooperate with employers through workshops and contests.

At graduation, all informal learning related to the study program is ascribed to the graduate diploma.

We obtain informal feed-back from design bureaus. Our graduates are good at some tasks, at some not. We do not have any formal monitoring. One indicator is also the contests and their success and international workshops.

We should improve cooperation with the bureaus and chambers and improve skills in public appearance, because the architect must have the knowledge how to explain their project. We support a regulated occupation (5+0), because three years are not enough for someone to become an architect. Bologna was supposed to decrease the number of students per professor but the reality is just the opposite. The Bologna study program has a positive effect on communication skills, confidence and general knowledge in the field, but does not add any additional knowledge.

Interview: [SIH15]

The most important generic competences are analytical ability, critical judgment, solution seeking, and challenge solving or unpredicted situations solving. Specific professional competences connected to drugs, their use and effects and technological procedures of drug production.

Responsibility lies with family and education in all levels, individuals, and state institutions for societal climate.

The groups of competences are complementary. Generic competences allow for searching of analogy, which cannot be efficiently used for developing new solutions.

We practice a combination of different modes of teaching and learning like classical lectures, seminar work, workshops and leading discussions.

Part of the laboratory work is carried out in the laboratories of future employers; two programs have obligatory practical training. Graduate projects are performed in cooperation with employers, as well as joint research applicative projects at the postgraduate and doctoral level, joint research projects and project work.

Non-formal attained knowledge can be formally recognized, but we have only small number of such cases.

At the level of each subject we constantly monitor and evaluate skills in practice and constantly monitor achieved competences during the year and final examination at the end of each subject.

University does not educate apprentices for instant work, but provides universal knowledge and competences which allow graduates critical distance towards the processes they are involved (technological and social). Students need more skills on how this knowledge can be efficiently used in real situations.

The standardization of study programs is not sufficient. The uniformity of the programs is not right at the level of study programs. No education can prepare a human for 40 years of employment. It is just a proper basis which has to be upgraded.

We educate through the same study program pharmaceutical and medical pharmacy and pharmaceutical industry, which is part of the private business.

TURKEY

Interview: [TRH1]

The most important generic competencies for a university graduate are the ability to rapidly acquire new knowledge, which shows that she/he could learn on her/his own, to have organizational skills, the ability to work as a team and to show analytical thinking. The most important subject specific competencies are the basic knowledge in the field of study and the ability to use the main concepts of her/his field of study to apply the work she/he performs. The teaching staff at the university are responsible for the acquisition of this competency by the students. There should be a balance between generic and subject specific competencies; however, generic competencies are more important for the graduates to work productively in the society. Problem based learning (PBL), project based learning, and group assignments are the most important teaching- learning activities emphasized in our study programs. We organize fairs and career days to allow our students to meet with employers and alumni. The alumni board is a good tool that promotes contact with the ideas of alumni; additionally student clubs organize meetings with the companies, employers. We do not recognize and validate the non-formal learning of our students and do not have a plan yet. We could begin working on this topic in if national studies begin systematically, because this subject should be studied nationwide as it is a very debatable issue.

We have a systematically performed survey in our university; an Alumni and employer board are present in each of the study programs. Generally, the bachelor degree is a sufficient qualification for the labor market; after the national qualification system is established, the studies should be carried out by the regulating decisions of the Council of Higher Education and there should be systematic work in the universities about how these competencies are developed through study programs. Assessment of the study programs in the universities, in that sense, is very important.

Interview: [TRH2]

The most important generic competencies that a university graduate must have are the ability to think critically, to write and speak in a foreign language, to work in interdisciplinary fields and to work as part of an international team. The most important subject specific competence is being practice relevant. The curriculum is responsible for the development of these competencies; thus, the responsibility begins with the decision makers and progresses through curriculum developers and teaching staff.. The generic competencies are more important than the subject specific competencies in many respects. There are many ways of developing these competencies in my university; namely, through internships, practical work, applicative projects, problem based learning, team work, written assignments, oral presentations, written exams etc. We cooperate intensely with the employers. We use a rich variety of tools to cooperate with them; some of them are internships, practical work, applicative projects, and meetings with employers. Examples of good practices are the CAP (Company Action Program), the technology development zone and the survey to the world of work. We do not recognize and validate the non-formal learning of our students and do not yet have a plan to do so. We could begin working on this topic if national studies begin systematically, because this subject should be studied nationwide since it is a very debatable issue. We use the survey results mentioned in question 5 above and the feedback from our graduates for quality control and monitoring activities related to development level of competencies acquired. The study of learning outcomes for each course in the study programs is currently carried out in our university. The Bologna process is a very good guide and tool for the universities to develop their curricula according to the needs of the knowledge and of an economically well developed society. Nearly 69% of our first cycle graduates go directly into labor market, the remaining 31 % continue with second cycle studies. This shows that the first cycle degree is sufficient and well understood by the employers for the entrance to the labor market. Many of our graduates delay their entrance into the labor market to finish their military service.

Interview: [TRH3]

The most important generic competencies which a university graduate must have are the ability to think critically, to write and speak in a foreign language, to work in interdisciplinary fields and to work in an a team formed by the persons of the same field or another field, to learn herself/himself, to have ethical values, to be able to manage and organize her/his work and studies; namely, to have well developed organizational skills. The most important subject specific competencies are to have a basic knowledge in the field of study, to be able to use the knowledge in practice, to be able to assess, solve the problems and propose solutions, to be creative.

The curriculum is responsible for the development of these competencies. Both the generic and subject specific competencies are of equal importance. There are different methods embedded in the curriculum for the development of these competencies in my university; namely, internships, group assignments, applicative projects, problem based learning, team work, written assignments, oral presentations, written exams and graduation projects. We cooperate with the employers, but I do not think that this is sufficient. The most striking example of cooperation with the employers is the survey of the world of work. We do not recognize and validate the non-formal learning of our students, although we give a certificate upon the completion of such courses.

We use the survey results mentioned in question 5 above, the feedback from our graduates and also the results of surveys filled by our students at different levels of the program for quality control and monitoring activities related to development level of competencies acquired.

We have a consulting committee formed by the graduates, employers, teaching staff. This team gives reports on the competencies which the graduates should have; the reports are then discussed and the results are reflected in curriculum development studies. This work is carried out in some departments within the university.

Universities should ask all of the stakeholders about the generic and subject specific competencies and their level when designing and developing new study programs and also when making curriculum development studies. The Bologna process is a very good guide and tool for the universities for developing their curricula according to the needs of the knowledge and economically well developed society. Through the Bologna process studies, the curricula of the universities would be comparable.

Our first cycle graduates go directly into the labor market. This shows that the first cycle degree is sufficient and well understood and well known by the employers.

Interview: [TRH4]

The most important generic competencies for a university graduate are the ability to think critically, to write and speak in her/his own language as well as in a foreign language, to have organizational skills, to be able to work in a team and to be able to learn on his/her own. The graduate must also be aware of ethical issues. The most important subject specific competencies are to have basic knowledge and concepts about to her/his own field of study, to interpret them and to have the ability to use that knowledge and those concepts in a practical field, to use this knowledge to solve the problems.

The curriculum is responsible for the development of generic and subject specific competencies in a graduate. This requires all of the stakeholders to be involved in studies, beginning with the program design, through development, application and further curriculum development studies.

The graduates with balanced generic and subject specific competencies would be more productive and active citizens in the society, so we think that there should be a good balance between theoretical and practical teaching and that learning activities should be very well balanced in study programs of the university.

To develop generic and subject specific competencies equally, the teaching and learning activities should be practiced equally.

We cooperate with employers in many aspects. Many of our study programs include work placement/ internships. Our students visit different fairs organized in different sectors; additionally, we organize many seminars and conferences which enable the employers and students to meet each other and get to know and understand the needs of the labor market. We do not recognize and validate the non-formal learning of our students and do not yet have a plan to do so.

Interview: [TRH5]

Different types of teaching-learning modes are used in different faculties. Generally, student-based learning is discussed in the institution but the implementation strategy is not yet defined. Group assignments, oral presentations and the ability to use computers are the most important generic competencies for future graduates to function well in the society; participation in research projects is the most important specific professional competence. Related courses and learning activities should be augmented to the curricula to link the generic competencies to the professional specific ones. Each teaching staff is responsible for her/his own course for the development of these competencies, in accordance with the general program objectives, which assures the acquirement of these competencies.

The balance between generic and specific competencies should be equal.

There is cooperation between university and employers mainly at departmental/faculty level; through information days, conferences, and internship/ work placement possibilities. This relationship could be improved by a career centre, which would enable these efforts to be systematically and effectively done at university level.

One of the barriers in cooperation with the employers is that they want only basic subject specific competencies to be included in the programs, whereas the university staff wants to also include the subject specific competencies in more detail.

Non-formal or informal learning is not recognized. There is a feedback questionnaire for each course in each study program.

The competencies written in curricula are determined by the department teaching staff. They put the competencies in the curricula according to the experience/ information they gain/ get from conferences, recent technological developments, and recent literature. The university should develop a strategy to receive feedback regularly from the students and employers and to use these results in the curriculum design/ development.

The bachelor's degree program is a sufficient qualification for the labor market. High numbers of students in the classes affect the modes of teaching and learning activities. The graduates have a good level of theoretical knowledge; however, their practical skills are not at the desired level asked for by the employers.

Interview: [TRH6]

The most important generic competencies are: motivation, leadership, coaching, and teamwork. Besides these, foreign language and computer literacy are important assets. Each teaching staff is responsible for her/his own course for the development of these competencies. A long term career center is responsible. Specific competencies are more required than are generic competencies.

Many of the faculties modified a problem based learning method to their needs and the type of courses. Besides, lectures, other modes of teaching in various departments include group assignments, participation in research projects, internships, work placement, project-based learning, written assignments, oral presentations by students, and multiple choice exams.

There is strong cooperation between our university and employers at every level. New students may participate in the program offered by the career center. At their graduation, they receive a certificate from the career center. Non-formal learning is recognized by the modules. Placements, career days, and projects are carried out in cooperation with employers.

HR staff and employers are invited to the faculty meetings. They inform the university which department they need and which skills are important for them in the recruitment process.

There is also a technology center in which firms open their offices. AISEC supports the connection between students and the world of work.

With the project of the career center, we aim to reach graduates to get their feedback about the program from which they graduated.

There is also a 22-member Bologna Follow-up Committee in the university. They follow the learning outcomes and follow the student questionnaires.

For the project incomes, academicians share their income with the university, which is a barrier for most of them to participate in the projects with the world of work.

Interview: [TRH7]

The most important competencies are entrepreneurship and ability to speak and write in at least one foreign language. The University policy is very important to support the courses and activities that help the students in their personal development. This is the responsibility of the rectorate (university management) and the lecturers.

There should be a balance between generic and specific competencies. If the students do not develop generic competencies, they have difficulties at further studying. Lectures and group assignments are the main type of teaching. However, those modes vary according to departments. Career days, meetings, sponsorships and project partnerships with the Chamber of Industry, Chamber of Sea Industry, and municipalities also occur. The Vocational Schools have meetings with the representatives of the world of work. Together, they define their needs for this area, new courses, new skills, new curricula, and new departments. The university then proceeds to develop these facilities within their capabilities.

There are two committees working on quality management: the Academic Evaluation Committee and the Quality Evaluation Committee. Regular surveys help these committees to follow the development of quality. Students have an active role in these evaluation systems and they also participate in the faculty and senate meetings.

Research and development activities should increase in the university. During the Bologna Process, university policies are very important for the support of the changes. Many students need practical applications.

Interview: [TRH8]

The most important generic competence is problem solving ability. The most important subject specific competencies are the ability to have and use the basic knowledge related to the field of study, to work as a team, to use computers, and to write and speak in a foreign language. The university as a whole is responsible for the development of generic and subject specific competencies. The program developers, teaching staff, and university management team should all be involved in this work. The generic competencies are more important than the subject specific ones. The study programs should be developed; thus, the teaching-learning activities should be selected for the best development of generic competencies. Generic competencies allow graduates to update themselves more easily and effectively in their own fields. Due to high numbers of students in the classes, active teaching-learning methods are not used frequently in most of the study programs in my university. However, in some of the study programs, active learning has been used lately. We cooperate effectively with the employers. The most important cooperation is for the work placement/internships for our students. We organize seminars and cooperate in different projects with the chamber of industry and chamber of commerce. As a result of this cooperation, these chambers opened a bureau within the university campus. The cooperation with the chambers is a good example of the relationship between the university and the world of work.

We do not recognize non formal and informal learning and do not yet have a plan.

The most important quality control and monitoring activities that we use as feedback not only about the development of competencies but also teaching-learning activities is realized by the "quality coordination committee". This central committee is responsible for the internal quality control and quality assurance within the university.

The universities should change in every aspect in order to improve the development of students' competencies, because learning outcomes based on teaching-learning demands the change in the minds of all the stakeholders of higher education. Bologna Process studies are a very good tool for this. If the universities change and develop their curricula according to the demands of the world of work and according to the needs of today, the Bologna Process will actually lead to the standardization and comparability of education.

I think that the bachelor's programs are sufficient for the labor market, as most of our bachelor's graduates go directly into labor market. The program is well understood by the employers.

Interview: [TRH9]

The most important generic competencies are problem solving, to work in a team, analytical thinking, to be aware of ethical issues and social justice. The most important subject specific competencies are the ability to have and use the basic knowledge related to the field of study, to work in a team, to use computers, to write and speak in a foreign language and to communicate with people from her/his own field and other people. Many of the competencies, especially the generic ones, should be gained by the student by formal and informal learning,

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before he attends the university.. The university as a whole is responsible for the development of generic and subject specific competencies. The generic competencies should form 30 percent of the study program. Assignments, group assignments, oral presentations, interactive learning, and discussion hours are used as teaching and learning modes in different study programs. We effectively cooperate with the employers. We organize seminars and cooperate in different projects with the world of work and students take part in these projects, career days, and the graduate follow up system.

We do not recognize non formal and informal learning and do not yet have a plan. The most important quality control and monitoring activity is the surveys to the students, which are partly applied within the university; in some study programs. Unfortunately, we do not have a systematic feedback mechanism for the monitoring and quality control activity to provide feedback that a certain level of competencies is acquired. The universities should change in many aspects in order to improve the development of students' competencies. The universities should develop their infrastructure for research and practice. The students should participate and work in the projects of the teaching staff. The Bologna Process will actually lead to the standardization and comparability of education. I think that the bachelor's programs are sufficient for the labor market; most of our bachelor's graduates go directly into labor market. The program is well understood by the employers.

Some remarks about my country are: The students begin university with competencies insufficient for their future life; thus, the university study programs should be arranged in order to develop these competencies during the university life. The study programs should be updated after the national qualification framework is established. The students may actively participate in their learning paths; this is done at the moment. Teaching staff should be evaluated regularly and the students should take part in this procedure. The quality assurance system in the country should be established and the study programs should be evaluated accordingly.

Interview: [TRH10]

The most important generic competencies are the ability to self learn, to work in a team, to think analytically, to use ICT, to communicate in a foreign language and to take responsibility in a team. The most important subject specific competencies are the ability to have and use the basic knowledge related to the field of study. Among these, the most important competence is the ability for self learning. Many of the generic competencies should be gained by the student before he comes to the university. The university as a whole is responsible for the development of subject specific competencies. The program developers and teaching staff are responsible for the development of these competencies. The generic competencies should form a small portion of the study program. Thus, the study program in the university should be focused on the development of subject specific competencies. Due to high number of students in classes, the general mode of teaching is class lectures. In science and engineering programs, there are practices; in some social science programs, there are discussion hours; and in many programs, the students prepare graduation projects. In some of the programs, work placement/ internships are obligatory. We cooperate with the employers in different ways; we organize seminars and career days. Examples of good practice in the framework of this collaboration are the career days. Sometimes, the employers directly recruit the graduates at these career days.

We do not recognize non formal and informal learning and do not yet have a plan.

The most important quality control and monitoring activity is exams. The restricted feedback from the employers is obtained by the career days and seminars we organize with the employers. Therefore, unfortunately, we do not have a systematic feedback mechanism about the level of competencies that our students gain through our programs.

The universities should change in many aspects in order to improve the development of students' competencies. This means a change in the thinking patterns of the teaching staff because these are the ones with direct exposure to the students. . I think the Bologna Process will lead to greater standardization and comparability in higher education, because it includes all of the tools for an ideal university for students, a knowledge society, and for the labor market. It includes all of the stakeholders in the program structure, quality assurance, program outcomes and learning outcomes.

I think that the bachelor's program is a sufficient qualification for the labor market; 80% of our students go into labor market, while only 20% continue with master's studies.

