Requirements of Practical Life versus Possessed Competencies in Highers Education

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Abstract[1]—Significance of knowledge is realized and appreciated in the life of every competitive economy. Although a question must be put. What is the right and required knowledge enterprises need?

One can read a lot of criticism of educational methods of universities and colleges as students' knowledge, abilities and preparedness are not suitable for the requirements of companies and practical life. To face the criticism a survey was conducted among students and teachers from different higher educational institutions. Authors have examined features of preparing for practical life, roles of students and teachers, methods of education in a quantitative survey by questionnaires.

In the second phase of the research the aim was to know, how the students can acquire the required competencies and how Hungarian educational system can keep steps with the continuously changeable economic demands to serve the requirements of companies? Can the students use this knowledge, skills in their workplaces in an effective way? Do young employees with a new degree have these competencies? The authors have tried to find the answers to the above mentioned questions. In this phase, students and managers from different companies have answered the questions of questionnaires.

During the research by the verification of hypotheses was demonstrated that teachers' roles and methods - which are in relationship with teacher dominance role - are characterized. In addition, there are significant differences between students' and teachers' opinions about the right methods and there are significant differences between employees' and employers' opinions about students' competences which are acquired in higher education.

Keywords—higher education, knowledge management, knowledge sharing, knowledge transfer, teaching methods, teaching roles, student roles, soft skills

I.   INTRODUCTION

The secret of successful companies has been debated for a long time. How can it be that one of them is more successful than the other, but they compete with each other at the same market, they work with similar employees, they have the same organizational structure, they work in the same division of labour, etc.

Researches have verified that these facts do not have a serious role in this difference. And what is more even, the volume of the invested capital does not play an absolutely qualifying part [1].

But we cannot estimate companies without their environment. They work in a given social and cultural conditions and with employees who are chosen by themselves. Their success in the market is determined by these two facts. We talk a lot about the changes of our environment that require organizations to change continuously. This willingness to change, flexibility, skill of reaction, skill of renewal are determined by the creativity of employees and colleagues, their willingness to study, the leaders' style and by the organizational culture [2].

Managers have to prepare for management in a new style, to comply with the requirements of becoming a learning organization, keeping knowledge and at the same time for the adaptation of recent methods of knowledge management not only mentally, but also consciously [3].

II.   THEORETICAL BACKGROUND

The role of knowledge is determinative in the life of economy and society. Nowadays this role is revaluated by new knowledge - economic and sociological processes [5]. Why do we have to manage knowledge? Due to the fact that intellectual capital has been in the foreground of organizational statements in the last period. However, it is clear that knowledge is difficult to account for, its importance is indisputable. The more companies can keep and exploit their employees' knowledge, the more they will be able to reach a business success. Their knowledge is to be found in a lot of divisions (departments, workshops, industrial units, etc.). It is dissipated and this knowledge is not available by every employee. Therefore, companies have to discover their knowledge again and again, they have to find solutions which have already been born in another unit [4].

Cognitions, abilities, competencies change depending on economic development [5]. At the beginning of industrial production only simple abilities were needed (acquired in vocational schools), nowadays employees have to have a wide range of capabilities and skills. In our days employees should have an ability of problem solving, good communication, knowledge of how enterprises are run. To obtain these abilities a very good school system is needed [6].

Hessami és Moore [7] determine competence as the best practice of knowledge management, as a mix of

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knowledge, experience, motivational features with the help of which employees can fulfil their tasks successfully. From this view, competence is an ability to undertake a task perfectly, efficiently, in a high quality according to costumers' demands and changeable conditions. This portfolio of abilities and talents are much more than using knowledge successfully. In this meaning a competent person is much more than a knowledge – worker [8].

Knowledge stream is ensured by teachers, professors to students by pedagogical processes. These processes are influenced by roles of teachers and by roles of students as well, because they are workers of training processes or customers of courses and other services. The knowledge stream is influenced by training or the educational model, the structure of institutes, study material, know-how and the stressed processes of explicit or tacit knowledge [9]. The success of knowledge sharing, the acquired competencies and effectiveness of their application, its practice influence young people's value-production in companies' life.

Managers have to prepare for management in a new style, to comply with the requirements of becoming a learning organization, keeping knowledge and at the same time for the adaptation of recent methods of knowledge management not only mentally, but also consciously [10].

