



Research Report

„Entrepreneurs’ expectations from higher education institutions”

**Institute for Private Enterprise and Democracy
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This project has been funded with support from the European Commission. This interview reflects the views only of the author, and the Commission cannot be held responsible for any use which may be made of the information contained therein. 1

1. Presentation of methodology and selected enterprises

In February 2010 Institute for Private Enterprise and Democracy conducted a survey among Polish entrepreneurs regarding their expectations from higher education institutions. The survey consisted of four parts. In the first part the respondents were asked to indicate the important features deciding on the practical utility of higher education graduates for an enterprise. In the second part of the survey the interviewees could indicate the most needed skills deciding on the practical utility of higher education graduates for an enterprise and the average level of these skills provided by higher education institutions. In the next part of the survey the respondents were asked to indicate the form in which the new employees are trained in missing skills and how their enterprises show proper attitudes to inexperienced workers. The summary of the research was a ranking of the enterprises' recommendations to higher education institutions regarding the education offer and cooperation with business as well as pointing out their own recommendations.

Twenty respondents representing different size companies took part in the survey. The biggest group included small size companies employing no more than 50 workers (9 enterprises). Second group consisted of middle sized companies employing from 51 to 250 workers (6 enterprises). In the third questioned group were large companies employing more than 250 workers (5 companies). Among the interviewees were eight women and twelve men from which ten persons are company's owners or presidents, three persons are HR managers and seven persons are HR or marketing specialists or others.

In all questioned enterprises in the last year 47 higher education graduates were employed. The biggest group of employed persons included technical education graduates (38%). Slightly smaller group consisted of economical education graduates (34%). The lowest employment rate in the questioned enterprises was among humanities graduates (17%). The graduates of the other education types were less than 11% of the employed persons in 2009.

Table 1. Graduates employment rate in the questioned companies in 2009.

	technical education graduates	economical education graduates	humanities graduates	other education types graduates	employed graduates in total
large companies	12	4	2	1	19
middle sized companies	6	8	5	3	22
small & micro companies	0	4	1	1	6
	18	16	8	5	47

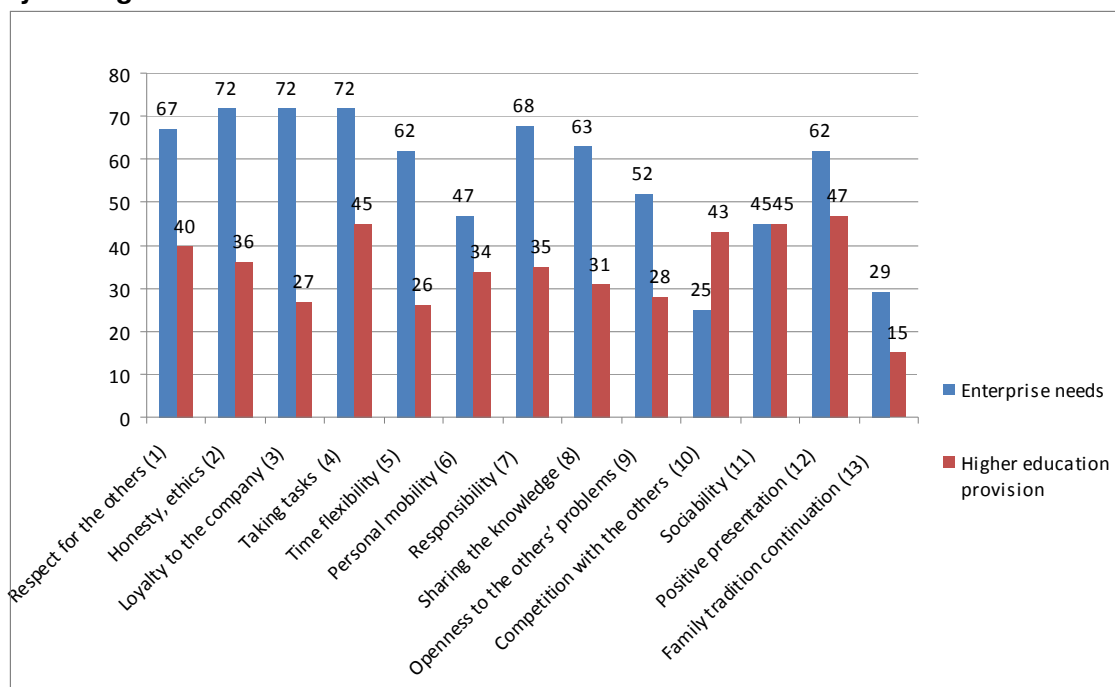
As shown in the above table education of the employed graduates in 2009 was definitely different considering size of the questioned companies. In large companies mostly technical education graduates have found employment (12 persons) and in middle sized and small companies – mainly economical education graduates (accordingly 8 and 4 persons). Noticeably in small companies no technical education graduates were employed in 2009.