The students begin university with insufficient generic competencies. Due to high number of students in classes, I think these generic competencies are not very well developed at the university as well. I would say that our graduates are more qualified in knowledge domains.

Interview: [TRH11]

The most important generic competencies are the ability for self learning, to work in a team, for analytical thinking, the ability to use ICT, the ability to communicate very well in one's own language and to communicate in a foreign language and to be able to take responsibility in a team. The most important subject specific competencies are the ability to have basic knowledge related to the field of study and to be able to perfectly apply this knowledge to different problems. I say that all of these generic and subject specific competencies are of equal importance and are musts for a graduate. The university as a whole is responsible for the development of generic and subject specific competencies. The study program in the university should be arranged in a way that both generic and subject specific competencies are equally developed, because I think both types of competencies should be developed equally in a graduate who can then function well in society.

Different teaching and learning modes are used in the university. Due to high number of students in classes, the general mode of teaching is class lectures. In science and engineering programs, there are practices. In health sciences and engineering programs, work placement/ internships are obligatory. Work placement is optional in social sciences study programs.

The cooperation with employers is insufficient; we sometimes organize meetings with employers. The feedback taken from the world of work in these meetings is not systematically used to develop the study programs.

We do not recognize non formal and informal learning and do not yet have a plan.

The most important quality control and monitoring activity is exams. Therefore, unfortunately, we do not have a systematic feedback mechanism to determine the level of competencies that our students gain through our programs.

The universities need to change as a whole in order to improve the development of students' competencies. This means a change in thinking patterns of the teaching staff, the management team of the university. I think the Bologna Process will lead to greater standardization and comparability in higher education, because it includes all stakeholders, who take part and share responsibility in order to improve the university education.

Interview: [TRH12]

The most important generic competencies are the ability of self learning, to work in a team, analytical thinking, the ability to use ICT, the ability to communicate in a foreign language and to be able to take responsibility in a team. The most important subject specific competencies are the ability to have basic knowledge related to the field of study and to be able to perfectly apply this knowledge to different problems. I say that all these generic and subject specific competencies are of equal importance. The university as a whole is responsible for the development of generic and subject specific competencies. The study program in the university should be arranged in a way that both generic and subject specific competencies are equally developed, because I think both types of competencies should be developed equally in a graduate to allow her/him to continue to develop these competencies in the workplace. We use nearly every type of teaching and learning mode in our study programs, according to the field of study. Lectures, practices, oral presentations, oral and written exams, projects, graduation projects, work placement are all used. Written exams are done as multiple choice or open end question exams; the university has a general grading system and all exams are graded according to that general grading system in of the study programs. The cooperation with employers is at a very developed level. We have a technology development zone and this allows not only our students but also our teaching staff to be involved in many project partnerships with the world of work. The university also has many co operations with different sectors, the most important being with the tourism sector.

We do not recognize non formal and informal learning.

The most important quality control and monitoring activity is exams. Therefore, unfortunately, we do not have a systematic feedback mechanism to determine the level of competencies that our students gain through our programs.

The universities need change in many aspects. The learning outcome based teaching and learning is one of the most important concepts that the Bologna process implies will result in changes in the university. I think this will lead the standardization and easily comparable degrees in .higher education systems.

I think that bachelor's program is a sufficient qualification for the labor market. The employers see the bachelor's program as a sufficient degree for the labor market. It is well understood by the labor market.

Interview: [TRH13]

The most important generic competencies are the personal and social responsibility, planning, problem solving, reasoning, creativity, strong communication skills, both for interpersonal and presentation needs, cross-cultural understanding, knowing how and when to use technology, and choosing the most appropriate way for the task. The most important subject specific competencies are the ability to have and use the basic knowledge related to the field of study. Among these, the most important competence of all is the ability for self learning. Many of the generic competencies should be gained by the student before he comes to the university. Students need to be equipped with also generic competencies both by higher education institutions and by employers. Employers can support employees by putting in place favorable conditions for lifelong learning and competence development, offering internships to students, and providing higher education institutions with information on their competence needs. The program developers and teaching staff are responsible for the development of these competencies. General competencies and specific professional competencies are equally important. Therefore, they complement each other. There are different teaching activities and assessment tools, depending on courses and

aims of the courses; these are: lectures, seminars, group work, problem solving sessions, studies, workshops, discussions, question sessions, oral presentations, essays, and laboratories etc.

The cooperation with employers is insufficient. We sometimes organize meetings with employers. The feedback taken from the world of work at these meetings is not systematically used to develop the study programs; the interested teaching staff change her/his courses according to the feedback from the employers. Some project partnerships exist at departmental level but the students generally do not work on these projects. We do not recognize non formal and informal learning and do not yet have a plan. To obtain feedback on defining the level of acquired competencies, several assessment techniques have been used. According to learning outcomes (knowledge, skills and behaviors expressed in the Outcome Objectives) assessments are closely matched to purpose, program objectives, intended teaching and learning activities and regular opportunities for formative and self assessment. However, we do not have a systematic feedback mechanism regarding the level of competencies that our students gain through our programs. We do not have a specific committee to monitor and evaluate the level of competencies that our graduates gain in the university. We have a central education board; this board evaluates the curriculum change offers given by the departments and asks for the reasons why that curriculum change is necessary, and the board wants the department to give proof for their proposal. This proof is generally the examples of curricula from universities abroad. The Bologna Process is leading to greater compatibility and comparability of the systems of higher education. Moreover, the Bologna Process has promoted lifelong learning, employability, research and innovation, mobility etc. Therefore, higher education institutions should change in several aspects. Higher education institutions should have principals for the implementation of lifelong learning policies. Higher education should equip students with the advanced knowledge, skills and competencies they need throughout their professional lives.

Interview: [TRH14]

The most important generic competencies are versatility, ability to work with others in collaborative work, communication skills and analytical thinking. The most important specific professional competencies are the ability to have the fundamental theoretical knowledge about the relevant discipline and ability to apply this knowledge to practical life and business. Both the HE institution as well as employers or firms are responsible for the development of generic and specific professional competencies. Secondary school education also has to provide the ability to think analytically. The Central National Exam Placement system of Turkey does not particularly encourage the development of these competencies. Of course, development of generic competencies should also be augmented into the specific professional knowledge that is obtained through the university.

Although it changes from discipline to discipline, we can say that class lecturing is the most common mode of lecturing in our university, like most of the universities in Turkey. University policy encourages student centered active learning and project centered learning. Within this context, we encourage essay type exams, essays, and projects. In addition to this, internship is compulsory in some of our departments. We also observe that there is a high demand for voluntary internship among students, even though their departments do not require it. There is cooperation with the employers basically in two different ways. Firstly; internship application: departments that have compulsory internship applications are in touch with the business world to find a place for students. Secondly, in order to increase the employment opportunities of students, we organize career days. Unfortunately, we do not have a systematic relationship with the business world except through these activities.

Student evaluation forms give us information about the subject specific competencies. University's Council of Education also discusses the issues on curriculum changes and gives advice in this respect.

One of the important steps that have to be taken by universities is to encourage more interdisciplinary studies (minors-majors). Universities should also make it easier to shift between departments to compensate for the disadvantages created by universities. There should be fewer courses and less teaching hours per term. Instead,

there should be more mandatory project work. This kind of change can encourage less dependence on classes and more independent work.

Due to the Bologna process, concepts of student centered learning and learning outcomes are starting to be discussed explicitly in our education system. Having completed the necessary work on quality assurance and other issues, this will be much more beneficial to Turkish Higher Education System. The bachelor's degree is sufficient and should be sufficient qualification for the labor market.

Interview: [TRH15]

Generic and specific competencies are required in the 21st Century workplace. The generic competencies are problem solving, working in a team, analytical thinking, creative thinking, decision making etc. Specific competencies are the ability to have and use the basic knowledge such as reading and writing, to write and speak in a foreign language, to use resources effectively and efficiently, to use ICT effectively and efficiently in work. The competencies are also essential for the workplace. In a nutshell, universities need to focus on learner-centered education, to foster high quality learning and to empower their graduates. At least 25% of a study program should include generic competencies, which could be embedded into program or take place as modules.

We are using different teaching activities and assessment tools depending on courses and aims of the courses; these are: seminars, group work, problem solving sessions, studies, workshops, discussions, question sessions, oral presentations, essays, and laboratories etc. Therefore, the aim of the program is to shift from teacher centered to a student centered learning environment and to use formative evaluation and summative evaluation together. We should encourage work placements embedded in study programs as well as on-the-job learning.

To provide feedback on defining level of acquired competencies, several assessment techniques have been used. According to learning outcomes (knowledge, skills and behaviors expressed in the Outcome Objectives) assessments are closely matched to purpose, program objectives and intended teaching and learning activities, and regular opportunities for formative and self-assessment. Summative and formative assessments are integrated into curriculum (essays, projects, rubrics, presentations, feedback from their internship studies). However, we need more than that, such as student self assessment (Self-Assessment is a relevant method/tool to assess and evaluate quality, to ensure and develop quality at system and provider levels.), peer evaluation, observations of our graduates in the workplace, interviews with students, follow up studies etc.

The Bologna Process is leading to greater compatibility and comparability of the systems of higher education. Moreover, the Bologna Process has promoted lifelong learning, employability, research and innovation, mobility etc. Therefore, higher education institutions should change in several aspects. Higher education institutions should have principles for the implementation of lifelong learning policies. Higher education should equip students with the advanced knowledge, skills and competencies they need throughout their professional lives.

However, university students are not beginning university with required competencies for their future life as of now. Therefore, university curriculum should be arranged to develop these competencies during university life. These competencies could be embedded into their programs or could take place in separate modules. Moreover, teachers in universities should have the same competencies in order to equip their students with these competencies and to evaluate these competencies. Lastly, the system should be open for process assessment (including evaluation of teachers) performed by students.

c) Short summaries of all Employers' Interviews, by Country

LITHUANIA

Interview: [LTE1]

The proportion of importance of general and subject-specific competencies of graduates is 50 to 50 percent. HEI is asked to provide the basics of subject-related knowledge, values for democracy and citizenship, tolerance, to develop communication skills. HEI graduates fall rather short in required job competencies. Looking for a new employee, the important feature is the above mentioned competencies, not grades; the HE institution of graduation is also important.

Both HEI and employers are responsible for fruitful cooperation in order to develop required skills of graduates. An example is when the active part of fruitful cooperation was for library directors in the city of Klaipėda, since it was short of librarians. The cooperation with HEI (university) and the library is not sufficient, it is limited. The cooperation is based on students' practical work (performed in the library) and rare meetings with HEI representatives and students. HEI should be more active, HEI should invite the library staff for cooperation: librarians could advise on the competencies of the study program, develop workshops with students when librarians could share their practical experience. The study program of bibliography should be revised: first, students should be graduated from a specific field of study (e.g. physics), and only then go through 1-1.5 year bibliography studies. At the moment, universities have developed bibliography study programs for bachelor's and master's levels.

There are formal requirements (not clear) for the development of qualifications of a librarian. There is no recognition and validation of non-formal learning in the bibliography sector. In the library, there is no internal system of recognition of non-formal learning achievements. A new employee is accompanied by a mentor until he/she gets to know the job and the organizational culture. Non-formal recognition of a bibliographer is gained when he/she is graduated from the bibliography studies and has a major job experience (closed community).

Interview: [LTE2]

The proportion of importance of general and subject-specific competencies of a graduate is 30-40 to 60-70 percent. HEI is asked to develop general skills of students and basic subject knowledge; the graduate should acquire specific-subject knowledge in the job place after graduation, working as a specialist. A very important feature of a graduate is his/her a motivation for constant learning.

In most cases, graduates are rather low skilled. Mostly, graduates are good in theory but have little practical skills. Employers witness a shortage of literacy skills in handwriting (presumption: because computers are used for writing).

Hotel administration cooperates with non-university type HEIs since hotels engage graduates from colleges in areas such as practical work and career days (once, and found it very useful); some students come to acquire the data for their final thesis. The Employer does not take part in any study program committees because it was never asked to do so. In the employer's opinion, the cooperation with colleges is not sufficient. In order to "produce" good specialists, the cooperation of HEI and employers should be mutual. Nevertheless the first signal for cooperation should come from the HEI. The HEI should invite the hotel for cooperation and announce the

events they organize. Hotel administration would be willing to participate in career days every year, and the hotel could invite more students for practical work. When looking for a new employee, the grades of the student do not play the most important role. The important feature is the graduate's practical experience and his/her communication skills.

In the hotel, there is no system for recognition and validation of competencies acquired by the employee in a non-formal way. The recognition of competencies acquired non-formally is done through the rises in his/ her position level. Competencies of employees are appraised during seminars. A new employee is accompanied by a mentor till he/she gets to know the job and the organizational culture.

Interview: [LTE3]

The most important competencies for graduates to function well in both a local and global working environment are mastery of your own field, professional knowledge of other countries, alertness to new opportunities, ability to use time efficiently. Especially important is ability to work productively with others, since most of the tasks are done through group work activities. Also important is the ability to come up with new ideas and solutions. Responsibility for the development of competencies lies on both sides: the HE system and labor market. The Employer is responsible for the professional development of employees. The HE institution is responsible for the quality of studies that it provides. Both competencies, generic and special, have the same value of importance in this sector. Usually, most fresh graduates lack practical skills. Non-university types of HE institutions develop more practical skills in their students, but university programs lack these. The most important feature for a new employee is communication skills and common human values.

Students of non-university type HE institutions perform practical work in the respondent's institution. Sometimes, some universities provide information on their study programs. The employees that become/are students in HE institutions ask for information for their final thesis or research projects. The Employer was never asked to provide a feedback on competencies of study programs. Staff of HE institutions are not even concerned how successful the students are who perform practice.

When a new employee starts working, a senior colleague is asked to accompany him/ her. It is treated as learning in a job place. The duration of the period depends on the employee; it is very individual in terms of personality and position (for certain positions, it lasts 1 month, for others – 6 months). When the employee starts working by him/herself, s/he follows national requirements for qualification development. HE institutions should be more active and invite employers for cooperation. At the moment, they do it very heavily.

Interview: [LTE4]

The most important competencies of graduates are background knowledge of their own field, ability to rapidly acquire new knowledge, alertness to new opportunities, ability to work productively with others, to come up with new ideas and solutions, to presents products, ideas or reports to an audience, to work with people from other cultural environments. A student him/herself is responsible for the development of required competencies. HE institution's role is not to damage the talent of a student and to show to student the way how/ where s/he should develop the talent. The Employer's role is to employ and develop the talent of a student/ graduate. Basic general education in a bachelor's program should take 70 % of a program, 30% should be dedicated to specific competency development. Graduates possess basic theoretical knowledge and rather well developed generic competencies. If a graduate is eager to learn, s/he is able to become professional in 2-3 years time. An important feature that distinguishes one graduate from another is his/her practical skills and generic competencies. The main purpose of employer's cooperation with HE institutions is to search for new employees. Students perform practical training and look for information for written assignments at the employer's organization. Employees give

lectures to students when they visit the organization and take part in students' final thesis defense committees. Employees meet HE staff in non-formal meetings and discuss various topics concerning studies. The HE institution should be an agent for the graduate and for the employer; it should help a graduate to get a job placement. The period of practical training of a study program should last longer. HE staff and students should visit the employers' organization more often to get to know the practice and expand the field of research. The Employer regularly gets proposals from ambassadors for internships of employees. When starting at the job, new employees get instructed by the HRM office. The new employee is mentored by a senior colleagues and/or a manager of a department. Later, qualification of employees is developed according to the needs and possibilities.

Interview: [LTE5]

The most important generic and specific professional competencies for graduates to function well at workplace: ability to rapidly acquire new knowledge, to work productively with others, mastery of your own field. Ability to use computers and the internet is obviously important. When looking for a new employee, very important competencies are: willingness to question your own and others' ideas, being a self-starter and motivation for a job. The HE institution should provide a student with specific professional knowledge and skills. A student is responsible for the personal development of common human values and study achievements. The Employer should cooperate with the HE institution for practical work of students, identification of required competencies and etc. The proportion should be of 60 % specific and 40 % generic competencies, since employees should have good field knowledge and do the job accurately. Some graduates have enough competencies, the others – not enough; this depends on the person and his/ her values and personal abilities. Theoretical knowledge is important, but so is practical experience as well. The cooperation between employer and HE institutions is based on students' practical work and direct recruitment of students or graduates. In most cases, the employer took the active part. Other types of cooperation: students come to acquire information for their research project and final thesis. Employees take part in the final thesis committees' activities. The Employer is seldom asked about the required competencies. The cooperation between employer and HE institutions is not sufficient. HE institutions should be more active and should respond to the call for cooperation if an employer makes a call. Cooperation should be based on various forms. First of all, HE staff should be concerned about how students perform their practice; at the moment, they are not.