The purpose of this study is to show you the students' features of preparedness to work, their typical characters in different institutions, the environment of teaching-studying, the students' and teachers' roles. On the basis of the research results, the paper shows the acquired competencies which come from higher education system. Authors have investigated, if these competencies serve requirements of companies or not, if there are differences between employees' and employers' opinions about the usefulness of these competencies [11].

Learning in Higher Education

Kozma [12] differentiates the roles of students according to requirements of students' positions. He writes about the following roles: follower (student), team member (campus resident), client (customer). According to Sirvanci [13] there are 4 roles of students: products of a process, inside consumer of the academic services, participants of learning processes, inside consumer of courses.

Owing to the increased number of students, the students who enter any universities have very different abilities and requirements. When students enter an institution, probably a lot of viewpoints influence their choice.

According to the multi-cycled educational system, students have more possibilities to leave or to re-enter in educational process. The analysis of exit strategies shows that to step into workplaces take place in different ways. The borders among possibilities have become indistinct [14].

At the same time, according to Hall's, Binney's and Kennedy's [15] opinions, the personal interactions among students and teachers influence the students' outcomes and their behaviour later in their workplaces. The causes in the background are the stressed role of teamwork.

Teachers'roles

There are different approaches to roles of teachers. According to Kozma [12] the changing of teachers' roles follows the changing of higher education. The roles are defined as a scientist – teacher – officer. From this group, the teacher's role is important for us. They have to fit a scientific community and a teacher community at the same time.

Teachers, professors cannot form a personal relationship with each student and this situation brings a new system of examinations. Evaluations are based on writing tests or essays which are knowledge tests only. The main values, relationships, interactions disappear from the system, performances are underrated, talents vanish, the administrative tasks grow continuously [16]. Óhidy [17] and Green [3] systematized the roles of teachers on the basis of cooperative learning forms. Researchers use this grouping as well:

• 'Learning organizer': to define tasks, to form individual responsibility, to represent demands, to develop cooperative abilities.
• 'Decision maker': to set targets, to form teams, to form an environment to studying/learning, to define help to study/learn, to define tasks.
• 'Observer and interventionist': to pay attention to students' behaviour and to intervene (help) if it is needed.
• 'Estimator and evaluation': to develop students' self - estimation by analytical evaluation of students' tasks.

Experience shows that in the mass education system students are susceptible to be real students and they do not wish to do anything in the courses, they want to listen only. To activate them successfully depends partly on teachers and on students' attitudes as well.

The training methods determine a generally used teaching model about which you cannot read in this paper. If a reader is interested, research results can be read in Makó et al. [18] and in Raviola et al. [19] papers.

The task of higher education is to ensure knowledge transfer to the direction of the real word. It raises a question: what kind of higher educational system we need to realize our aims.

On the basis of the above shown theoretical summary, research results will be highlighted (learning – teaching environment, teachers'- students' roles, given and possessed competencies and companies' demands) which were conducted in different institutions.

In the first phase of the research the following questions were formed: How are students prepared for the requirements of companies? How can teachers support students with preparing to be suitable for the requirements?

Subsequently, in the second phase of the research the following questions have been answered: How can higher

education and labour market interpret knowledge? What kind of competencies are needed for a successful economy? Do young employees with a new degree have these competencies? Can higher education provide students with competencies which are required by the labour market?

These questions were answered on the basis of investigation of the research hypotheses.

III. EMPIRICAL RESEARCH

Methodology of Research

In the first phase of the survey a paper based examination was continued by questionnaires with random sampling, between Jun. 2013 – Nov. 2013. The second phase took place between Jan. 2014 – Apr. 2014 when the investigation was completed with opinions of company managers. Students and teachers at universities

and managers of enterprises/companies were questioned by a questionnaire. Before the survey semi - structured interviews were conducted by personal asking to test our ideas and our questionnaire. On the basis of the sample, a statistical selection (sample cleaning) was used [20].

Characteristics of Sample

The sample is not representative, but the numbers of questionnaires are big enough to confirm or to reject the hypotheses. The number of questioned people symbolizes well and give an overall picture of their situation in Hungary. Our statements are valid on the examined sample. (See table 1.)

Asked groups	Number of samples	Number of universities/companies
Students	399	6
Teachers	95	6
Managers	486	433

Table 1. Characteristic of sample

Majority of students is studying as full time students (85%) the others are (15%) in correspondence courses.

Specifications of the sample are to be seen in table 2 and 3.