2. Work attitudes. Personal values. Presentation

During the survey the entrepreneurs were asked to indicate the important features deciding on the practical utility of higher education graduates for their enterprises. The interviewees were asked to rank the validity of the given feature between “5”-extremely highly needed and “0”- not needed and to rank the average level of these features which is provided by higher education institutions between “5”-extremely highly provided and “0”-not provided. The features were divided into four groups:

- Personal values: 1/ respect for the others; 2/ honesty – personal ethics; 3/ loyalty to the company,
- Attitudes towards the employer: 4/ willingness to take tasks at work; 5/ time flexibility, willingness to work overtime; 6/ personal mobility, willingness to work in different locations; 7/ responsibility,
- Attitudes towards colleagues: 8/ willingness to share one’s own knowledge and experience; 9/ openness to the others’ problems; 10/ competition with other employees,
- Presentation: 11/ sociability; 12/ positive personal presentation; 13/ family tradition continuation.

The results are shown at **Chart 1. Features needed in the enterprises and their provision by the higher education institutions.**



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The questioned entrepreneurs stated that the most important skills are honesty and personal ethics (72 points), loyalty to the company (72 points), taking tasks (72) as well as responsibility (68) and respect for the others (67), willingness to share the knowledge and experience (63), time flexibility and willingness to work overtime (62) and positive presentation (62). The research has shown that the above mentioned features are not sufficiently realized by the higher education system. The biggest differences are noticeable in case of loyalty towards the company (45 points of difference), honesty and ethics (36), time flexibility (36) and responsibility (33), willingness to share the knowledge (32) and openness to the colleagues' problems (24). At the same time, willingness of competition with others is over-provided which is hindering employees from building teams in the enterprises, where an excessive attitude of competition with other workers is received negatively. The above chart shows that within all the features included in the survey the higher education institutions are not able to satisfy the entrepreneurs' needs.

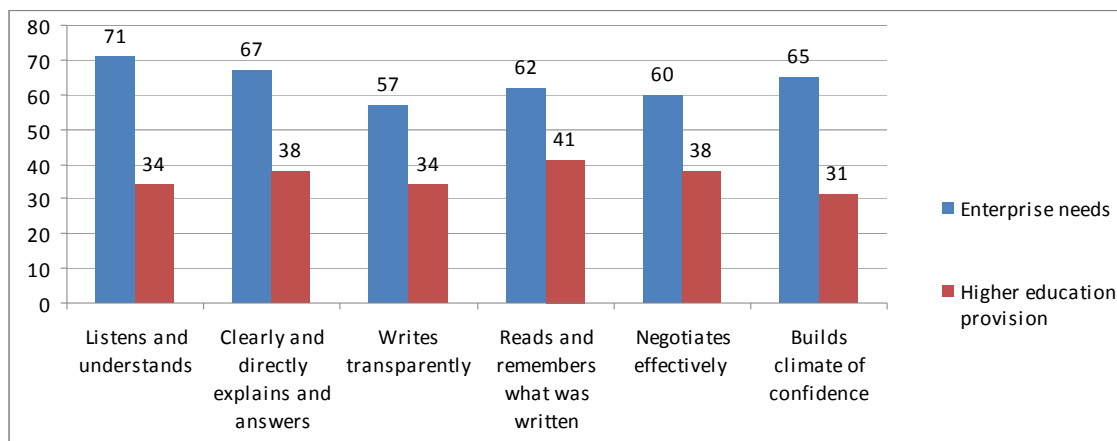
3. The most needed skills

During the survey the questioned entrepreneurs had a possibility to indicate the most needed skills deciding on the practical utility of higher education graduates for an enterprise and the level which is provided by higher education institutions. The skills were divided into four groups:

- Interpersonal skills: 1/ communication and 2/team work ability,
- 3/ problem solving and 4/ initiative and enterprise skills,
- Learning skills: 5/planning and organizing; 6/self awareness; 7/learning,
- Workplace skills: 8/ technology and technical devices.