There is transition period of 3 months in a respondent's institution for adaptation of new employee. The institution is presented to an employee during first days of work, later – s/he starts working accompanied by a senior colleague. The schedule of tasks to be done is discussed with employer.

Interview: [LTE6]

Important generic and specific competencies for graduates are: mastery of your own field, alertness to new opportunities, ability to work productively with others, willingness to question your own and others' ideas, ability to perform well under pressure and social skills. Three bodies are responsible for the development of required competencies: the student, the HE institution and the employer. The proportion of competencies developed in the HE institution should be from 50 % specific to 50 % generic. Most of the graduates have theoretical knowledge but lack the above mentioned generic skills, practical experience, and skills in stress management. Grades of graduates are important since they show personal attitude towards duty/ job; the HE institution and study program is also important. Employers cooperate with HE institutions with the aim of getting students to perform practical work and to recruit the best of them to the company and to maintain a certain level of competency at the organization when inviting new employees. The Employer participates in Career days, conferences and competitions organized by HEIs, provides practice for students and gives material support. There is a career development program and a substantial pool of important employees who comprise a reserve block of managers. If an employee is motivated and has abilities, s/he is able to make a career in the organization without certificates. The adaptation procedure consists of several parts: it starts with "Newcomer day" when the employee gets to know the formal culture of organization. The transition period lasts 3 months and is run

according to formal methodology. At the end of the transition period, the new employee has a conversation with the HRM department officer and his/her manager. HE staff should be more open to new opportunities and competencies that emerge. HE institutions should invite more practitioners to lecture students, to revise competencies of study programs and not only to take part in various boards of HE institutions. HE staff should acquire and provide students with the newest theories of science. The admission system to the HEI should be reformed: HE institutions should take only the best students for studies, not all who wish to study.

Interview: [LTE7]

The most important generic and specific competencies for graduates are the ability to rapidly acquire new knowledge, to work productively with others, to use time efficiently, to make his/her meaning clear to others, to presents products, ideas or reports to an audience and mastery of your own field. Adaptability and a person's ability for permanent self-evaluation is also very important. First of all, a man is responsible for development of required competencies. An employer is responsible for an employee development when inviting him/her for a job. The HE institution is responsible for provision of basic higher education. The proportion of generic and specific competencies differs according to position, if we take a product manager position – 50% of his/her competencies should be based on analytical thinking and skills of using Excel. Usually graduates are not good specialists, since there is a big gap between theoretical knowledge and practical skills. When inviting a new employee for a job, the most important is his/her basic knowledge, practical skills and values; therefore, neither the HE institution nor the grade is important. There are two reasons why an employer cooperates with HE institutions: it needs students for practical work and new ideas for business that students are able to generate; it was willing to outsource HE staff for qualification development courses for employees. The Employer faced two problems: mostly, students are not motivated to learn during the practice, they treat it as a duty. HE staff was not willing to provide courses for employees and the content of programs proposed was obsolete. When the employer was looking for new employees, it made presentations for students, took part in Career days at HE institutions, but there was no effect. The general problem is that employers wish to employ graduates who have practical experience, but students do not take the opportunity to get this during studies. In addition, students who perform practice are treated as a free labor force by most employers, HE staff do not care about student achievements during practice. There are three parts of HRM practice for a new employee. During first two weeks, the employee gets to know the organization and his/her functions. The Instructor accompanies the new employee at the job place and teaches practical skills. At the end of transition period, the manager examines the new employee and decides if s/he could proceed in working.

Interview: [LTE8]

The most important generic competencies for graduates to function well at workplace: knowledge of other fields, ability to negotiate effectively, to work productively with others, to write reports, memos or documents. Ability to use computers and internet is obvious. Both the HE institution and employer are responsible for the development of required competencies of graduates. If the employer invites a new employee for a job, the employer is responsible for his/ her professional development; nevertheless, the employee should enrich the organization as well. When looking for a new employee, important features are the study program of graduation and his/ her practical skills. The balance between generic and specific competencies depends on the activity that the employee performs. If it is in a field of techniques, more specific competencies are required; if it is in a field of social services – more generic competencies are required.

Master's degree graduates have more developed competencies than bachelors because they have more time to develop generic competencies and to acquire practical skills and work experience. The cooperation with universities is based on students' practical work performed at the respondent's institution. Occasionally, direct recruitment of graduates is developed. In addition, students often come to acquire information for their research projects or final thesis. Some employees participated in the committees of final thesis assessment, some on study program committee activities. The Employer does not provide permanent feedback on the required

competencies. There is a special introductory program that new employee has to go through when s/he is presented in the organization. There are two issues that HE should improve: quality of practical work management. This topic should be a concern of both employers and HE institution, national regulation (support) should be improved as well. Development of career designing skills of students (graduates) should be strengthened so that graduates would be more aware of the possibilities that their education provides.

Interview: [LTE9]

The most important competencies for graduates of medicine studies are good field knowledge, communication, ability to acquire new knowledge rapidly, and IT skills. The proportion of importance of general and subject-specific competencies is 40 to 60 percent. Since doctors in the hospital work in the university as lecturers and study program managers and students perform their practical studies there, the communication between hospital (employer) and university (HEI) is sufficient. The students get to know the latest knowledge of the modes of treatment, drugs, and etc., they perform research together. Changes are very quick in medicine, which is why a very important trait of a doctor is to be able to acquire new knowledge quickly. Communication skills are important since the doctor's job is to communicate effectively with patients and other doctors. Student workload for acquiring communication skills was enlarged during recent years in Kaunas University of Medicine, but poor IT skills remain a problem of graduates. Hospital administration solves this problem by bringing new employees to IT skills development courses.

HE institutions, not employers, are responsible for graduates acquiring needed competencies. Because of the type of subject, "fresh" graduates of medical studies are low skilled. The last years of the study program are performed in a field (hospital) where students work as resident doctors. Resident doctors are not free with their decisions; they are supervised by a senior doctor. If they are not free, they learn the practice very slowly. The HE institution can change nothing here. If the university would add a more practical workload to the study program, it would not change the competency of graduates, since it cannot change the level of autonomy of students in this profession. A graduate becomes good specialist after 10 years of work experience.

Non-formal learning in medicine does not exist. To be able to perform medical practice, a doctor has to have a license. The duration of the license is 5 years. In a 5 year period, doctors must pass 140 hours of qualification development courses.

Interview: [LTE10]

Very important knowledge for a teacher is knowledge of psychology; another feature – common human values. The HE institution is responsible for the student's preparation to the world of work; for the quality of job and future personal as well as professional development of a graduate employer (school) where graduate work is carried out. A graduate becomes a specialist working as a teacher, not by being a student in a HE institution. One teacher used to say: "for the first year of the career, the teacher damage pupils, for the second year – the teacher is learning, for the third year – he/she starts teaching". The balance between generic and specific competencies is indicated as 50 % to 50 %. Graduates possess enough specific field knowledge but lack generic competencies, common human values and practice in the field of work. The school cooperates with HE institutions: there are some teachers that guide the students during their practice in school; vocational information services for pupils is developed with the assistance of HE institution staff who give lectures and guide workshops for pupils; only seldom are HE institution graduates employed directly from studies; and only once was the principal asked to take part in an accreditation procedure of the university study program. The cooperation between school and HE institutions should be developed more. According to legal regulations of the teacher vocation profile in Lithuania, there is no possibility to have an internal system of recognizing and validating employees' non-formal learning or competencies acquired at work. A new employee works and is observed by a senior colleague. Later, the new employee develops his/ her own strategy for further professional development.

The certification procedure of professional development of a teacher follows legal national requirements. For modern curriculum development, more attention should be paid to the psychology knowledge and related skills. In addition, practical work during studies should be done not once, but regularly and for longer periods of time than it is now. The collaboration between a school teacher who guides the student's practice, the student and a tutor in HE institution should be strengthened.

Interview: [LTE11]

Necessary competencies for graduates are the ability to use computers/ the internet and to write and speak in a foreign language. Important generic competencies are: ability to acquire new knowledge rapidly, willingness to learn, ability to use time efficiently, work productively with others, present products, ideas or reports to an audience, write reports or documents. The important issue is that the graduate would understand him/herself. The HE institution should provide basic knowledge and develop generic competencies; the employer should direct a person to the job that suits him/her best and provide the support for his/her development. Above all, a person is responsible for him/herself development. Graduates do not have enough specific competencies since in HE institutions they are not provided with the latest knowledge. When looking for a new employee, the name of the HE institution is important since the quality of studies differs. The study program is important since the employee has to have background knowledge; grades are not important but usually they are high. The important feature is the activeness of the graduate (membership in various organizations and etc.).

The employer invites students for practical work, internships, recruits students directly for studies, participates in Career days, makes presentations for students about the organization, employees give lectures for students working for a part time job at universities, takes part in the final thesis defense committees and study program committee activities, gives opinions on required competencies, out sources HE staff for qualification development courses for employees. The cooperation barriers: on the side of employer – resources, especially time and human; on the side of HE institutions – willingness and initiative for cooperation; on the side of the student – motivation. At a national level, the system of subsidies for employers who invite students for practice should be developed. There is an internal system for qualification development of employees in an organization. A new employee has a mentor and a manager. If a new employee works in a service, s/he has to pass a training program of 6 months in order to work individually without a mentor.

Interview: [LTE12]

Generic competencies are of secondary importance, nevertheless they all are important. The most important is to develop ability of reasoning and learn things in solo, besides lifelong learning and flexibility. If a man is able to reason, i.e., able to listen, understand what is said and develop a thought, s/he will be able to do all of the needed tasks. There is no individual work at the employer's organization; therefore, important skills include group work and presentation of results to the audience. Three players are responsible for the development of these competencies: the student him/herself should be motivated and strive for the goal, the HE institution should provide background knowledge, and the employer should aid the young person to develop him/herself. The employer invites students and graduates to work directly at the organization from HE institution. Employers skim off the best students; therefore, they all have enough of the required competencies. The name of the HE institution when inviting new employees is not important, the field of studies is important. Since the employer invites the best students, they have the best grades. The main goal of cooperation with HE institutions is to get the best students who would work in the organization. One type of cooperation: employees work in the HE institutions as professors or assistants; 2) the employer invites students for internships and practical work; 3) the employer uses direct recruitment of graduates; 4) the employer takes part in Career days. Professors who work in HE institutions are able to take part in study program committees and final thesis defense committee activities. The new employee is accompanied by a supervisor and a junior supervisor. The main supervisor is experienced in a field, and has not much time for a new employee. Therefore, the new employee is accompanied by a young

employee and they work together. A new employee starts giving output after 1-1.5 years of work and learning in a job place.

The HE institutions should put more stress on the development of ability of reasoning and learning in solo. The HEI should develop an attitude that learning is not for grades, but for personal development.

Interview: [LTE13]

The most important competencies for graduates are mastery of their own field, knowledge of other fields, analytical thinking, ability to rapidly acquire new knowledge, to coordinate activities, to work productively with others and willingness to question your own and others' ideas. Three bodies are responsible for the development of required competencies: the student him/herself, the HE institution and the employer. A graduate of technical science should have 80% of specific and 20% of generic competencies. Graduates have enough of theory but lack practical knowledge and skills. A student does not become a specialist in the HE institution, only in a job place. When looking for a new employee, important factors are grades, feedback of teachers and personal abilities of student. Cooperation between the employer and the HE institutions is based on students' practical training and the research that HE staff do for the employer. Students are directly recruited to the employer's organization. HE staff and students visit factory to get updated about news in technologies and manufacturing techniques. Students look for information for their research in the employer's organization; employees take part in final thesis assessment committee activities of particular HE institutions. The employer is not questioned on the required competencies of study programs but regularly gives feedback on students' competencies after practical training. There should be stricter admission procedures to the HE, such that only good students would be able to study. General subjects and general competencies should be left apart from study programs of the HE; the student should get general subjects in a non-formal or informal way. More specific subjects should be incorporated to study programs. Employer has developed ISO quality management system which determines qualification development of employees. The organizational structure is presented to a new employee by the HR department. An employee gets certain instructions about work safety requirements and etc. At the job place, s/he is accompanied by a mentor or a senior colleague. Formally, the transition period lasts 3 months.

Interview: [LTE14]

The most important competencies for the graduates are mastery of their own field, ability to rapidly acquire new knowledge, to come up with new ideas and solutions, to assert authority, to work productively with others. The student him/herself is responsible for the development of required competencies. The HE institution is responsible for the provision of basic knowledge; the employer is responsible for the development of the student's practical skills during practical training through study process and later, in a job place. For the specialist in techniques, the piece of special competencies should take 70%, generic – 30%. For the graduates of social sciences, the proportion of generic and specific competencies should be equal. Usually, graduates lack special professional knowledge and have enough generic competencies. A graduate becomes a specialist in a job place, not in HE institution; this takes 2 years. The most important feature that distinguishes one graduate from another is his/ her practical experience. The employer searches for new employees during students' practice; direct recruitment occurs often. The HE staff question the employer on students' competencies after/during practice. From time to time, the HE staff come to the factory on excursions to get learned in the news in manufacturing. The employer provided the HE institution with material support. Employees take part in final thesis defense committees and sometimes are asked to revise study programs. The HE institutions should up-grade their study programs more often; special attention should be paid to the novelties in technologies. There is an ISO quality management system, which determines qualification development of employees. Qualification and salary of workers depend on qualification category, which is regularly revised in the employer's organization. Nearly all new employees have worked in a factory during their practical placement and they know the organization when they start. There is a transition period that depends on the person (formally 3 months long). During the transition period, a new employee is accompanied by a mentor (senior worker or specialist) and his/her manager.

Interview: [LTE15]

Very important are personal characteristics of a graduate, such as curiosity and willingness to learn. The other important competencies are ability to rapidly acquire new knowledge, to perform well under pressure, to come up with new ideas and solutions, to make own meaning clear to others, to sort important information out of unimportant and to use time efficiently. Personal development starts in the family, it continues in various education institutions. Employers are responsible for the discovery of hidden abilities of employees. Generic competencies should take 2/3 of the study program, and the specific – 1/3. Graduates are short in required competencies and this is natural for young people. If a young employee has a good mentor, s/he could become a specialist in 1 year's time. Competencies are developed in the job place, not in the HE institution. When inviting a new employee for a job, important are personal characteristics, his/her motivation, and goals for the future. The study program is important since the employee has to have basic knowledge of the field. Students perform practice at the employer's organization; some graduates are employed. The employer contacts the HE institution department staff to learn about the competencies of certain programs when there are graduates as applicants for a job. The employer took part in the final students' thesis defense committees of one study program. The HE institution seldom invites employers to lecture to students; it asks the employer to give consultation on best practices, but questioned only once on the competencies of study programs, and never on the "quality" of graduates. The HE staff and students should come and visit the factory more often to learn about the practice and its changes. The HE staff should engage students in active learning. More young teachers should teach in HE institutions. Students should have the right to choose from 2-3 teachers of the same subjects. Teachers have to have practical experience in the field they teach, and renew this from time to time. There is an internal system for qualification development at the employer's organizations, as well as a system of preparation of a new employee for the job place.

HUNGARY

Interview: [HUE1]

The expert being interviewed (HR manager at XXX Ltd.) claimed there are many competencies missing among freshly graduated students. He says the basic competencies are all okay, but still the problem is huge. According to him, many times there are problems even with basic communication skills. The most important thing that students should have is management know-how, because that is something that can be used in nearly all fields of life.

There is one thing, though, that only tertiary students possess: the knowledge of how to evaluate a vocational bibliography and the ability of seeing the importance of it. All graduated students also have the ability to learn. There is a massive lack of commitment and professionalism.

The ability of memorizing easily is often a useless competence; this involves too big a lexical knowledge as well.

The internship system is not working properly because many of the students are only interested in getting the certification, not in the experience itself.

He also adds that the university should be more open-minded towards university students. Also, smaller enterprises should be considered in more respect concerning the chance of going there for internships.

He has no clue about the essential differences in the BSc and the "old" system. However, he thinks 3 years of studying can be fair enough because mostly students do not know what to do after school. After the 3 years of the bachelor's degree, they can go and try working in that certain field of science, then later continue studying, but in the field they are really interested in. This is the so called Lifelong Learning.