Students	Features	Teachers/professors
Female: 34,3% Male: 65,7%	*Genders*	Female: 55% Male: 45%
Public: 75,8%		Public: 91%
Foundation: 20,7%	*Maintenance of institutions*	Foundation: 9%
Church: 3,5%		Church: 0%
Natural sciences: 1,3%		Natural sciences: 5,8%
Technical sciences: 13,4%		Technical sciences: 3,8%
Medical sciences: 1,3%		Medical sciences: --
Agrarian sciences: --		Agrarian sciences: 5,8%
Society sciences: 70,8%	*Areas of sciences*	Society sciences:53,8%
Humanities: 13,4%		Humanities: 26,9%
Arts: --		Arts:3,8%
Theology: --		Theology: --

Table 2. Specifications of student and teacher sample

Sector	Agriculture, wild farming, fishing	Processing industry	Trade	Hospitality
Rate %	4,5	11,2	27,5	8,6
Sector	Transport, logistic	Education	Public health, welfare	Other services
Rate %	5,4	2,2	1,1	18,5
Size category of companies	Micro 39,2%	Small 28,9%	Medium 28,0%	Big, multinational 3,9%

Table 3. Sample of companies

Methods

• Qualitative method by semi–structured interviews

A semi-structured interview technique was selected because it is a representative of a questioning technique and can acquire a broad range of knowledge. The semi - structured interview is a standard technique used in numerous knowledge management projects. It makes use of a predesigned set of questions, but allows unplanned supplementary questions to be asked during the session. Traditionally the interviews are carried out face to face, one to one and consecutively. The interview is a mutual and a conversational interaction process which is based on asking and answering questions and carried out for a serious and predetermined aim. Twenty people were interviewed in these processes.

• Quantitative method by questionnaires

The structure of questionnaires was different. Three different types of questionnaires were used. Every form was directed towards the habits and communication situations of the asked people. The questionnaires consist of five main chapters with 25 questions. They are closed, opened and scaled questions. In the questionnaire the competencies which are in connection with work, profession, collaboration were scored on a nominal scale (yes – not) by students. Managers had to use the ordinal scale from 1 to 5, to mark at which level they expect the enumerated features from employees. In the questionnaires for enterprises there were statements which had to be valuated on a scale with 7 levels by the questioned people from 'absolutely not' to 'absolutely yes'.

The data were evaluated by simple statistical methods (frequency, average values, means, standard deviation) in a Microsoft Excel program and by cross tables, correlation analysis, factor analysis in an SPSS program. (To control the results Wilcoxon-style from nonparametrical methods can be used - which served to evaluate the coherent data - in case of ordinal scales. In this case, two samples will be ranked together and rank - numbers will be prepared on the basis of means without reference to groups. Direction of correlation can be investigated but the measure of correlation cannot be investigated.)

Hypotheses

On the basis of the above mentioned research questions the following hypotheses were formed.

Hypotheses in the first phase:

H1. There are differences among teachers thanks to generally used training methods and among students concerning expected and loved methods.

H2. The characteristics of teaching and learning methods in higher education are in connection with teachers' dominance roles.

Hypotheses in the second phase:

H3. There is a difference between employees' and employers' ideas about the competencies which are needed in the labour market.

H4. A knowledge society expects not only and not first of all professional knowledge from employees because behaviour and adaptability come first due to the accelerated technical development and environmental changes.

Research Results

In the first phase we analysed the educational and learning contexts by revealing teachers' roles, teaching methods, features of students' learning, on the basis of Kalman's theory [21]. (To compare courses, institutions, professions, scientific areas were not the aim of the research.)

Students had to mark the teaching methods on a six-grade Likert - scale which are most popular with teachers. (1= the least, 6= the most popular methods). The agreement is low (Kendall W=0,032) but statistically verified among the questioned teachers (p<0,01). The most popular methods with teachers can be seen in table 4.

Training methods which are used by teachers	Rank average	Final precedence
Oral knowledge transfer (presentation, storytelling, writing down, explanation)	4,2	1.
Project tasks	3,4	2.
Production, demonstration	3,4	3.
Teamwork	3,4	4.
Learning by discovery, as a method (on the basis of teachers' organization students can acquire knowledge independently, actively)	3,3	5.
Conversation	3,3	6.