Similarly as with the most needed features the interviewees could rank the validity of a given skill between "5"-extremely highly needed and "0"- not needed as well as the average level of a given skill provided by higher education institutions, in the same scale. The results are shown at the charts below:

Chart 2. Differences between the entrepreneurs' expectations and higher education institutions provision regarding communication skills



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Chart 3. Differences between the entrepreneurs' expectations and higher education institutions provision regarding team work skills

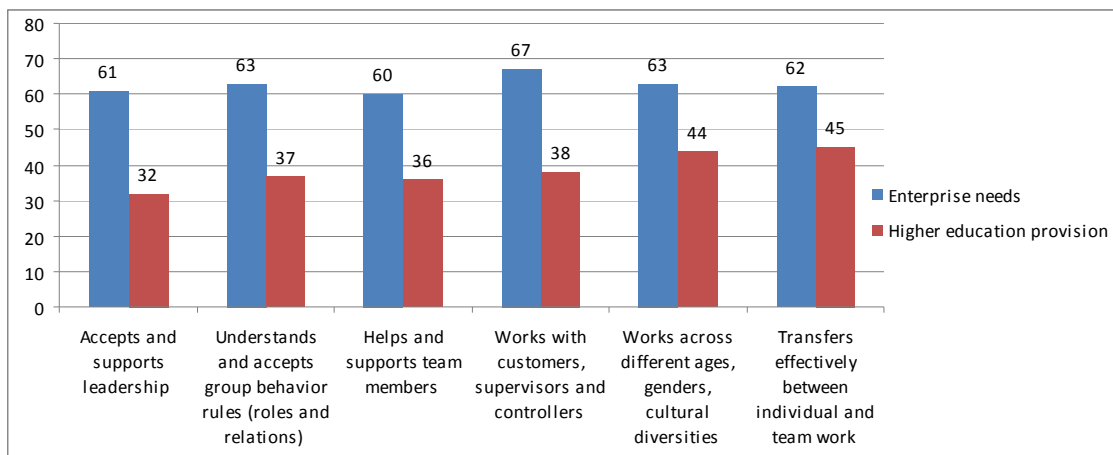


Chart 4. Differences between the entrepreneurs' expectations and higher education institutions provision regarding problem solving skills

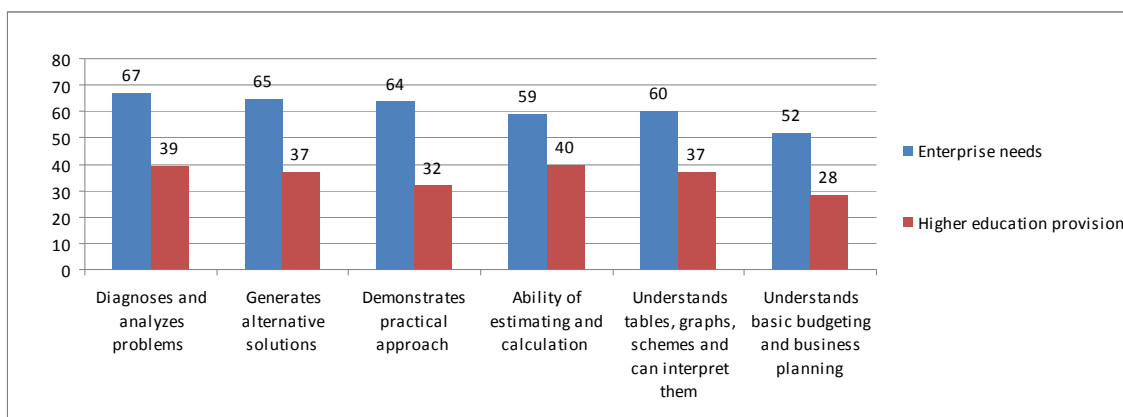


Chart 5. Differences between the entrepreneurs' expectations and higher education institutions provision regarding initiative and enterprise skills