For general competence, graduates need to be able to express themselves freely, not only in written form, to be open to new knowledge, and to be disciplined. For professional competence, they should have management skills, good decision and problem solving competencies, and legal and economics knowledge. Usually their IT skills are okay, but they do not know how to do Excel. Developing competencies is up to the school, but it is not very typical only in the case of second degrees. Graduates usually have general competence but professional ones, especially management skills, are needed. Those graduating from Arts and Humanities are more disciplined, they have work morals. Practically only those with degrees are able to process information individually and all are eager to learn, and searching for things on the Internet is also done well, but they lack in general a sense of calling and profession. There is too much theoretical, lexical knowledge. Those graduating in Arts and Humanities can write well, and although IT graduates sometimes have problems with communication skills and other competencies, they also have an insight for projects. One of the most important competencies lacking are management skills, graduates do not really know how to organize a process from beginning to end. Engineers have more complex skills, a financial graduate can manage themselves better. If someone has too many skills, it leaves them frustrated, although employers are happy they do not have to teach them everything. They have interns from a university: the university is told what kind of employees/interns are needed. There is no good cooperation: the Career Centers should be more cooperative. There are some non formal learning possibilities that are being developed now: training, time management, communication skills. There is an integration program, where new employees visit each department for a day so they can get to know the colleagues there. HE institutions should be open: they conduct a lot of surveys, but they do not show improvements. Three years of training seems to be enough to start working, and as part of lifelong learning, one

can always continue. Most graduates can find employment, not necessarily in their profession, but this might be because they have decided they are interested in something else.

Interview: [HUE2]

It is hard to find job in this sector - there are 30-40 applicants for a small job. Graduates have to have good personal connections to find a job. They can establish these connections during their higher education, but it is more effective to activate their parents/relatives personal connections.

Apart from factual knowledge, the graduate should be able to implement the law, meaning that they not necessarily know everything by heart, but know where to find it. Motivation, and the capability to adapt to a work place, is important, as is the capability to deal with clients (be sympathetic and empathetic). Further requirements are the knowledge of foreign languages at an advanced level, being hard-working, persistency. Both factual and practical skills should be acquired at university, but students should get to know their future jobs, in order to decide whether they are really interested, since they are clueless about the profession or do not even have any kind of commitment towards it. There are major gaps in factual knowledge, but there is no capacity to teach them – this is no more schooling. Although the interviewee is an associate professor in the HE, the firm has no connection with these institutions. The interviewee does not deal with it, although thinks it a good idea to have some kind of measures taken in order to implement some kind of cooperation. Interns are no use, they cannot do any legal work, they are in the way. The Bologna process seems to be forced in some places. The firm has employed freshly graduated students with sometimes discouraging results. The application for a job is a 3-step job interview: 1) written legal questions in a foreign language, 2) orienteering interviews on the profession and legal applications of the law 3) personal interview on family ties, experiences. The firm tried hiring a personnel consulting agency, but had similar results. As for HRM practices, first the filing and IT system is introduced to the newly recruited and he/she is assigned to a case where he/she can help, about after a year he/she can get own cases. From some universities, they do not even admit graduates, and they look for those graduating summa cum laude with at least two foreign languages at an advanced level. Social capital is needed to find a job, since it is an overcrowded profession. It is advisable to starting building relationships while still attending university.

Interview: [HUE3]

As general skills, foreign language knowledge, self assurance, good communicational skills, and flexibility are important. Of course, for each profession, different professional competencies are also required. In 10%-15%, the companies are responsible, 50%-60% HE institutions and around 30%-40% secondary schools are responsible for the development of competencies. There is serious problem with communication and reading skills. Around 60% should be the level that has general competencies, especial speaking languages if someone has studied abroad. 40% should consist of factual and professional knowledge, which one can build on. Graduates of economics speak a higher level of foreign languages, have better communication competencies, they have worked in projects and even abroad. Engineers with only a BSc do not have enough factual knowledge, Master's degrees are needed. There is pressure from the labor market that they need graduates with Master's, except in the case of IT specialists, since the training of graduates with Bachelor's degrees is not worth it. There is a lot of relationship with HEI: cooperative training programs, internships, career centers. The company gets involved with the work of the HEI: thesis papers, projects, direct funding. By having "personal" MSc degrees at two universities, the cooperation can be called successful; since students will be able to find employment, the training fulfills the needs of the company. There are no re-training when the freshly employed start to work: of course, they have to get to know the equipment, there is also an "Engineer" pre-school and mentoring system. Although there is a growing number of relationships between HEI and companies, there is still need for the HEI to develop general competencies. They need to be more flexible, since the demand is great. Career centers are not so successful at finding graduates employment. There is competition in the field, especially since the economy crisis, so HEIs are trying to establish contacts with companies. There are some degrees where unreliable knowledge has been disseminated.

Interview: [HUE4]

Both general and professional competencies are defined by each profession. In the company, each job description has a host of competencies, which are required to fill that job. In the case of economists, these are good communicational skills, logical thinking, independency, and reliability. In addition, knowledge on a specific subject is an advantage; those having experience acquired during training will also have advantages. There are positions where command of a foreign language is important. It is always a plus to have HEI organize different kind of internships for the students, but the length of a required internship should be increased. Experience is important later on in life. Although factual knowledge is important, of course, being fully prepared for a specific job is hard to fulfill, so it is more important to have knowledge with what the company can build and the missing knowledge will "catch up" with the graduate on the job. New graduates are striving to learn new things; it is becoming more and more common that they continue on to postgraduate training. They also learn extra languages or do extra courses (accounting). Cooperation with HEI is not typical, although there are some examples: when employees give lectures on the logistics of the company. There is not any contact with Career Centers either. There are some negotiations on developing educational tools, but this initiative is still progressing by baby steps. The company focuses a lot on the training of employees (professional, language, conferences). The newly employed will be on probation for a half year and will be finalized only afterwards. More experienced colleagues help the new employee. There are also a couple of standard training (IT, safety) in which they have to participate. They have not noticed any difference in the system, it does not matter what kind of training in which one participated. A lot of just graduated are looking for jobs. They key question is whether they had any kind of professional experience while they were still attending school.

Interview: [HUE5]

A degree and at least two foreign languages are needed to succeed nowadays. Up until a few years ago, employers were replacing older employees with younger, more competent graduates. Now, this situation has changed; employers are keeping older employees, since they have experience. Graduates are not that reliable and do not take work as seriously. You cannot learn experience. Schools and companies are both responsible to develop competencies. Factual and practical knowledge should be adjusted to each other, and school cannot prepare students 100% for work places. Special skills are important: with only general skills, it is hard to find employment. Graduates have excellent IT skills and command of foreign language. They are also open and have the possibility to study abroad, maybe evening learning from more developed cases. Grades do not matter that much, because good grades do not always mean a better work force. Graduates should not be afraid to start from the jobs with low prestige and work their way up: it counts a lot. Contracts have been just signed with several colleges for month-long internships. The goal is to make use of students, but also help them to learn different things. A lot of attention is focused on employees; HR frequently has meetings with them as it is important to keep them satisfied with their jobs. If they train themselves, they can profit from it, but it all depends on the person. Although the above mentioned internship program has not started, the plan is to show the students at least two fields within the hotel. The Bologna process is unknown. The biggest shortage of the training is the lack of practical knowledge of graduates, three or four months is not enough. Student should work half a year to a full year in order to get to know how everything works: sales, marketing, financial department.

Interview: [HUE6]

Competencies depend a great deal on field of study and it is quite obvious that students cannot be expected to graduate being fully prepared. The most of what the university can give is professional safety. Although students learn how to sell themselves, they lack the humbleness needed for the profession. The company generally is not looking for people for specific jobs, but in general for junior jobs and the work linked to it is more tailor-made. It is important to have analytical insight, to have enthusiasm after 25 in-depth interviews, to be open towards a lot of fields and the culture in general. The ideal would be to have a graduate who already know the basics and then you can go from there. It is devastating to hear what is going on at the university and it seems to be unfair to

demand anything from these graduates since they did not get the support needed in the HEI. The policy is that asking never hurt anyone; the important thing is to have the ambition to get ahead and learn, understand. If there's a need, older colleagues will explain different things to the juniors, although this cannot go on forever. The biggest problem with HEIs is they do not demand from the students, students are not used to getting feedback on their work, thus making them unambitious. How do we expect HEI to teach general competencies, if they do not even teach student enough professional knowledge? There is no point in talking about i.e. communication competencies, until they have appropriate knowledge. The company holds its own training. It really does not matter where the student graduated. What counts is what kind of experience do graduates have: in the past couple of years, the graduates have had impressive resumes: a lot of them have taken part in national surveys, written articles. Those without this type of experience will find it hard to start in the profession. There is no real cooperation with HEI, there are only personal contracts with students. The company is small, but HEI has not sought any kind of cooperation. It is hard to employ students with schedules. Although there is no official way to recognize formal education, it means a great advantage in case of admission interviews. At first, the juniors are moved around a lot, to be tested how well they work and with whom, but there is no specific program aiming to prepare new employees for their work.

Interview: [HUE7]

Students need to have well based professional knowledge. One of the basic skills is the command of a foreign language: new employees need to know English, since it is a international company. They should also be open towards other cultures, be creative. There also has to be some kind of very strong self-marketing: graduates need to be goal oriented and ambitious. Although few HEIs attempt to develop cooperation and team work, a lot do not focus on competencies. As well, the employers also need to help graduates develop their skills and competencies, and in order to bring out the best in them, mentors should be assigned to them. A lot of competencies have been given higher value: IT skills and foreign language knowledge and the ability to react fast. General competencies are the basics, but special ones are built on these, so neither is really useless. Although fresh graduates are very confident and believe they are well prepared, when it comes to practice they find it difficult to solve problems. The graduates have developed competencies, since they have been living in a very rapidly changing world. Although they are more open, they are somewhat more superficial, although they know about a lot of things. Graduates lack actual foreign language knowledge and they put off receiving their degree because of this many times. There is cooperation with one of the universities, where the companies go and have informal meetings with students to inform them about the demands of the labor market. Similar cooperation is also planned and they can then prepare themselves for it. Students should have more opportunities to get to know the other side. There is a plan for the development of competencies that help with work. Since it is a small company, employees keep an eye on each other. When graduates are admitted, HR introduces them to the history of the company and to the whole work mentality. There is also an integration new employees: they spend a small amount of time in each department, so that in the end they can see how their work will make a difference. This takes about three weeks and they also take part in an integration program within their own department. The HEI should concentrate on being more practice-oriented. Student should meet the circumstances of the real world; they should know the concept of projects. There are a few universities that already focus on team work and projects. In the case of a bachelor's degree, a large amount of factual knowledge is taught to the students, but speaking languages becomes only secondary. There are too many HEIs in the country and graduates of these institutions become frustrated when they can only find work that someone with a secondary school degree can do just as well. Although there are a lot of resources in students, it is hard to shine out from the rest.

Interview: [HUE8]

In order to be a well integrated member of society or of a work place, one needs communication and organizational skills and also team work. Teachers are trained for special fields, so they need to learn special skills and also need to develop pedagogy skills. Pedagogy, a child's psychology, are important, no matter what kind of technique they have. Although college is responsible for developing competencies, it does not prepare

graduate that well. On the other hand, the HEI does not have the equipment needed; in a lot of cases, kids know better how to use digital technology. Teachers need to be more and more prepared, since the family seems to secure the needs of children less and less. It is important for teachers to have love and good knowledge of the chosen subject. Theoretical knowledge is also important, as well as IT skills. Developing these competencies all depend on the HEI, but the most important is to have the aptitude for teaching. It is important for the graduate to be able to adapt to new surroundings. Periodically, there is some contact with the HEI, but usually students organize these on their own. Although it would make sense to have some kind of discourse on what kind of competencies are need in the field, it is not in the interest of the HEI to know what kind of professional they train. If there was to be something organized, there would be a difference in primary and secondary schools. It is hard to recognize non formal competencies of graduates, since it is only possible to recognize these after a while and there are few possibilities to keep new employees on probation, and after being made public servants, they are hard to fire. Two years ago, the student teaching program had been accepted: new teachers are assigned mentors, whom they work with for several years. Both schools and graduates would profit from a student teaching program. The most important improvement needed in HEI is in pedagogical teaching. Students need to spend more time with children and also should be introduced earlier in their training to situations that they will meet while teaching. Officially, teacher applications can be only called where there is an interview and probably grades are also taken into consideration. It seems that it is not in the interest of the HEI to have their students find employment, although output indicators, feedback, would be useful.

Interview: [HUE9]

Due to the fact that the school has all Roma children, graduates need to have social competencies, empathy. They need to be innovative and have skills for developmental psychology. Conflict management skills develop as they start teaching. They need to be open, and have IT skills and foreign language knowledge. Project and team work seem to work in general with new teachers. Although the HEI is responsible to develop the needed competencies of graduates, in some cases these can only be developed on the job, so openness is a key question. It would be easier if they would arrive with more experience and practice, more time spent in institutes and students seem to feel the same way: they channel in too late in the process (in the third year). However, they are prepared well in theoretical knowledge. Graduates also lack the interest to understand the pedagogical program of a school they do not really care about, so the idea of being teaching assistants was a good idea on behalf of the state. Graduates also need to learn time management. The cooperation with HEI works well: there is a group of seniors each year who get to know how the school works and learn what kind of methodological challenges there are with this kind of school. The school also gives feedback on the achievement of the senior, when HEI officials come and monitor the work that is being done. The whole school monitors each other, it works like a family: the older ones help those who are newer. The new employees are slowly introduced to the head teacher of the subject and after a year or two they can gave a class of their own. A lot of administration has to be learned, since most of the kids come from disadvantaged families, and there is a lot of paperwork concerning this. The Bologna Process is not that good: it is not obvious how someone can do with only three years of training. It is hard to find employment; a lot of graduates would do anything, basically. In a lot of cases, it counts if graduates have relations. In the case of this school, it is not so important: special competencies are more important; are they able to deal with sometimes very passionate parents, can they handle the situations? It seems as the HEI pays attention to teach students how to sell themselves: they are very well prepared at interviews.

Interview: [HUE10]

Commanding a foreign language, team work, self-assurance and some kind of professional background. In Hungary, a lot of emphasis is based on theory, so theoretical knowledge is also expected. The biggest problem is that there are not enough young professionals and the industry sucks them away and they do not commit to research and PhDs. Graduates are well prepared by the time they leave university, but professors are complaining more and more that freshmen have very low knowledge, so secondary school also has a role in developing skills. General competencies are more important, since graduates can learn specific and professional

skills on the job. Graduates are well trained and have the knowledge needed, they're innovative, but because they do not have a language certificates, they do not acquire their degree in some cases. As for quality assurance, ISO9001:2000 is used and it seems through the employee satisfaction survey that everyone is satisfied. There are also safety rules and new employees are looked after by some of the more experienced colleagues. There are safety rules and there is also a yearly report each employee has to write. It is hard to create some kind of internship, since there is a lot of confidential data being dealt with, although there is a point that it could be useful in many ways. The institute has successful cooperation with several universities: they have joint departments, or take part in some councils, and participate in doctoral training. The aim is to keep an eye on the students who will be graduating. Some of the employees even lecture at universities, so the cooperation cannot be enhanced much further. Universities have become more and more flexible in the past years. The institute does not feel it is in the position to demand any kind of competencies that should be taught at universities. The institute has not noticed anything about the Bologna Process, although there will be fewer students acquiring Master's degrees. Non formal education is an important aspect, and it can happen that younger employees will be asked to do a little research on the topic and new employees will be encouraged to complete a PhD within a topic of the institute. The HEI should increase the teacher-student ratio and a mentoring system would also be helpful. The Bologna Process works in many countries, but there are some serious dangers to it: companies will suck away the labor force after the bachelor's degree and also the state may not fund a lot of Master's degrees. Another 20 years are needed in order to see all advantages and disadvantages, to see what can a person with a Master's degree can do. The bachelor's degree is similar to a technician's degree and people with Master's degrees are needed.

Interview: [HUE11]

Graduates should have general competencies such as: empathy and good behavior style, so therefore, a lot depends on schooling and family background. As for professional skills, they need to have professional knowledge and IT skills. Graduates need to be able to have communicational skills both with patients and colleagues. They also need to have keen senses (sight, smell, touch etc). School, work, and family are all responsible, and the competencies of doctors develop until they are 45. It is hard to define the ratio of competencies. The important thing is not how good these competencies are, but rather that graduate students should not lack them. Although students speak languages better, and are more open, they do not have enough experience, have not learned how they are supposed to behave in a ward, how they are supposed address the patients, causing frustration for graduates and sometimes even leading to complaints from the patients. There are several ways the hospital cooperates with HEI: there is the residential program and a lot of doctors teach and give lectures regularly at the HEI. There is no need for a lot of team work between doctors, since asking for a consultation would indicate that he may not be so competent, a nurse-doctor team work can be a lot more typical. The hospital plans to introduce an employee satisfaction survey, and also the complaints of the patients are taken into account. This new kind of human resource management is still new. New doctors are assigned to an attending doctor, take part in doctors meetings, and analyze cases, but this is not working well. The residential system is much younger, but it took time to get used to it. Medical schools are in a very special case; there is a need to get back the quality of professional knowledge as it was in the 70's. Family ties and tradition strongly define whether someone becomes a doctor: if one of the parents were doctors, the child will most likely will also become one.