Table 4. The most popular training methods with teachers on the basis of students' opinion

You can see that the most popular training methods belong to teachers' dominance, they are oral knowledge transfer (presentation, storytelling, writing down, explanation), project tasks, and production, demonstration. Methods which demand students' activity (teamwork, learning by discovery and conversation) are less used by teachers.

The agreement is low as well (Kendall W=0,015), but statistically verified (p<0,01) among the asked students. The order of rank of the most popular training methods can be seen in table 5.

Training methods which are most popular by students	Average	Final rank
Teamwork	3,8	1.
Production, demonstration	3,6	2.
Conversation	3,6	3.
Oral knowledge transfer (presentation, storytelling, writing down, explanation)	3,4	4.
Project tasks	3,3	5.
Learning by discovery, as a method (on the basis of teachers' organization students can acquire knowledge independently, actively)	3,2	6.

Table 5. The most popular training methods among students on the basis of students' opinion

You can see that there are significant differences among the most frequently used and the most popular methods. Students would like teamwork, production, demonstration and conversation. They do not prefer presentations, project tasks and learning by discovery.

Teachers' roles were examined as well. See them in table 6. According to the above shown possibilities, students had to qualify the teachers' roles. The bases of students' qualification were their opinions about teachers, how they can manage their roles. In this case a 7- grade Likert scale was used (from strongly disagree to strongly agree).

Teachers' roles	Number	Average	Deviation
'Decision maker'	393	4,2	1,240
'Learning organizer'	392	4,5	1,295
'Observer and interventionist'	393	3,4	1,317
'Estimator and evaluation'	392	3,4	1,381

Table 6. Óhidy - style teachers' roles on the bases of students' opinion

Óhidy [17] and Green [3] formed the roles of teachers in cooperative learning but we spread this idea. We compared the different training methods with the roles of teachers in order to know how students perceive these roles, in which methods by they are felt students. (See table 7). The statistical relationship between students' opinions of the used training methods and the roles of teachers by cross table analysis were examined in which Pearson Khi test shows the significance level. Table 7 shows the values where statistical relationships are to be found.

You can see that students feel 'Decision maker' (average 4.22) and 'Learning organizer' (average 4.55) the most characteristic teachers' roles. The 'Decision maker' is in a significant relationship with the teacher's communication method (p<0,01) which is used by most teachers. This relationship can be shown in teamwork as well (p=0,015) but it is used not so frequently. It is on the 4th place only.

Teaching methods / Teachers' roles		Decision maker	Learning organizer	Observer and interventionist	Estimator and evaluation
Oral knowledge transfer	Pearson χ^2	p<0,01	-	-	-

(presentation, storytelling, writing down, explanation)	Cramer factor	0,284	-	-	-
Conversation	Pearson χ^2	p=0,020	-	p=0,001	p<0,000
	Cramer factor	0,239	-	0,248	0,284
Production, demonstration	Pearson χ^2	-	0,030	-	-
	Cramer factor	-	0,232	-	-
Learning by discovery, as a method	Pearson χ^2	-	-	-	p=0,008
	Cramer factor	-	-	-	0,244
Project task	Pearson χ^2	-	-	-	-
	Cramer factor	-	-	-	-
Teamwork	Pearson χ^2	p=0,015	-	-	-
	Cramer factor	0,242	-	-	-

Table 7. Statistical connections among teaching methods and teachers' roles from the students' view point

'Production, demonstration' method is in connection with the 'Learning organizer' role (p=0,030). To show special technics, machines, their operations, to use new methods, to try them demand a lot of organizational tasks from teachers which are perceptible by students.
'Observer and interventionist' and 'Estimator and evaluation' roles are in connection with 'Conversation' (p=0,001) and 'Learning by discovery' (p=0,008) methods but they are used the least. On the basis of these research results H1 and H2 hypotheses are accepted.

Teaching and learning methods are in connection with teachers' dominance roles and there are significant differences between students' and teachers' opinions about the right training methods.
In the second phase one of the hypothesis was investigated among managers and students. In the background of this investigation, there had been a lot of earlier research which reported that the enterprises/companies are not satisfied with young people with a new degree. Teachers miss cooperation with enterprises/companies. The rank of required competencies can be seen in the table 8.