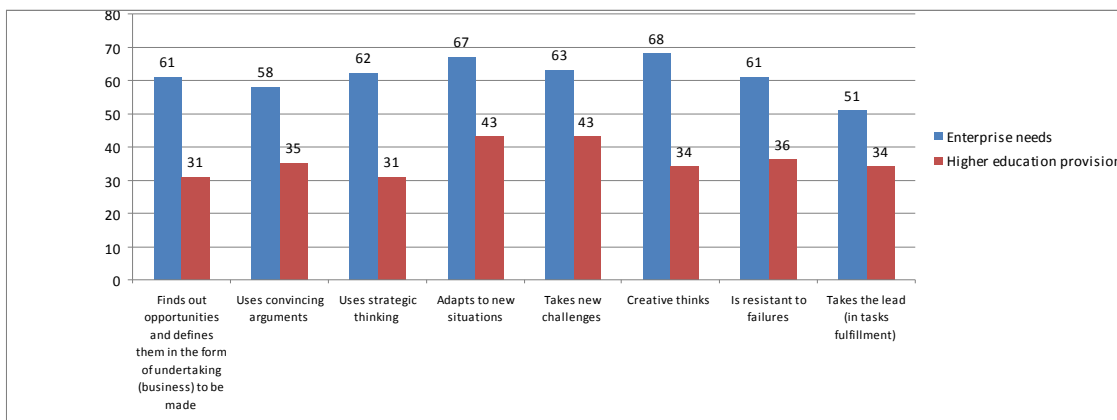
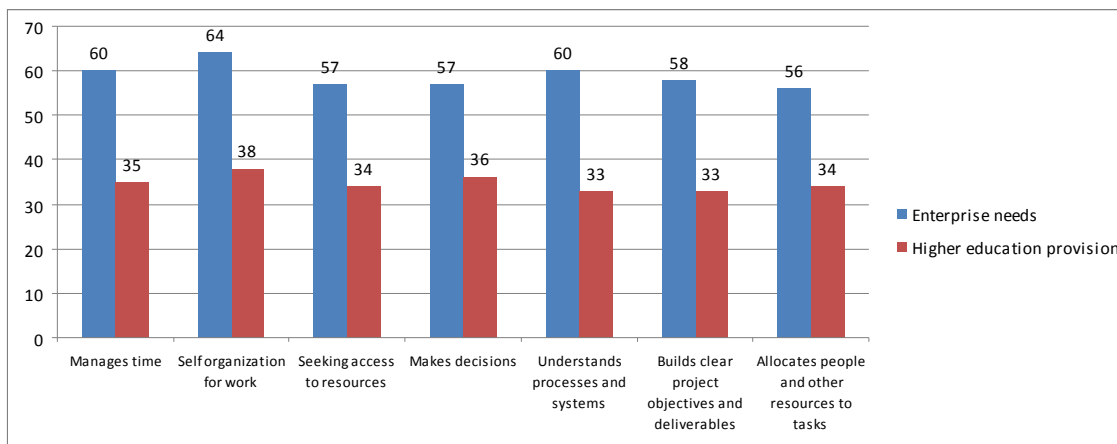


Chart 6. Differences between the entrepreneurs' expectations and higher education institutions provision regarding planning and organizing skills



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Chart 7. Differences between the entrepreneurs' expectations and higher education institutions provision regarding learning and self awareness skills

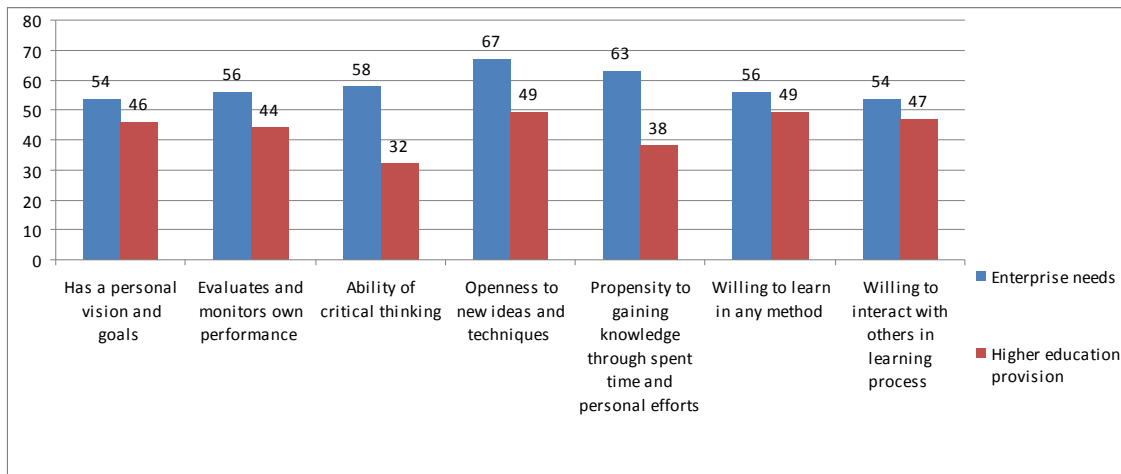
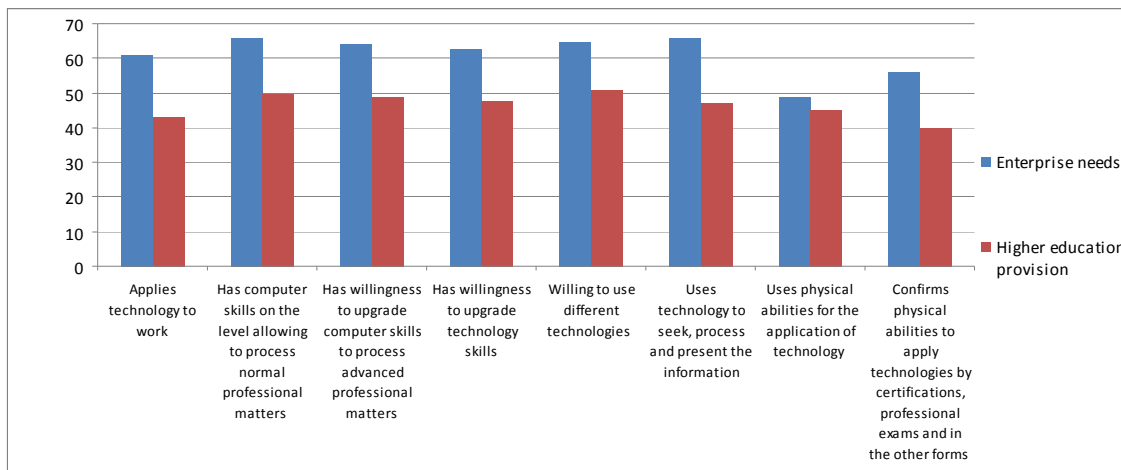