Interview: [HUE12]

One of the most important things needed in graduates is to be determined, persistent, and respectful of the profession. As for professional competencies: good organization skills, structured thinking, strong work load and some kind of exhibitionism. The family should raise the children and not the school; the state should give better support so parents can be able to deal with their children. There are a couple of skills which can be learned at work: precision, structuring, independency and a lot of practical questions. One of the biggest things that graduates lack is endurance. Creativity also needs to be kept in training, as a lot of young people are dependent. They also lack logical thinking and due to the new type of admission tests (it was introduced in 2005), those less

capable of this profession end up at the universities. One of the largest surplus competence of students is that they frequently go abroad to study comparative law, and they will only start actual work when they are 30 years old. There is a difference between universities, it counts where one acquired the degree. More practical courses would be needed; students need to see and know how a law suit progresses, or how to write official letters. There is no clue how well those who graduate will find employment. It does not help one's chances if one already has experience or was an intern: in a couple of months, the job can be learned. There is no concrete cooperation with HEI, although some co-workers hold lectures. Interns and admission is done through advertisement. There is no feedback towards the university, because it is not in their interest. The Bologna Process is contra selective on the Law Faculty. Foreign language skills are an asset and is tested through interviewing. The firm has a professional agenda, where the new employee prepares for numerous topics that are important for the firm, and once a week a meeting is held to discuss one of the topics. This goes on for 3 months. The admission exams should be modified: instead of Hungarian and History, there should be grammar, rhetoric, math and logic. Quality training should be made as an interest for the HEI.

Interview: [HUE13]

Openness and command of a foreign language, motivation is important. Graduates cannot be expected to have specific professional skills and know as much as those who have been working in the field for years. The basics of competencies are set in school and the employer's role is to create graduates' theoretical knowledge into practical knowledge. Competencies that were important in the past are still important, but several others have become important, like the command of a foreign language. Graduates need to have an attitude change when they start to work: they are no longer students, but responsible employees. Those graduates get admitted who have more specific skills. The knowledge and preparedness of graduates vary, but only those who already have general competencies will actually get admitted, although there are exceptions: when someone has a lack of good communicational skills, but has very special knowledge, then the company decides it will invest. Although the cooperation is good, it is hard to keep pace with all universities, be there on all career expos, and they cannot influence what is being taught at the universities they have contact with, although in case of smaller professional associations with the HEI this can be done. The company did not participate in the Bologna Process and they are just developing an internship program. If the company itself does not initiate informal learning, they will not know if an employee attends non formal training or not. New graduate employees are integrated into a program whereby they participate in general training and then are assigned to a senior co-worker, and there is also a graduate group within the company. The graduates are not sent to out-sourced training, since they can learn a lot more from co-workers. The effect of the Bologna process cannot be seen clearly, it might be possible that with a Bachelor's degree graduates will have to learn a little bit more in order to find employment. The most important criteria for admission is not where and with what grade did one acquire one's degree, but how well do they do on the interviews: are they open enough, have enough skills? In this time of economic crisis, it is hard to find jobs, so there' is the possibility that they need to retrain themselves.

Interview: [HUE14]

First of all, foreign language skills and professional knowledge is essential. Then there are those "soft skills", like self-assurance, communication skills, and team work that also matter. Some professional skills are also important. There are competencies that the university cannot teach. However, for the general competencies, the universities should be responsible, but only a few actually implement it in their curriculum. At the company, there is a list of soft skills and employees are sent for these kinds of training. The command of a foreign language is not always perfect; graduates also have a hard time being self-assured and communicating well. An ideal employee speaks at least two languages, is ready to travel, has good communication skills. IT specialists seem to be anti-social, and do not have good communication skills. It does not matter where one got the degree, although the differences between knowledge can be seen. The company participates in many career expos and also in cooperative training with two universities and has also founded research centers; they also offer other internships. Both students and the company benefit from the cooperative training: students get experience, while the company can test these students and they are a cheaper labor force. They did not participate in the Bologna

Process. The company has a three-staged integration process for new employees. They receive a booklet about the company, they participate in a multi-fold training (communication, IT, quality assurance) and then the new employees enter the mentoring system, where older co-workers help them along. The company already has some influence in the training, since they have lecturers at universities. It is in the interest of the company to have graduates admitted, so they ask for feedback in general. There are increasingly more professors who also work on the labor market, so the HEI has ideas regarding how the changes should be made.

Interview: [HUE15]

After leaving university, there is a big change in lifestyle, which needs flexibility, including any competence that helps with social relations and competencies concerning openness. Communicational skills are also important and also the capability to work in a team. After 18, it is the student's responsibility to find the most suitable channels to achieve his/her goals. Students need to find ways to develop their own skills; of course, this all depends on the possibilities. Professional competencies of graduates are in order, but if they seek greater knowledge in something, then they are the ones who should go after it. It is important to stay open and not specify skills too much, so that in the end, if there is a bigger change, the adaptation is easier. Although usually the best are picked out, it could be noticed that while conducting group interviews and group exercises, each year the effort that students put into it is less and less. This could lead to giving up some harder problems. There is no such thing as too many competencies. Each job has a list of competencies that are necessary to fill them. All new employees will still need to learn things about their job, through integration and training, he/she will learn how it works. Most competencies required by the labor market can be acquired only in professional jobs, or by other activities, where it is not the usual homework type of task (organizing some bigger event, summer jobs etc.). Although there is no discrimination among the universities, mostly students of top universities are granted admission after knowledge and competence tests. There is cooperation with the HEI: there is the internship program and also the possibility to write a thesis on a topic distributed by the company. There are problems in cooperation, because the interest and aspects are very different: the market and public education do not have the same logic. The company also has minor teaching activities. There are no obvious forms of how the HEI uses the feedback given by the companies. The company has an evaluation system to pick out the best graduates. This also includes group and personal exercises. All new employees participate in an orienteering program when they join the company. The Bologna Process is a positive change and it is a good thing that education is becoming more practice-oriented. It is not clear how the bachelor's degrees be useful. The internship program has also been made a two-step thing.

POLAND

Interview: [PLE1]

General competencies are of basic importance in the recruitment process. It is expected that the employees will develop, in the course of work, professional attitudes and expertise for a certain group of positions. The capacity for building customer relations is of fundamental importance. Interpretation of legal regulations, as well as practical application of law, is expected from employees. Generic and specialist competencies (the latter in a basic range) shall be formed at the university. Some shortages in competencies occur, e.g., students learn a bit too much, mainly through memorizing, then they forget the essence of learned knowledge, they do not understand the meaning. They also lack negotiation skills and ability to work under pressure. Graduates of faculties of law, economy, or administration have the highest development potential; however, the company also accepts graduates of technical universities. Grades are not an important criterion in recruitment. The company does not value being a partner in the Bologna process and does not participate in any consultations; however, it observes with satisfaction that the graduate preparation is better and more adequate to their needs each year, even without consultations, due to high levels of academics. Lack of relevant procedures and lack of a forum for information exchange are seen as main barriers. The company accepts students for short term and long term (diploma) internships. Every two years, the employee is appraised as to competency development, in which non-formal training is taken into account. The induction process is well established and defined by law; it is the so called preparatory service lasting from 3 to 6 months, and includes work in different departments, a mentoring scheme, training and a final exam. The company is very satisfied with recruited graduates; however, it suggests widening the education process to analysis of practical real life situations and case studies.

Interview: [PLE2]

Due to its specialization, Geofizyka SA values most the competencies related to geophysics, geology and mechanical engineering. Due to varied geographical areas of operation and work specifics (mainly fieldwork in remote areas), generic competencies are of great importance, such as leadership, independence, self reliance, as well as knowledge of foreign languages, cooperation in multicultural environments and teams, and capacity to operate under stressful conditions.

It is difficult to present a unique relation of generic and specialist competencies – the more the position is of independent character and specialist one, the greater is the role of specialist competencies. The importance of generic competencies grows in the case of managerial positions. Not all of the essential competencies are possessed at satisfactory level by technical university graduates.

For several years close cooperation of the company with Cracow University of Science and Technology (AGH) is developed and formal agreements are signed with that respect. Subjects of MSc theses are consulted with the company so that the research solve the real problems. The company accepts students for internships and practical training during studies as well as cooperates with the career services.

Newly accepted employees get support through a mentoring system (3 months); in some departments, the employees go through all positions within a rotational system. The company, through the initial and specialist training, complements and develops specialist competencies of graduates. New competencies not necessarily acquired through formal training are identified and reflected in periodic assessment procedures. Their new competencies are registered and this information constitutes an important asset for their new supervisors. In the opinion of the company, the universities should put more stress on practical issues in their curricula.

Interview: [PLE3]

In the opinion of the employer, graduates shall possess and develop generic skills such as analytical thinking, customer orientation, capability to operate under pressure, to make decisions, and to cooperate with other people. ICT skills are very important and shall be applied for information management and searched as a way of complementing and developing of specialist competencies. International orientation of the company forces the need for communicating in foreign languages.

Graduates themselves, employers and universities are equally responsible for formation of necessary competencies. The universities shall concentrate on development of lifelong learning attitudes as well as provide the graduate with general knowledge as a basis for specialist competencies that will be developed further in the companies, under the supervision of more experienced co-workers. A balance between generic and specific competencies is recommended. In the company's recruitment process, the stress is put on generic competencies.

Education in the field other than law is not an obstacle in applying for a job. The company accepts students and graduates for internships (3-6 months); however, this is the initiative that comes directly from students not universities. Neither the company nor professional corporations have elaborated regular cooperation schemes with the universities. No system of validation of non-formal learning exists in the company. Competency development and its adequacy to the needs of the company are assessed by the supervisors: no systemic evaluation occurs.

Introduction of a new employees to the job lasts 3 months (probationary period). The universities shall put more stress on internships, organize them in well established ways, consulting contents of internships with companies or professional corporations.

Interview: [PLE4]

For the ICT company, most important are specific competencies and knowledge of English language, enabling fluent communication and reading of technical documentation and manuals. Specific competencies are formed by the university in the course of higher education and later in the company in the course of internal training and learning by doing. Only 50% of applying graduates are well prepared to working in the ICT sector. Some of them overestimate their own potential upon entering the job market – and their financial expectations are too high.

Neither name, reputation, nor the type and training cycle at the university are important and decisive in the selection process. The same concerns students' academic performance and average marks. Required personal competencies are assessed in a subjective manner by the future working team (tailored to fit) and it is difficult for the respondent to enumerate or define them.

The company cooperates with career services at Polish universities as well as with students organizations (BEST, AIESEC, MANUS) focusing on widest access to possible recruitment candidates. No cooperation exists at present with respect to curricula consultation or cooperation with the academic environment, despite successful attempts from two years ago when the company performed academic courses at one of the universities – the practice was abandoned due to organizational obstacles. The company, in an organized and planned way, develops competencies of employees through internal training and the system of periodic appraisals. The three month induction period is organized for newly accepted workers, including training and care of a mentor with whom any problems are discussed. The desired direction of changes in higher education is

towards closer cooperation with employers, leading to modification and adaptation of study programs so as to follow dynamical changes in the ICT branch.

Interview: [PLE5]

The Orlen company values creative people, people ready to improve their qualifications, fast learners, result- and objective-oriented, able to think analytically, speaking foreign languages and using advanced IT technology. Specialist competencies with business profiles are an asset in the case of candidates for positions of responsibility. These competencies should be developed simultaneously at university (specialist) and individually by students, e.g. linguistic competencies, through pursuing their individual interests or through action, e.g., activities in public-benefit organizations. The ratio between competencies in the case of production positions is in favor of the specialist ones (60 %), in the so-called support units, the ratio of 50 % generic competencies / 50 % specialist is expected. The company prefers technical university graduates, especially from such faculties as mechatronics, mechanics, mechanical engineering or specialist faculties from the field of IT. Graduates from such faculties as management, economics or social sciences are sought after for support services (other faculties are not unconditionally excluded). Graduates nowadays display more open attitudes towards acquiring knowledge, higher mobility, and greater determination in action and creativity in their ways of preparing themselves for the recruitment process. Grades obtained on completion of study are irrelevant in the recruitment process of graduates. The company's cooperation with universities is limited to providing students with a possibility to complete their diploma practical training and graduate internships, contacts with career planning centers and participation in virtual job fairs. The company does not think of itself as a partner for a university within the framework of the Bologna Process, and it postulates changes in this respect. Having accepted a graduate for an internship, the company monitors their competencies; it is possible to discover and acknowledge competencies acquired in the course of non-formal education.

Introduction of a new employee to their job is preceded by an employee adaptation system – uniform for the whole company. A supervisor/mentor, together with the employee, determine the time of adaptation (often coinciding with the trial period). At the end of the program, the employee and the supervisor meet to sum up the period of training and adaptation. This facilitates smooth entry into the company structure; an exchange of views on the company image takes place. From the very beginning of the program, the employee is trained for a given position; in the case of several positions, the candidates have to pass position examinations.

Interview: [PLE6]

The company values the following generic competencies: flexibility, mobility, ability to adjust to changes, ability to speak foreign languages, team work, coping in difficult situations, ability to work to a deadline, considerable independence, self-reliance, individual initiative, own ideas to improve the work process, and at the same time ability to work in a team, but also individual characteristics, such as health and fitness. Specialist competencies that are sought are: knowledge of IT applications as well as knowledge and skills from new trades. In the employer's opinion, at universities, students acquire general and theoretical knowledge, which facilitates acquisition of specialist competencies in operation of a given position.

The company prefers engineers – graduates from technical faculties. Candidates for managerial positions are required to have a master's degree. Grades on the diploma tend to be disregarded in recruitment. In the company, students may do paid summer holiday practical training and internships; their coursework is entirely controlled by the company. Practical training are also organized by the university, pursuant to a separate agreement. The company cooperates with career planning centers and students' organizations, presentations of the company are carried out at universities. The employer is engaged in the exchange of experiences, opinions, and suggestions during informal meetings with deans.

The employees undergo periodical evaluation; informal education is not certified. New employees undergo a cycle of preliminary and specialist training. Interns get an assigned mentor who introduces the graduate into the specific character of work at different positions; there is a possibility of sending an intern for 3 months to foreign divisions of the corporation.

Universities should introduce pro-business education and make it possible for students to do practical training; they should take the responsibility for teaching skills necessary for construction engineers.

Interview: [PLE7]

The company consists of three basic departments: Consulting, Outsourcing and New IT Technologies. In the recruitment procedure for the IT department, specialist competencies are the most important (very good foreign language communication skills and knowledge of IT on various levels of advancement). General competencies, such as motivation or eagerness for development and learning, are valued. Developing these competencies falls within the responsibility of the university, company, environment, school, family and the students themselves. The company has no defined preferences as to the type of education, particular universities, or faculties completed. Recruitment results are not influenced by grades obtained in the course of studies or on the diploma. Diploma supplements are also considered irrelevant. The company cooperates with universities in the form of participation in job fairs; it organizes workshops at universities, e.g. IT IL, the best IT practice in business, within the framework of which the HR department carries out a series of lectures, presentations, and also knowledge workshops. For a year, the company's IT department has been organizing students' practical training. The company has initiated work on developing a system of recognition and acknowledgement of the employees' non-formal training.

The company operates a well-developed system of the employees' competencies and development recognition. The system of quarterly and annual evaluation has been implemented to this end, employee individual development plans are created and there are also Development Center sessions. Introducing an employee into the company takes 3 months in most cases; the employee is assigned to a team leader and there is also a possibility of collaboration with a mentor. Changes in the system of higher education are inevitable; universities should direct their teaching processes more towards practical issues, put more emphasis on teaching foreign languages or carrying classes in foreign languages. A good method of gaining more practical knowledge is combining studies and work or introducing into the system of higher education the so-called sandwich courses. The role of practical training in education is enormous – practical classes enable students to become familiar with the specific character of work under the constant supervision of a mentor.