Students' opinions				Leaders' opinions			
Number of samples	Sum of answers	Rank	Required competencies	Number of samples	Mean	Standard Deviation	Rank
372	340	1.	Profession (Knowledge)	462	4,4	0,741	2.
372	323	2.	Language knowledge	458	3,7	1,140	10.
372	308	3.	Adaptability	461	4,2	0,772	5.
372	300	4.	Communication skill	460	4,1	0,821	6.
372	281	5.	Creativity	460	3,9	0,927	7.
372	278	6.	Experience	458	3,7	1,018	11.
372	274	7.	Collaboration	461	4,5	0,724	1.
372	273	8.	Flexibility	462	4,4	0,731	3.
372	272	9.	Teamwork	461	4,3	0,782	4.
372	204	10.	Propriety	457	3,9	0,883	8.
394	190	11.	Obedience	456	3,8	0,910	9.
372	138	12.	Empathy	458	3,6	0,888	12.

. Table 8. The rank of required competencies according to students' and leaders' opinions

It can be established that these two groups of participants have a different opinion about the rank of the

required competencies. Students think that the most important competencies are their knowledge, language

knowledge, adaptability, communication skills and creativity. At the same time for managers the most important competencies are: collaboration, knowledge, flexibility, teamwork and adaptability.

It was investigated what these participants think if these competencies can be gained during their studies at universities or not. On the basis of similar logic students' and managers' answers were compared.

In table 9 the statistically significant differences of students' and managers' opinions are highlighted. (You can see the differences between ranks.) Students think that they acquire skills in teamwork, profession (knowledge), communication, collaboration and adaptability. Managers' opinion is the opposite of these. According to their experience, young people with a new degree have skills in collaboration, language, communication, creativity and flexibility. In some cases there are big differences between their opinions. For example: profession (knowledge), skills in teamwork, creativity, flexibility.

Students' opinions			Possessed competencies	Leaders' opinions			
Number of samples	Frequency	Rank		Number of samples	Mean	Standard Deviation	Rank
358	103	**11.**	Obedience	408	3,2	0,888	**11.**
358	253	**2.**	Profession (Knowledge)	418	3,4	0,873	**7.**
358	87	**12.**	Empathy	412	3,3	0,78	**10.**
359	203	**5.**	Adaptability	410	3,4	0,807	**8.**
358	127	**10.**	Propriety	411	3,4	0,866	**9.**
359	153	**9.**	Flexibility	415	3,6	0,854	**5.**
358	205	**4.**	Collaboration	414	3,7	0,803	**1.**
358	170	**8.**	Creativity	413	3,6	0,831	**4.**
359	192	**6.**	Language knowledge	413	3,7	0,900	**2.**
359	221	**3.**	Communication skill	416	3,6	0,827	**3.**
359	255	**1.**	Teamwork	412	3,6	0,821	**6.**
358	177	**7.**	Empirical experience	412	2,6	1,003	**12.**

Table 9. A rank of possessed competencies according to students' and managers' opinions

It was also examined what students' opinion is if there is a statistical correlation between the requirements of enterprises and competencies gained at universities. In the analysis, correlation calculation was used among the non-metrical variables. It serves to show direction and tautness of linear correlation among varieties. To control and analyse these nominal scales (dichotomous variables) simple cross-table analysis was used. The results show there are differences between the requirements of the labour market and the obtained competencies at universities according to students' opinion.

On the basis of the above showed logic, managers' opinion was investigated if there was a statistically significant correlation between the requirements of the labour market and the competencies supplied by universities or not. If there is a correlation, how strong it is. From this view, a weak connection was established, consequently there is no harmony between the requirements of the labour market and the competencies provided by the universities. (See table 10.)

Requirements of the labour market (expected) and acquired competencies at universities	Number of samples	Expect more than get	Required and given are the same	Get more than expected
Acquired obedience vs. expected obedience	398	**201**	139	58
Acquired knowledge vs. expected knowledge	406	**291**	93	22
Acquired empathy vs. expected empathy	402	174	163	65
Acquired adaptivity vs. expected adaptivity	402	**247**	118	37

Acquired propriety vs. expected propriety	400	194	136	70
Acquired flexibility vs. expected flexibility	404	**245**	132	27
Acquired collaboration vs. expected collaboration	402	**255**	120	27
Acquired creativity vs. expected creativity	404	176	140	88
Acquired language knowledge vs. expected language knowledge	402	156	110	136
Acquired communication skill vs. expected communication skill	404	197	140	67
Acquired teamwork, skill vs. expected teamwork skill	403	**239**	118	46
Acquired empirical experience vs. expected empirical experience	400	**260**	113	27

Table 10. Labour market requirements and acquired competencies at universities

In table 10 the differences between the required competencies and the possessed competencies of employees are summarized. On the basis of a Wilcoxon test, there are statistically significant correlations (p<0,01) in each case without language knowledge (p=0,936).

The table 10 shows in some cases, differences between the acquired and expected competencies. According to these results, enterprises miss skills in the following areas: profession (knowledge), adaptability, flexibility, collaboration, teamwork and empirical experience.
Altogether it can be established, students and economic players have different ideas about employees' competencies. On the basis of this result

H3 can be accepted.

In table 11. there are means and standard deviations of answers and their rank in case of enterprises. From the means it can be seen that each feature was mostly or absolutely important. There is only one exception: 'employees' personality should not be boring'. It is clear, deviation was very high in each case which means that questioned people's evaluation is not homogeneous.

The rank on the basis of means, leaders expect employees to be correct and honest, should be interested in the profession and should be authentic, should have realistic expectations concerning tasks and should be able to work in a team. These competencies and features can be developed during education, tuition and empirical trainings.

Expectations from employees	*Number of samples*	*Mean*	*Standard Deviation*	*Rank*
Should be honest and correct.	**483**	**6,2**	**0,983**	**1.**
Should be interested in profession.	**479**	**6,0**	**1,096**	**2.**
Should be authentic.	**483**	**5,9**	**1,056**	**3.**
Should have realistic expectations concerning tasks.	**483**	**5,8**	**0,975**	**4.**
Should have the ability to work in a team.	**485**	**5,8**	**1,048**	**5.**
Should have ethical norms.	**482**	**5,7**	**1,140**	**6.**
Should have realistic expectations regarding salaries.	482	5,6	1,116	7.
Should help colleagues.	483	5,6	0,993	8.
Should have realistic expectations regarding workplaces.	483	5,6	1,025	9.
Should have such knowledge which determines what he/she wants to do.	481	5,4	1,200	10.
Should have up to date information.	479	5,4	1,122	11.
Should have excellent communication skills.	484	5,1	1,272	12.
Should have empirical experience.	483	5,1	1,277	13.

| Should have foreign language knowledge. | 485 | 4,9 | 1,548 | 14. |
| Should not be boring. | 477 | 4,6 | 1,530 | 15. |

Table 11. Expectations of enterprises from employees

On the basis of this table it can be seen that the expectations of employees are ethical (1., 6.) and social (2.,3.,4.,5.) These preferred features require not absolutely professional knowledge.

Universities have a dual sorter role: at first, at entrance examinations, during the education to get a degree while students are selected, sometimes students drop out. Economic analyses show that ability to perform tests is in a weak correlation with abilities to perform special tasks at companies at a high level. These results confirm this thesis from the employers' point of view, it is the least important.

As the number of these variables was so high, data had to be reduced by Maximum Likelihood method. At first KMO and Bartlett's-test was used. On the basis of their results (KMO=0,847) and Bartlett's test (p<0,01) factor analysis can be used. (See table 12.)

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		,847
Bartlett's Test of Sphericity	Approx. Chi-Square	1346,835
	df	45
	Sig.	,000

Table 12. Results of KMO and Bartlett's Test

Expectations of enterprises towards employees	Components			Commu-nalities
	1	2	3	
Should have realistic expectations of tasks.	**0,849**	0,241	0,187	0,815
Should have realistic expectations of workplaces.	**0,735**	0,154	0,208	0,607
Should have realistic expectations of salaries.	**0,594**	0,245	0,195	0,451
Should be interested in profession.	0,096	**0,685**	0,146	0,499
Should be authentic.	0,207	**0,639**	0,179	0,483
Should have such knowledge which determines what he/she wants	0,248	**0,568**	0,132	0,401
Should be honest and correct	0,248	**0,425**	0,375	0,383
Should have the ability to work in a team.	0,129	0,056	**0,618**	0,401
Should have ethical norms.	0,228	0,255	**0,571**	0,443
Should help for colleagues.	0,111	0,165	**0,480**	0,270

Table 13. Factors about expectations of enterprises towards employees

The extracted factors were named:
1. Factor: Realistic expectations
2. Factor: Mature personality and professional preparedness
3. Factor: Social/communal being

The first factor contains realistic expectations. Employers expect a realistic behaviour and a realistic way of thinking of work, workplace and salaries.

The second factor contains a mature personality and professional preparedness. It means that employees should be conscious, authentic, correct, honest, open for his/her job.