Interview: [PLE8]

Important criteria in the recruitment process are: personality of the candidate, knowledge of English and French, communication skills as well as specialist competencies (sales techniques, customer relations skills, interests in sports, some knowledge of sporting equipment). Studies at the university provide general theoretical and practical knowledge. The candidate is not always aware of his/her own competencies and link the professional plans to the study profile, which is a very limited approach. Specialist competencies are developed by the company through training packages. No experience is required. The ideal candidate to work in the commerce sector shall have 80% generic competencies, and 20% specialist competencies. Recruitment experience proves that there are two extreme attitudes prevailing among candidates: too high self esteem and self confidence and too high shyness, lack of effective self presentation accompanied by a high level of theoretical knowledge. The company prefers graduates that are active, fit and sporty, as interest in sports develops specialist knowledge, e.g., in the area of sporting equipment. Graduates of second cycle (Master's) are preferred for managerial positions (mainly due to required high availability), but other positions are open to first cycle graduates. The company plans to develop cooperation with universities aimed at organization of paid internships with possibility of further employment. The system of periodic appraisal of employees is elaborated but it still assess level of knowledge and competencies acquired through formal internal training organized by the company – a new one

taking into account recognition and validation of non-formal training is underway. The newly employed graduate is offered a set of training tailored to needs, as well as care by an assigned coach. Suggestions as to changes in the HE system concentrate on a more practical approach, implementation of curriculum contents developing creativity, e.g., knowledge on how to use possessed knowledge in non obvious ways, how to promote one's own capabilities as well as putting more stress on forming attitudes and personal values such as responsibility and sense of duty.

Interview: [PLE9]

Employees are required to be able to think analytically, organize their work efficiently, acquire knowledge quickly and work under pressure. Specialist competencies for the managerial staff are being able to spot new opportunities, ability to think in a flexible way, some expertise in basic legal issues and basic economic expertise. The engineering staff are required to be able to coordinate activities, to have some organizational skills, to be able to work in a team and to get information across in a clear manner, as well as to have some engineering expertise (in the field of automatics, telecommunications engineering, power engineering). The ability to use basic computer software is nowadays an elementary competence, and so is the ability to speak foreign languages. Another important competence change pertains to information; at present, the emphasis is put on the skills necessary to find and interpret the needed information rather than on remembering it in detail. General competencies are developed throughout the whole process of education, and the role of the institutions of higher education should be teaching the ability to think.

The ratio of general and specialist competencies required by the company is 70 % / 80 % to 30 % / 40 % for general competencies, and the level of these competencies have been considered satisfactory. In the recruitment process, no particular attention is paid to the type of university from which a candidate has graduated or to the grades received. The company cooperates with universities in organization of students' practical training, provision of materials for master's degree dissertations, it exchanges experiences participating in conferences and in meetings with universities employees and with students. The company does not feel that it is a participant in the Bologna Process.

Competencies acquired in the process of non-formal education are discovered and recognized during the trial period. The newly employed employee receives training under the supervision of a mentor. The company invests in the development of the employee's competencies using the internal training unit, sending the employee to training at the manufacturers of cutting-edge equipment, financing their post-diploma study programs. Some of the internal training ends with a trade examination.

The president suggests making the time schedule of student practical training more flexible and passing on information on competencies of the present graduates and the expected ones in 10 – 15 years' time resulting from the company's strategy.

Interview: [PLE10]

General competencies required by the company are: advanced foreign languages skills, interpersonal and communication skills, ability to work in a team, being result-oriented, motivation for performing work on a high level of quality, orientation on the quality of the work done. Specialist competencies are closely related to the profile of the position held. General and specialist competencies are evaluated at the recruitment stage. The profile of the required competencies has not changed in the last five years. General competencies should be developed at every stage of life and education, at work and during activities outside the university and at university. Client satisfaction is the most important thing for the company, since it is the condition of the company's development and existence, and it is the result of content-related/specialist competencies as well as

interpersonal ones. No considerable competence differences amongst graduates from the last 5 years have been observed; the level of skills and expertise is equally varied. In the recruitment process, grades, diploma supplements and the type of the academic degree are disregarded. Units that realize university cooperation with the company are career development centers; they inform students about practical training, sometimes they carry out recruitment and organize job fairs, presentations, and meetings of the company's representatives with students. There is cooperation with student organizations. However, no closer cooperation has yet been started with academic circles. The company supports the employees' competence development, and such development is reflected in the periodical employee evaluation. The Training Excellence Center – the company's training unit, which budgets for training at the disposal of managers and encouraging employees to work on their development, which are some of the elements of the employee competence development system. New employees are introduced into their work after a cycle of training at the company's headquarters and in its divisions abroad, they are delegated to a producing plant to get to know the specific character of the whole company. The company sees possibilities to remove the discrepancy between the competencies that are taught at universities and the ones which are sought after in the labor market. This could be done by including employers in the process of adjusting the education offer to the economy's tendencies of development.

Interview: [PLE11]

Competencies particularly highly valued in the uniformed services are: analytical thinking, effective negotiations skills, ability to act under pressure, ability to work with others effectively – team work; working with computer is an obvious basic competence. General competencies are developed on all stages of education and by the family. Recruitment to service is based on competition, no important graduates' competencies changes have been observed. Generic competencies determining a candidate's suitability to uniformed service constitute about 40 – 50 % of all the competencies necessary for efficient work. The Firm recruits from a wide pool of candidates, the following faculties get extra points: administration, law, economics, and computer science. In the recruitment process, however, it is not important what degree a graduate has (bachelors or master's degree), a graduate's grades are also unimportant; the factors that count are how fast and how effectively they will use the acquired specialist expertise. Recruitment to service is a separate activity, and for this recruitment aspect, the Firm has initiated cooperation with career development centers and it also participates in job fairs. Until now, the Firm has not articulated any remarks as to the creation of new specializations or its competence expectations. After being accepted into the service, the candidate undergoes basic training lasting half a year, during which period the candidates stay in barracks. During the training, candidates acquire theoretical and practical specialist knowledge on the provisions of law. After basic training, they are employed at the basic position and they have an experienced employee assigned to them – a supervisor or a mentor. The system of introducing the employees into the uniformed service is identical for graduates of various education types. Recruitment of employees for civilian service is a completely different procedure. Candidates apply for advertised jobs, and recruitment processes usually consist of one or two stages. The Firm's postulate is that candidates should have more precise expectations from life and they should be more aware of the specific character of uniformed service.

Interview: [PLE12]

The Ministry's priority is that the candidates should be specialists in a given field of expertise, familiar with issues specific to a given region; they should be able to act under pressure, to coordinate activities, to cooperate with others, to speak a foreign language, to operate office equipment and to use technical novelties. Specialist competencies are: expertise in a given region's specific character, ability to speak the language of a given region, and the 21st century competencies are the ability to use one's own knowledge and self-presentation skills. Competencies should be balanced (50 % to 50 %) – the general ones should be developed at all stages of education, and specialist competencies should be taught at universities and acquired during contact with an employer. Graduates of today are well educated, ambitious and they speak foreign languages fluently; they are open and willing to learn new things, they are also very well prepared professionally with satisfactory general competencies. The Ministry offers employment both to graduates with a bachelor's and a master's degree; the grade on the diploma is an important criterion but only in certain departments, and so are the faculty and the

university from which a candidate has graduated. The cooperation between the Ministry and universities consists of organization of practical training and internships. The Ministry informs universities about its expectations, provides feedback on the efficiency of graduates doing their practical training and exerts some influence over the changes introduced into the study syllabuses. The barrier in cooperation is of organization and legal character, e.g., financing the maintenance costs related to doing practical training.

Competencies acquired in non-formal education processes may be recognized after passing an appropriate examination. Introduction of a newly-employed person into their work is done with the participation of a mentor and takes 1 or 2 months (depending on the position); during that time the employee learns the specific character of the department or other organizational unit, undergoes the position training course and initiates external relations. Institutions of higher education should modify their structures and syllabuses so that they develop such competencies as communication, self-presentation skills, creativity and initiative. This will allow better preparation of young people to meet the expectations of the labor market.

Interview: [PLE13]

Candidates applying for jobs with the company should have cooperation skills, problem-solving skills, ability to learn (this competence is becoming more and more important); they should be characterized by spatial imagination, logical reasoning, lateral thinking and anticipation of events; the ability to speak English at a level allowing unhindered communication, as well as perception competencies, such as perceptiveness and good concentration skills. General competencies are acquired at all stages of education, graduates of maritime schools acquire specialist competencies in the course of their studies, while other candidates do so in the course of training and through practice. The competence level of graduates applying for jobs with the company is considered high. The company recruits graduates from all schools (graduates from the navigation specialization are especially welcome), the preferred age is 26 – 28 years, grades and diplomas are irrelevant, the company operates a system of discovering competencies, also the ones acquired in the process of non-formal training. The objective of the cooperation with universities is dissemination of information on the specific character of the company and recruiting candidates for employment. The company provides students with materials needed for master's or bachelor's degree dissertations, but due to the specific character of the company, no systems of students' practical training have been implemented. Preparing a new employee for taking up their responsibilities is done through preliminary training and position training. Preparing a candidate for the position of an air traffic controller requires a few stages: for the first 3 months they undergo theoretical training and for the next 3 months they train on a simulator (both are finished with internal examinations). The whole training cycle is completed with an external examination done before an external institution issuing licenses for air traffic control trainees. For two years, the employee works under supervision of an instructor but on a real operation station, and then they do another external examination and obtain their first independent air traffic controller license. From the company's point of view, universities should open more for cooperation with companies and they should focus more on developing general competencies (e.g., the ability to learn), which are more important on the market than are specialist ones, since the latter may be acquired in the course of company training.

Interview: [PLE14]

Teachers' preferred competencies are a compilation of general and specialist competencies and a distinct personality. Competence development is initiated by the family. Specialist competencies are developed at university and during work at school. In recent years, the importance of information technologies, communication in English, acquisition of new knowledge and continuous development has grown. Candidates will have advantage over competitors if they have some professional experience and have done teaching practice or internship. Doctoral students' teaching practices are an example of good practice in relations between the school and universities. Within the framework of the Witkowski University project, academic circles present their potential and pupils learn about university research areas. The school prefers public university graduates; grades and supplements are a criterion but not the most important one. Competencies that distinguish best candidates

are interesting personalities, good communication skills, and open attitude towards others. Competence development through non-formal learning can be observed in everyday relations with pupils and teachers. Teachers who develop their competencies attract pupils. Competence growth is reflected in professional career advancement. A new staff member is gradually introduced into independent work; for a graduate, the first training period is a test of aptitude for the profession. Changes in higher education should lead to greater flexibility in staff employment, to restructuring the system of academic teachers' professional advancement and remodeling the teachers' remuneration system. Only then will the best graduates choose school as their workplace.

Interview: [PLE15]

General and specialist competencies are equally important in the education of a graduate applying for a job with the agency. Graduates' competence levels depend on their attitudes at all stages of education and on the ability to define their personal development paths. In the process of evaluation of the candidates' aptitudes for work, the agency pays attention to the university diploma. The agency cooperates with all the career development centers functioning in the region – it presents information on recruitments, offers practical training, and through a special unit, the Professional Information Centre, it offers assistance in conscious shaping of the professional career path. The level of satisfaction from cooperation with universities varies according to the area of cooperation. The students' practical training is the weakest link, since universities rarely take interest in their students trained at the agency. Recruitment for the agency has to comply with the requirements imposed by the procedure of civil servant employment. The agency would be happy to participate in meetings with academic environment, but students show more initiative in this respect (self-study associations) than do universities. The agency is not invited for consultations on study curricula. In the firm, there is a possibility of diagnosing and recognition of competencies acquired outside formal training, and validated competencies are reflected in the motivational system. Preparing a new employee takes place during the preparatory service; during that period, the employee has two supervisors – one from the working team to which the new employee has been assigned and the other one – the preparatory service supervisor. Universities should focus more on linking theory with practice.

Interview: [SIE1]

Concerning generic competencies, they expect communication, resourcefulness, initiative and the ability of practical way of thinking. Concerning specific competencies they expect the ingenuity, the integration of theoretical knowledge related to the economy in various fields, the understanding of their customer needs and to be able to apply knowledge that was gained on the faculty in the practice of the company.

Competence development is, in the first instance, the responsibility of the individual himself. He/she must be willing to learn. Next are the educational institutions. They think that young people, after the completion of primary education, first need to get practical knowledge.

New graduates can bring some fresh and new ways of thinking. They organize specific workshops on certain specific topics for the benefit of students. In this way, they note the abilities of new employees. They also prepare lectures for larger groups of students and cooperate with professors and students, so that their employees are involved in the educational process.

They monitor the development of their staff. Together with employees, they set the time of acquiring certain certificate.

They have a system of mentoring. They try to immediately involve newcomers in the existing projects. Once this process is completed, they do not use tests evaluate the knowledge gained.

They think that the economy and the public sphere and the higher education and the faculties are two different worlds, where things do not function. Faculties should listen more to the needs of employers. In the first instance, they should require cooperation that would allow the employers to introduce new content, new technology, new methods of instruction materials, more practical training. There is also the lack of education of professors and assistants, who should be constantly trained.

Interview: [SIE2]

The graduates are expected to be more able to use acquired knowledge, to solve new situations that are associated with the work performed; they lack some form of belonging to a work group. For them, it is difficult to identify themselves with the group; they have a lack of business values and they should have a higher business culture. This points out that young people do not feel the company's strategy and vision.

Competence development is the responsibility of the educational institution it depends on the education someone brings from home and on the work group in which someone takes part.

Perhaps the graduates in recent years have more useful knowledge, but there is still not enough self-consciousness for independent, efficient work. Graduates are not sufficiently creative, they resolve new situations with difficulty, but there are also some who can immediately apply their knowledge in an independent manner. Faculty should give them more basis to work independently. This means training and problem-solving ability.

They work with students, they participate in the preparation of their diplomas, if they are related to the company work themes, they cooperate with the Faculty of building, in terms of recruiting personnel, and they offer apprenticeships, if they have needs.

They have introduced rules on the progress of workers, which will evaluate the informal knowledge. In the case of graduate internships the mentor is determined in the personnel department; he has a program and plan of work per month. Traineeships are completed by a trainee examination and if a trainee pas it and they have a vacancy, he gets the job.

Their recommendations for HEI are: There should courses in the curriculum that should develop the personality. There should also be a module that would show students where they need to upgrade competencies in order to be more confident, and capable of strong entrance into the working group. This means that all the faculties should have programs that would include communication, recognition and learning about themselves. Faculties should get the ways of doing things closer to their students, so the students would know how to follow the practice with their knowledge.

Interview: [SIE3]

In the company competencies (English language, leadership, talent development, delivering results, innovation, and relationships orientation) are precisely defined at the corporation level in job descriptions that are higher than 5th educational level. All competencies are also labeled with levels from 1 to 5. The company has induction programs that are individually prepared by leaders when it is needed. They are developing a system for identification and remuneration of non-formal learning in which non-formal learning will be one of the criteria they will use for remuneration of the employees. They also observe, identify and measure competencies of their employees. For these annual talks with employees, individual development plans, signed mutual agreements and questionnaires are used.

The company thinks competencies are best developed in work environments. Concerning the cooperation with HEI, for now, they do not cooperate much, but are very open to it. When they do, they provide practical training and apprenticeships for students. They also stated that cooperation, in their opinion, mostly depends on the HR person in the company. For better cooperation with HEI, they emphasize well prepared practical work of students, the need to motivate students for gaining work experiences in real environments and through student work, and the need for professors' knowledge about the situation in the companies, and their experiences and connections gathered with mutual cooperation.

Interview: [SIE4]

In the company, they expect teamwork and the ability of cooperation between different departments; the nature of the work dictates the ability of rapid decision-making, taking responsibility for individual decisions, flexibility, precision, and sometimes an ability for improvisation.

First, the society is responsible for the competence development. Then it must be built up in elementary school, in high school, and in college. When people enter the labor market, they on their own are responsible for the development of their competencies, but their employers need to assist in this task. Competencies need to be identified and the employees offered the tools to develop them.

In the building profession, a large gap is noticed between practice and theoretical knowledge that students acquire at the university. They also encounter a lack of knowledge of foreign languages.

The employer participates in the practical training of students; they cooperate with HEI in the recruitment of new staff, in the field of study at work and in various projects, where they invite students to participate and where they can present us themselves as an attractive employer.

In the employer's view, competencies can be primarily recognized in even greater knowledge and sophistication in the field of expertise. In the organization, they have kept the training period, which lasts one year, or may be less, depending on the level of education, and in which the work is accompanied by a trainee mentor. During training, the worker is brought into the business; he gets to know the organizational rules and the organizational culture, and is, in accordance with the mentors' assessment, also sent to the "rotation" in the organization.

They think, in HE in particular, a greater emphasis on practical education would be required; institutions could encourage students to do team work and to participate in collective elaboration of seminars, papers, projects, etc.., instead of individual work, and also put more emphasis on the professional literature and technical terminology in a foreign (English) language.