The third factor contains expectations of social interactions, helpfulness, ability for teamwork and ethical norms.

The competencies and abilities which are determined and expected from employees by enterprises can be formed in education and due to social environmental effects. The knowledge as a resultant of the other competencies, it comes to light, most part of competencies - for example collaboration, flexibility, teamwork and communication, - rest on the quality of education, social and family life. Having examined all the social system, we can say that universities should handle education and transmission of the moral cognition equally with tuition and training.

On the basis of the above showed results hypothesis H4. is accepted. It means that the expectations of enterprises regarding employees are beyond professional knowledge, other light (soft) competencies are also required.

IV.   DISCUSSION

Because higher education has to ensure a knowledge transfer into the direction of practical life [1], a competence based training method and the necessity of a module system in the educational structure have to be stressed [2]. The research results strengthen these demands of companies. The value and quality of knowledge can be determined by competencies, erudition and professional skills [22] which will be judged by the economy and the labour market. Thus, first a transferable knowledge (usable, transformable), contents and formal requirement of knowledge have to be determined [1]. Competencies of professional fields have to be connected to study-modules. The contents of each study - material should be interpreted in each institution in the same way [23]. In this field Hungarian higher education has a lot to do. In the fist part of this research authors verified that methods and roles have to be changed in the educational system in the future in order to ensure a satisfaction of practical life in the companies. Competencies have to be determined very well and exactly and during the educational processes teachers have to focus on them. When the way of thinking and training practice will be changed, the finished modules by students can be authenticated and used later in every institution and in the practice of companies. Yusof et al. [24] confirm these ideas in their researches.Additional research results about the necessary competencies and teaching methods can be read in papers of Korableva et al. [15] and Mahbub [25].

In the second phase, the verification of hypotheses has shown that students and economic players have different ideas about competencies which are important in the labour market.According to students, employers expect professional knowledge, language knowledge, communication skills, adaptability, creativity from them. It is not the same as employers' opinions. According to them, knowledge and adaptability are important, but the most preferred are collaboration, flexibility and teamwork. Teturova and Brodsky [22] have had similar results in their researches.In addition, Jayawardena and Gregar [26] have stressed the importance of emotional intelligence as well.

Enterprises require more professional knowledge, flexibility, adaptability, collaboration, ability in teamwork, practical experience at a higher level than students can gain at universities. Altogether higher education cannot meet the expectations of the economic sector.

On the basis of empirical experience, it was verified that at the companies demands appear for soft skills/competencies beyond professional knowledge. In this frame with generated factors, it was verified that for enterprises professional knowledge and a mature personality are important, but there are more preferred employee values referring to work, workplace, salaries. The skills of teamwork, helpfulness which are very important for collaboration and success of enterprises play determinative roles in employers' expectations. Stavjaníčková [27] has verified the same results in her paper.

CONCLUSION

In this paper authors have tried to find answers to questions how knowledge transfer operates in universities, what kind of facts and processes form students' knowledge and competencies. What are differences students' and managers' opinion about the necessary competencies and if students possess these required competencies or not.

As the sample was not representative, our statements are valid in the examined institutions only. But the numbers of adapted questionnaires give a base to take generally valid conclusions. (Due to the fact that a lot of teachers have lessons in more institutes and students can study in more universities and their value systems and attitudes are close to each other, we can suppose that significantly different results cannot be shown in case of another sample either.)

In the frame of this survey hypotheses were verified.The actors of higher education see the trainings theory oriented rather than practice oriented.

The analysis of training context pinpointed that teachers prefer theoretical and specific technical knowledge transfer and they prefer lessons as a teaching method. These facts are confirmed by students' opinions. Most of all used training method is the teacher dominance and it is in connection with the 'decision maker' teachers' role only. There are significant differences between students' and teachers' idea about the right methods.

As readers see, higher education is theory oriented in Hungary. Conditions to form practical and other soft skills are at a low level. To build a knowledge society and a competitive economy is a very important task to harmonize the demands of companies and supply of universities. Such professional knowledge and competencies should be in the middle of education which can serve the demands of real markets. To this a conversation between players of economy and a change of structure and methods of higher education are needed. In a lot of regions of Europe conventional educational systems hinder forming and operating a competitive society and economy. If there is an expectation, an open way of thinking, collaboration, teamwork and flexibility from students, teachers, professors at universities have to take the first steps on this road.

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