Interview: [SIE5]

Persons who come directly from the university usually do not have work experience. Competencies are generally viewed from two angles - first, breadth of view, if the workplace is such that it requires a specific knowledge, then they focus on specific competencies. Because knowledge can be easily acquired, built up, and very quickly replaced by the individual, the employers expect more innovation, enthusiasm, the desire for some movements, the ability of the perception of the environment, the ability to receive and pass the appropriate information, the ability of cooperation. These competencies, which they see as specific, help the colleagues to perform work with the most quality.

Competence development is a combination of individual responsibility, the mentor and the leader. Each one has its own role in this process. The mentor definitely is more professional, and the leader operates more in terms of achieving certain objectives.

Students should be more educated in the field of knowledge of the real systems; there is also the lack of practice obtained through studies. The system would have to allow students to meet the actual environment in which they are to work, where they have the possibility to use their knowledge in practice. Another shortcoming is that the education system does not give graduates do enough width. Graduates must learn to listen, to hear the right information, to know how to make and use the right information. When they want to achieve their goals, to be the best, they must do it in an environmentally sound way, with involvement in the environment.

On the faculties, they announce calls and together with some faculties they have designed programs for doctoral studies, they also have a target education of sales employees.

Informal knowledge is now at the forefront and is a good additional indicator of how wide a person is, what they can expect from him, what are his abilities. This additional knowledge shows the integrity of the person. The system, which would specifically take this into account already from the start, has not yet been established.

We have different induction processes for different positions.

The cooperation between business and studies must be continued. It should be further strengthened. Higher education programs should develop the skills of students in such a way that they will be useful, that they will meet the expectations of any employer. Programs must be set so that in the first two years, students get general education and then they may choose the program that interests them. Faculties must attract future employers, who will invite the candidates to their research or will give them practice. It is necessary to meet the needs of employers; they should be very well monitored in the market, as they are changing rapidly. Here, the faculties have to do more.

Interview: [SIE6]

Concerning generic competencies, it is important that the graduate is flexible, that he is willing to accept changes, that he is communicative, that he is not a conflict person, that he is pleasant, respectful to the person he communicates with, that he is able to listen, he is peaceful and he is able to establish human relations. For specific competencies, the respondent highlighted the professionalism, the leadership skills and the ability to cooperate with people of different degrees in the work process.

Competence development is the leaders' responsibility. He must be self-critical, has to have the ability of observation. Competence cannot be obtained at school, people are partly born with it and it could also be developed in the working environment.

For specific jobs, specific competencies are in the forefront. However, if a person does work that also requires many other skills and responsibilities besides specific knowledge, then the specific competencies are also more pronounced. In leadership communication, this is important.

They note that the graduates who come to us from the building faculty have professional focus. They lack, of course, management skills.

They cooperate very little with higher education institutions. When they employ someone, the first condition for the employment is his/her formal education. In addition, they also ask about informal knowledge, which is then entered into evidence.

At the outset, a mentor is determined for each of the newly employed. At the end of this period, the mentor gives his opinion and report to the personnel department. He tells how the employee reacted, and assesses if additional training is needed.

Maybe for building programs, introduction of some additional general courses would be needed.

Interview: [SIE7]

Generic competencies are: cooperation, the ability to search for information, teamwork, and process work ability. Besides that, entrepreneurship, ambition, trying to seek challenge in work and developing the work are important, as are efficiency, organizational structure, the ability to set priorities, and the ability of taking risk. By specific competencies, they emphasize flexibility, decisiveness and, above all, the process view. Specific competencies

represent the individual's mode of operation, decision making, and risk-taking. Specific competencies must be in the context of the company.

The players in competence development are: the profession, the superior, and each employee. Each of us is responsible for his job, on this depends the work process. Nothing is shared, all of this is a triangle. Managers must communicate how they we want the company to operate, and how to achieve values, but all depends on the leaders. If co-workers are not connected, there is no success.

The students have a lot of knowledge, but there is a lack of integration of skills and knowledge transfer when they get into concrete practice.

They cooperate with HEI and the career centers, because they want to become a little more recognizable in higher education programs. Among the reward criteria, they will also use the informal knowledge. The HR department, together with the head of the department in which a new worker comes, prepares an induction plan that allows a new employee to get to know the work group and the company. If they are employed for an indefinite period of time, a probationary period is usually defined. They do not have much knowledge regarding how this is implemented in the programs. Exercises should be more practically oriented; there should be more practice and mutual flexibility.

Interview: [SIE8]

Generic competencies are a matter of education. People learn them at school or during the first months of employment. Labor-specific competencies in the public administration are: openness to the public, ethics, legality, political loyalty, integrity, transparency, knowledge of the system of public administration.

The school is responsible for the formation of the key competencies, higher education institutions for the profiling; the organization is responsible for the integrated development of specific competencies, which are then developed by an individual through a working space and through its operations in a work organization.

Students have theoretical knowledge. They get this before the onset of employment, in the performance of the professional exam, through work in public administration, or they came to this knowledge during the internships. They are extremely capable, so they absolutely have the basic competencies.

With some institutions, they have agreed that their students have precedence to study practice. They have the principle that in the time of practice the student also has a devoted mentor.

Non-formal knowledge is not taken into account at the entrance to the organization, because on the entry into the workplace, they have a much defined required education. However, it is taken into account when the employees are trained and in the performance assessment. Recognition is more or less in the hands of superiors, which, of course, is not the best situation.

They are quite satisfied with the HEI. There is a lack of practice. There should be a greater connection, the transfer of knowledge, from classrooms to the work environment. Faculties would need to look into the environment more often. Otherwise, they believe that the faculties prepare people well, and the question is more how much knowledge is anyone able to use in practice.

Interview: [SIE9]

Generic competencies are those that are common to similar tasks or groups of jobs. The work-specific competencies are those that are specific to individual jobs (specific expertise, which is necessary to competently carry out the work tasks in a workplace). It is vital that a job is performed by a person who already has the competencies that are required for the efficient performance of job duties in the workplace.

The development of competencies is the responsibility of every individual. Education is not only a right, but a duty. The gained knowledge, however, obliges us to use it in practice and to transmit it to others. By personal development, employees also develop the company in which they are employed. In the HRD department, they provide professional support to our colleagues.

The company prepares training systematically and deliberately. In fact, the company prepares a training plan each year, resulting from the business strategy. The resources enable permanent implementation of education in accordance with the needs of businesses and employees. Through these, education strengthens both generic as well as work-specific competencies.

In the company, they offer work to students throughout the year in accordance with the needs of our working processes. The company also has a price foundation for the best diploma and MA work.

Middle management is responsible for the growth and development of its employees. This is monitored annually in the planning process, during the preparation of a human resources plan for individual organizational units. Each year, there are also annual development talks. Acquired knowledge and participation in individual training is up-to-date recorded in our IKT application.

In the company, all new employees attend a two-day seminar in which they become familiar with the group, the operating standards, the different fields of activity, the activities in the field of human resources, the education opportunities. For employees in managerial posts, they prepare a rotation system within the group. For each new employee, his immediate superior ensures that the newly employed person is properly introduced in the work process.

Their opinion is that HEI outcome depends on each individual, how much he takes out of the higher education and how he applies the knowledge acquired in practice. In addition to this, an especially entrepreneurial mindset is crucial.

Interview: [SIE10]

We want someone who is practical, who is inventive in solving new problems. When confronted with a certain situation, it is important to us that he shows commitment, motivation to work, flexibility, preparedness to deepen himself in the work, that he has the widest possible target, because we do not need a lot of specialists. As far as specific competencies are concerned, we have found that economic competencies are not as sufficient as we would expect.

In generic competencies, they (HEIs) would give greater attention to the overall capability in terms of some analytical thinking about the problem. They enable that a graduate quickly learn skills that he needs at the beginning of a career. In the development of specific competencies, I find the management course inappropriate, if it is not combined with the experience. Furthermore, among the specific competencies the development of all soft competencies is necessary.

They have the feeling that education is not the one that would aim to develop certain competencies, but the development lies mostly on the individual. However, it cannot be expected that the student would have a certain degree of competence already developed in school, if we do not see it in the educational sector.

They have practice with various faculties, they offer student work, and the students also receive assignments and a greater responsibility. Together they prepare diplomas. Their colleges lecture at faculties and they invite lecturers to them.

They see informal knowledge as very important. They are very reluctant to employee training on various topics, from language to different skills.

Trainees in the company get a mentor and have a nine month rotation program. For young staff they have the so-called hatchery of personnel. Human Resources coordinates all of this; the HR department takes part in the determination of the mentor and the preparation of the program.

To HEI, they recommend the use of more practical examples and verification of the application of practical knowledge. When studying, a greater emphasis should be put on focus discussions. More papers should be prepared in teams. Faculties should be linked with employers, operating in the fields in which they educate.

Interview: [SIE11]

The most important generic competences are cognitive competences, attitude toward others and competences of personal characteristics and skills. On the other hand, work specific competences depend on the content of work. These are mastery of subject taken, credibility and interest representation, knowledge of internal and external factors, informal contacts and relations between actors in the field, knowledge of operational and technical procedures.

The education system is responsible for the development of generic competences and some specific competences. Companies are mostly responsible for specific competences.

The balance in emphasis on the two groups of competences depends on the faculty and varies from 90%-10% to 70%-30%. When looking at the level of graduates' competences, graduates mostly lack cognitive skills, since graduates are not independent and are unable to make synthesis of cases and information. Brilliant graduates only achieve a level of competences for easy tasks and those not finishing their studies mostly have better competences.

Cooperation with HEIs is taking place mostly in the form of practical training, lectures of experts, apprenticeships, cooperation on specific projects and direct recruitment and there are no experiences in the cooperation with University career centre.

The employer has established an education centre, which is recognized and systematically educates and validates for national professional qualifications which are introduced into the work place systemization. The newly employed go through the process of preparation for work through a trial period and mentorship but there is no formal systematic enrolment practice.

Closer cooperation with HEI could be achieved also with the involvement of employers in the development of study programs, selection at the enrolment in HEI, recognition of concrete work, products and awards in HEI.

Interview: [SIE12]

The required competences depend on the job placement and the field of work. We take into account the field of study, graduate thesis, and knowledge from different fields, such as foreign language. Specific competences are openness, analytical thinking, quick and logical thinking and leadership competences for management positions, such as general knowledge of economics and a positive attitude to change.

The human resource department is responsible for the development of competences and depends on three preconditions: personal activity of knowledge; internal training in dialogue with the individual; and the environment, mainly leadership, which needs to recognize the competences of their team members and encourage their development. Both groups of competences are important and cannot be developed separately. The level of competences is improving; graduates have good theoretical knowledge but may lack experience, mainly in the study fields of social sciences.

Cooperation with HEIs is based on contractual agreements in which students prepare a graduate thesis and go through the process of training and can later also get a job. Direct recruitment is also possible mainly from the faculty of economics and law. We do not cooperate with career centers. An internal system of recognizing and validating employees' non-formal learning or competences acquired at work is performed directly on the job done.

We have established electronic management of human resources, where each newly employed goes through the program to learn about the company, functions and basic rules and responsibilities. Cooperation with HEIs could be enhanced in a few ways. Firstly, each year a discussion on the curriculum could be organized between different stakeholders. Secondly, practical training should be introduced as part of each study.

Interview: [SIE13]

In general, the important competences for each graduate are knowledge of specific subjects, individual character, formal education, communication skills and computer skills. On the other hand, important specific-practical knowledge is searching information/data that can be later used. Education begins early with socialization and later the process of study. The most important competences are practical knowledge, which are not being sufficiently provided by the faculties. This is a huge shortfall for graduates.

The employer does not have any experiences with cooperation with HEIs. An internal system of recognizing and validating employees' non-formal learning or competences acquired at work is based on an evaluation system which includes payment incentives. New employees go through the three week working process in different workplaces and can be easily monitored and evaluated. At the end of the process the graduate is hired or not.

HE institutions could change in order to improve students' competence development by including more practical knowledge and by employing young lecturers who are more familiar with recent developments and knowledge.

Interview: [SIE14]

Society requires knowledge in information technology, functional literacy and foreign languages. The company requires hardworking employees with quality knowledge, a good attitude towards work, the right level of patience and appropriate communication. Responsibility for the development of these competences is firstly in the hands of the family, later the school and also in the working process. It is not just the responsibility of the HEI.

General and specific competences are equally important, but still more practical knowledge is necessary for the graduates.

There is no cooperation with HEIs sincegraduates mainly come directly through student work. An internal system of recognizing and validating your employees' non-formal learning or competences acquired at work is important and mainly based on direct interview with the employee where all experiences are important, from their study, student work and other skills. The employer has several systematic HRM practices to prepare new employees for their work and development, depending on the workplace and working group. After one week of internal training, an interview with the employee gives information on their satisfaction and vision. They also practice informal training for different fields of work and in general, to become acquainted with the work process.

HEIs should transfer more knowledge from the field of communication skills.

Interview: [SIE15]

The most important generic competence is communication skills. In addition, coping with change is a priority in highly changing working environment, organization skills, a high level of literacy, administration, project work, holding meetings and teamwork. Generic competences are compatible with specific competences. The employer has only little experience in evaluating graduates' competences and no direct linkages with HEIs or systematic system of cooperation, despite the lectures of our experts at HEI.

An internal system of recognizing and validating your employees' non-formal learning or competences acquired at work has only recently been experienced. These knowledge and competences are important for promotions every three years. The employer has only limited experiences with a systematic HRM practices to prepare new employees for their work and development, like longer-term apprentice program. After 2-3 months of training, new employees get knowledge according to minimal standards, which are necessary for doing their job. A professional examination is also being practiced and developed internally according to the required competences. In order to improve students' competence development the connection should be established in order for the students to get practical knowledge during their studies and to experience their field of study. Students have good theoretical knowledge but lack practical skills.

TURKEY

Interview: [TRE1]

There are some competencies that are very important for the world of work. These are self-confidence, honesty, motivation, adaptation ability, outlook, expressing yourself, to have an aptitude for teamwork, ability to take the initiative. After these, professional competencies come. For overseas business dealings, the most important competency is speaking a foreign language. Then, computer literacy and an aptitude for teamwork come next. Higher management and HR department are responsible for improving these competencies. General competencies are more important for most of the jobs. Competencies are gained during higher education and developed during work. Some positions are determiners for the universities. Graduation scores are not the identifiers for a position. Personal development and future plans/targets are more important. There is a sufficient cooperation with HEI very actively in the field of internships, practical work, applicative projects, direct recruitment from schools, and cooperation with career centers. This cooperation can be developed especially in designing the curricula. Graduates usually have theoretical information but they lack practice. Business people should be invited for conferences or as lecturers to communicate with students. We do not have an internal system for the recognizing and validating non-formal learning. There is an orientation program for all newcomers. After this, the job evolves with the necessary mentoring and learning by doing. For 2009, these are our training for our employees; customer relations management, stress management, motivation, interview techniques, sales and marketing.

Interview: [TRE2]

Speaking a foreign language, widely English, and computer literacy are very important skills. In addition, it is very important for a graduate to be open to innovations, to have ability and to be motivated learn. Usually, university graduates are seen as the employees for the future management levels; therefore, the ability to work productively with others is important for the career development process. Questioning to improve the system in which they are working is a very important asset.

In order to survive in a global competition, employees should follow and adapt themselves to the new technology at their work. In this sense, ability to rapidly acquire new knowledge is emerging. HEIs are mainly responsible for competency development. Generic competencies are more important than specific competencies. Firms provide all necessary in service training to the new comers. In general, final grades and the institution attended are important. In addition, the family background is important to distinguish between different graduates.

Cooperation with HEIs is not sufficient, except for internships and practical work. The main aim is to find the most suitable employee for the job.

For non-formal learning, there is no recognition system. There is a systematic HRM practice for employees. In service training, topics are management, English and computers. There should be more cooperation with the industrial world. Most of the lecturers are very far from the practices and aware of only the academic world. Curricula should be adapted to the needs of the world of business. The way to do this is by more effective communication and cooperation between HEIs and the world of work.

Interview: [TRE3]

In the law sector, because of legislative changes, new regulations and new administrative procedures, the ability to rapidly acquire new knowledge and ability to follow up the changes is very important. In addition, the ability to work productively with others and the ability to use computers and the internet are the important assets. As well, a good level of a foreign language and being curious to learn what is new in the field are pluses.

Some new competencies are becoming required because of the globalization, such as knowing international regulations and law. Being open to new technologies and rapid learning ability are important. General competencies can be taught in higher education or before higher education, for example, the ability to write and speak in a foreign language. However, specific competencies are better acquired in the workplace.

Attending university is important for recruiting graduates. There is no cooperation between universities. Lack of practical courses in the university may lead to some difficulties for the adaptation of new graduates. HRM systems are not developed in the field and there is lack of in-service training. Usually, it depends on personal encouragement and demand.

In addition, because of being a candidate country of the European Union, Turkey is adapting its laws to meet the requirements for European Union membership. It is becoming increasingly important for lawyers to know European Union law and regulations.

Interview: [TRE4]

In the education field, expressing yourself, good communication skills, ability to work in a group, motivation, and being open to new information and changes are important competencies. In addition, ability to adapt the new technologies is important for the improvement of the professional competencies. The ability to speak English is also an important asset.

In the 21st century, schools have very dynamic structures. Because of this, employers should be open to new technologies and new administrative and teaching methods. An ability to learn quickly is a new job requirement. Lifelong learning is an important part of this process.

Orientation programs and in service training are the ways to support the employees to improve their both professional and generic competencies.

Both generic and professional competencies are very important and necessary. There should be a balance of the competencies. There should be a strong and productive cooperation between all the parties that deal with HE.

The cooperation with a university is important for schools to improve themselves and to be aware of the new developments in the education field. In internships, there is a chance to meet potential future employers.

The necessity for this job must be determined and then, if necessary, the appropriate resources should be defined and provided. In addition, HEI should invite people from world of work for seminars to share their work experiences and good examples.

Interview: [TRE5]

Today, all of the procedures are carried out by the use of computers; therefore, computer literacy is very important. Secondly, the ability to understand the information and apply this information to the practice is necessary. This should integrate quickly and embrace team work. In this global rivalry community, people should consider their rivals and determine a macro working field and draw an action plan in an accurate field. They should analyze the improving and changing information and apply it accurately and quickly.

It is also necessary to improve the competence fields and to keep pace with the changing world. I believe that the competencies could not be achieved completely during higher education.

The university and department of graduation are important factors for employers. The department of graduation, university, modules, degree of graduation, practice, foreign language and computer knowledge, activities, social life and etc. are the main factors in determining the differences among graduates. Being a graduate does not mean that these people have the abilities for the world of work. Theoretical knowledge alone is not sufficient; practical knowledge is also necessary. We have cooperation with the universities. This cooperation could be useful for universities in organizing the syllabus, especially for practical modules. The career days of the universities are very successful. Employers and students could find an opportunity to interact with each other. The students are being informed by the employers. We do not have an internal system for the recognizing and validating of non-formal learning and systematic HRM.

Interview: [TRE6]

There are two steps in staff recruitment. The first step includes an interview with the applicant. The compatibility, appearance, diction, expression, self-confidence, sincerity, trustworthiness and sociability of the applicants are evaluated. In second step, the professional aptitude of the applicants are evaluated. We are working with other countries; therefore, knowledge of foreign language is the most important ability in the foreign trade department. General and professional competencies of employees are the main factors affecting the power of the national and international rivalry, quality of service and compatibility to the improving technology of our company. We expect our employees to renew application projects and to reduce costs. Therefore, it is necessary for them to improve themselves.

We are demanding professional experience during the recruitment of employees. Therefore, we recruit experienced staff and they have high level competencies. The professional and financial satisfaction is important in employment.

For our company, the university or the degree of graduation is not important for employment. Professional experience, competencies and motivation are important factors from our point of view. We facilitate training and project working; however, we do not think that we have sufficient cooperation. The aim of our cooperation is to contribute the universities to get acquaintance with the world of work, but we do not think that we have a contribution to the syllabus. We believe that mutual systematic approaches are necessary for the improvement of the co operations. More conferences, panels and platforms should be organized. We have systematic HRM. All of the newcomers have a three month trial period. After this trial period, we recruit employees that could be beneficial for our company.

Interview: [TRE7]

For the new employees, high communication skills and motivation to learn are two important generic competencies. Adaptability to new technologies is becoming very important, since internet based learning is becoming very popular and demanding. Lifelong learning is also a part of in service training. Therefore, distance learning and the new skills related to that technology are emerging. The field of Education is a very competitive one. Private schools contest for the best available teachers.

One of the impediments to a new approach is that teachers are unable to adapt to the changing world.

New graduates may improve their professional skills in the work place. The management board of the schools and teachers themselves are responsible from the development of these competencies. If the graduates are enthusiastic to learn and are open to new methods, specific competencies can be taught in the work place.

There should be an evaluation process for the employees for quality management. Experienced teachers play an important role for the in-service training of the new graduate teachers. There should be more intensive cooperation with universities. This cooperation can also be widened to the other policy makers and bodies such as higher education council, ministry of education etc.

Interview: [TRE8]

For the recruitment process motivation, self-awareness, ambition, ability to write and speak in a foreign language, ability to work productively with others as are the most important competencies. There are also some emerging ones such as ability to work with other cultures and international communication. Academicians' approaches are very important because they are in very close contact and their attitudes are very important for the students. Graduates' expectations from companies are very high. Therefore when they start to work, they have adaptation difficulties at work.

Usually specific competencies should be high when we look from the perspective of an employer. Motivation and awareness of the environment and oneself are very important factors for distinguishing the different graduates.

There is a relationship with universities in terms of internships, practical work, and career day meetings. We have close cooperation with career centers. However, each year, the interest of the students in the companies' career day meeting decreases. At some university campuses, companies can open contact career offices, which is very helpful for the firms to be in touch with students. Safety of the workers is the most important issues for our companies. Therefore, we have training on this subject. For communication skills and teamwork abilities we also offer different courses. For recognition, we give certificates. Newcomers learn from and are oriented by experienced employees. There should be deeper cooperation with HEIs, especially in the design of the curricula.

Interview: [TRE9]

The most important generic and specific professional competencies for graduates to function well in the workplace are trustworthiness, responsibility, compatibility, appearance, expression, sincerity, and sociability. Primarily, the employee should be responsible for the development of these competencies. The employee should be able to investigate and describe the deficiencies and inform the employer about the related resources that are needed for development. The employer also should be aware of the importance of continuous training and be

sensitive to the expectations of the employees. General competencies must be ensured. For the person who already has generic competencies, specific competencies can be easily provided. It is more appropriate that generic competencies should be gained at the universities and that specific job competencies should be gained in the companies. The institution of the graduation is the main determiner of these gains. The degree of graduation is also important because it reflects personal responsibility. Comprehension and interpretation ability level is high in the person who already has a high degree of education. On the other hand, in our country, we have only one job entrance exam. Instead of this application, several exams or interviews should be done for the selection of the appropriate employees. Our institution participates in regular meetings for career planning and organizes internship programs. Universities play an important role in our continuous training studies. Some reports about employee's performance give some ideas about recognizing our employees' non-formal learning, competencies or advancement acquired at work. We have a regular and structural orientation program to prepare new employees for their work. The number of vocational schools is not sufficient in our country. Therefore, the Universities try to compensate for this situation. For this reason, universities should be giving great importance to practical learning. Internships are most effective way for developing job specific skills.

Interview: [TRE10]

The most important and basic competencies of the new graduates are the ability to communicate effectively and in a right manner, expressing herself or himself neatly, the ability to adapt to new conditions and professional environment and to be determined for success. Of course, needless to say, computer literacy as well as good command of English is unavoidable . In addition to these competencies, there are also job specific technical competencies. In rapidly changing economic and social conditions, there are newly required competencies especially job specific ones. Some of these competencies already exist as a part of the person's character and evolve with time, but most are acquired through formal and non formal education. Development of generic and specific professional competencies is mainly the responsibility of employees themselves. Of course, universities have an important role in the development of competencies. As a third important factor, HR departments, as well as the executive managers, are also responsible for the development of professional competencies. Since there are differences in the competence level of every individual, it is very difficult to make a general judgment or conclusion in this respect. It is relatively easy to acquire competencies at work because the expected level of these competencies is better defined. In that sense, employees have a chance to get feedback and as a result of this feedback, they have a chance to increase their abilities. The importance of which university an employee graduated from depends on the positions that are available. However, it is not ultimately the main determinant of the level of competence, since their language skills, their ability to use computers, whether they attended any internship programs etc. are also very important. We are working together with universities in activities like presentation about our company and Career Exhibitions. Additionally, in order to support and facilitate the universities compulsory internship programs, we provide an opportunity for students to work in our company. The main objectives of cooperation are to contribute to the academic and professional development of students and to get to know successful students who can be our potential employees. We think we have sufficient cooperation, but of course different projects can be developed to increase the level of cooperation. So far, we have not faced any barriers in our relationships with universities. We are aiming at informing universities about required competencies and the demands of the world of work during the presentations and meetings within the context of Career Center activities. We are not taking part in the Bologna reform. We were not consulted about teaching program design. Every person who starts to work in our company has to attend a compulsory Orientation program, which is led by the HR department. Universities should change their programs to include more applications in addition to their existing didactic programs. Introduction of courses that focus on the real word case studies will enhance the student job specific competencies. Not only students but also academics should take part in cooperation with the business world. This cooperation creates an opportunity to integrate theory and practice in the programs of Universities.

Interview: [TRE11]

The most important generic and specific professional competencies for graduates to be successful in their jobs are analytical thinking, computer literacy and good command of one foreign language, preferably English. In addition to these competencies, stress management, effective communication, transparency, and being able to work as a group member are also very important. Of course, these are the competencies expected from all employees that have a certain minimum degree. However, different departments demand the same competencies at different levels. Of course, as time passes, some of the competencies are becoming not as important as they used to be and some new competencies are becoming more important. Both universities as well as employers are responsible for the development of competencies. In my opinion, the responsibility of Universities is more important than the responsibility of employers, in the sense that if students do not acquire certain competencies during their education, employers do not have much chance to enhance these abilities. For personal competency development, firms should support their employees by providing special trainee schemes. Willingness of the employee and the support of the firms contribute the development of competencies. In a nutshell, we think that good education in the University is the base for competencies and these competencies acquired at the university level can be developed at the work. We do have a yearly performance evaluation system. This system aims at evaluating not only the competencies acquired at work but also the competencies acquired outside. We have an Orientation program as well as in-service training programs at regular intervals. The first aim of the orientation program is to introduce the general characteristics of the company as well as the job definitions of different departments. The second aim is to train new employees in specific duties for which they are responsible. The third aim of the program is to determine the level of the competencies of the relevant persons and to state precisely the competencies that have to be developed. For specific professional competencies, there should be more practical courses in addition to theoretical courses. Additionally, there should be more project-based courses that give an opportunity to students to work in a group. Universities can also encourage students for the internship.

Interview: [TRE12]

We are seeking for specific competencies required by different job positions in the company. However, if we consider the competencies that are essential for the successful work life, we can list these competencies as ability to work as a part of the team, stress management, ability to communicate well, good customer relations and being persuasive.

In connection with the field of activity and priorities of our company, we evaluate the competencies of our employees but we are expecting a different competency level for different job positions.

Rapid changes and developments in the market, as well as in our sector, require not only the enhancement of the existing competencies but also the development of new additional competencies.

I personally believe that development of generic and specific professional competencies are mainly the responsibility of employees themselves, but, of course, the manager of the employee in coordination with the Human Resource department should contribute the enhancement of the specific professional competencies by organizing different programs in the company.

In order to develop the specific professional competencies of our employees, we developed a competency map approach with the contribution of different departments in the company. Based on this approach, we explicitly determine the competencies required by different job positions in the company.

General competencies and specific professional competencies are equally important in our opinion. Therefore, they complement each other.

There are differences in the level of competencies based on the type of competency. Technical competencies can be evaluated as medium, but specific professional competencies, specifically the managerial competencies, are weak (shortages) in general. Although these levels do not look very promising, we are not very much worried about these levels as long as the employees are open to developments. We think that higher education and work experience complement each other. In this sense, the HEI graduated from does not make a difference to a large extent. Personal competencies and advantages are more decisive factors.

We have a basic internship program, and we also cooperate with Career centers of different Universities. We also have projects to employ successful new graduates. However, the level of cooperation is not sufficient and there is always room to increase the level of cooperation.

The basic aims of this cooperation are to give detailed information about our company and the career opportunities in our company to prospective graduates.

We are not taking part in the Bologna reform.

So far, we have not had any offers from Universities to involve us in developing their curriculum in the light of the needs of the world of work.

We do not have an internal system for the recognizing and validating of non-formal learning.

We have an Orientation program for the new employees. The Orientation program has two levels. In the first level, which can be called the general Orientation Program, all departments of the company are introduced in detail. In the second level which is the job specific orientation technical training as well as on the job training are implemented for new employers.

If there is a general increase in the quality of education system, this will help to increase the generic and specific competence level of students. Additionally, adjustments of curricula in line with the demands of business will also help to enhance the specific or professional competence of graduates.

Interview: [TRE13]

In the banking sector, competencies are divided into three groups: basic competencies like being customer oriented, productively working with others, flexible and adaptable, motivated. Administrative competencies are ability to manage a team, manage reorganization, manage the relations. Specific competencies, are expressing oneself clearly in writing and speaking, systematic working and reporting.

For the adaptation of fast changes, there are some emerging competencies such as the ability to multi task, planning, adapting to new conditions and one can analyze the benefits of this generic and specific competencies are equally rated with some tests. Therefore, it is equally important. And after these tests the employee takes the necessary in service training.

Some generic competencies should be developed at HEIs. Final grades are not important in the recruitment process.

There are project partnerships with universities; the most important one is called Practica. In this project, the students develop ideas as a team, using their creativity. There are 15 universities involved in this project. Career centers are usually very well organized and supportive of our activities at the universities. However, when we prefer to contact directly with the students, most of the universities do not have contact addresses. We have a systematic in service training for our employees. There are trainers working at our education department and also we outsource this training from time to time. When we need professional for specific banking subjects, our employees support us. For these non-formal in service training activities, we validate them with a certificate.

We have a system called Success Window, with which we evaluate the performances of our employees. We compare the level of the competencies of the employee and the tasks needed for his work.

The new employees also learn tasks and work processes from older employees and their managers. Therefore, learning by doing is an important method for our system.

In our recruitment process, we observe similar graduates rather than unique and special ones. Usually they lack analytical thinking and are not creative. In order to support the graduates' transition to the world of work, they need to be trained for their special personal abilities and interests.

Interview: [TRE14]

The most important generic and specific professional competencies for graduates to function well at workplace are adaptability, trustworthiness, responsibility, self-efficiency and accuracy, with means to continually improve and to work, to be a good computer and internet user, and to show analytical thinking skills and knowledge of foreign language. The graduate should be responsible for the development of these competencies. He should investigate and describe the deficiencies and inform the employer of the related resources that need development. The employer should also provide continuous training and be sensitive to the expectations of the employees. For these purposes, the employer should organize courses, seminars and education activities. General competencies and specific professional competencies are equally important. It is more appropriate that generic competencies should be gained at the universities and that specific job competencies should be gained in the companies. The institution of graduation is the main determinant of these gains. The degree of graduation is also important because it reflects t personal responsibility. We are working together with universities in activities like presentation about our company and Career Exhibitions. Additionally, in order to support and facilitate the universities' compulsory internship programs, we provide opportunities for students to work in our company. The main objectives of cooperation are to contribute to the academic and professional development students and get to know successful students who can be our potential employees. We think we have sufficient cooperation, but of course different projects can be developed to increase the level of cooperation. We are aiming at informing universities about required competencies and the demand of world of work during the presentations and meetings within the context of Career Center activities. We do not know about the Bologna reform. We were not consulted about teaching programs design with the universities. Every person who starts to work in our company has to attend a compulsory Orientation program which is led by HR department. This orientation program increase the adaptation period of new employees. For improvement of specific professional competencies, there should be more practical courses at the education programs. Additionally, there should be more project based courses that give an opportunity to students to team work. Universities can also support and encourage students for the internship.

Interview: [TRE15]

Important generic competencies are the ability to work with others, teamwork, ability to adapt the changes rapidly, compatibility to work environment and the colleagues, leadership, and analytical thinking. Of course, communication with the mother tongue and foreign language, mainly English are important. There are also some other competencies that are important for recruiting graduates: assertiveness and creativity. In light of current globalization, being open to intercultural working environments and open to new cultures are emerging new competencies. At some positions, generic competencies are more important. The required generic and specific competencies also change according to positions.

The person's ability and motivation is more important than the studied subject, the grade achieved or the institution graduated. Competencies can be acquired at the work place.

The relationship with the universities is based on practices, internships and career days organized by career centers. Sometimes we prefer to directly recruit from the universities.

We have an internal evaluation system for our employees, which is based on competencies. Employees have regular meetings with their supervisors and evaluate their improvements, and then this is reported to the HR department. We have social activities, courses, and training offered for our employees. They can participate the training that are required for their position or that they are willing to improve. When the training is completed, participants get a certificate.

Newly graduated employees are very far from the world of work. Therefore, the relationship with the companies and universities should be developed, especially for internships and placements. There may be some other projects or courses that can be developed that would allow the students to work in the company for prolonged periods.