Chart 8. Differences between the entrepreneurs' expectations and higher education institutions provision regarding applying technology skills



The above presented charts show significant differences between skills needed in enterprises and skills provided by the higher education institutions. The biggest differences were indicated within communication skills (on average 27,5 points for all group) and within problem solving skills (27). Almost as large differences exist in rankings of team work skills (25,6) and initiative and enterprise skills (25,5). Differences, significantly lower though, are also visible regarding learning skills (19,4) and applying technologies (14,6). The achieved results point out insufficient adjustment of education process to the skills needed in enterprises.

4. Actions taken by enterprises to train the graduates in missing skills and show proper attitudes

4.1 Skills

Respondents were asked to indicate the form in which the new employees were trained in missing skills. In the survey eight groups of skills were specified: communication, team work, problem solving, initiative and enterprise, planning and organizing, self awareness, learning and technology – 48 features in total. The entrepreneurs could indicate such activities as regular training, written information or oral instruction for the higher education graduates (within 2 years after graduation) or other steps aiming in completing the missing skills. The entrepreneurs could give more than one answer. Some of the respondents did not indicate any form.

Regarding **communication** skills, the majority of the employers provide their workers with oral instructions in case of completing such skills as: concentration in listening (17 of 19 indications), formulating clear and direct explanations and answers (16 of 18), transparent writing (14 of 16), reading with understanding (16 of 18) and positive climate building (16 indications of 18). Few – one or two persons – use regular trainings and written information to raise skills within the above mentioned areas. 10 of 19 indications show that regular trainings are used more often only to complete effective negotiations skills. However 6 persons answered that in their cases oral instructions are given and 3 persons use written information.

In completing skills necessary in team work the majority indicated also oral instructions, for example regarding understanding and acceptance of leaders (16 indications of 21), understanding and acceptance of group behavior rules (15 of 21), helping and supporting team members (17 of 21), work across different ages, genders, cultural diversities (14 of 17 indications) and transferring effectively between individual and team work (14 of 17 indications). Completing skills regarding work with customers, supervisors and controllers according to the respondents more often is practiced by regular trainings (9 of 22 indications), though also in this area equally often oral instructions were given.

The situation regarding **problem solving** qualifications improvement looks a little bit different. Employees have a possibility to take part in regular trainings almost as often as they receive only oral instructions, which may indicate a lack of proper qualifications regarding problem solving techniques in companies. Shortages in such skills as: problem diagnosis and analysis, creation of alternative solutions, demonstration of practical approach, estimation and calculation, ability to understand tables, graphs, schemes and ability to interpret them as well as understanding basic budgeting and business planning have been completed during regular trainings in case of 5 and 8 enterprises respectively (for 17-21 indications respectively). In case of 8-11 enterprises only oral instruction has been adopted.

Skills in the area of **initiative and enterprise** are the most often completed by oral instructions – 9 to 15 indications (for total 17-22). Sometimes employees take part also in trainings regarding this aspect (2 of 8 indications). Very rarely written information is used regarding such activities as: finding opportunities and defining them in the form of undertaking (business) to be made, using convincing arguments, using strategic thinking,

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adapting to new situations, taking new challenges, creative thinking, resistance to failures and taking the leadership (in tasks fulfillment).

In case of qualifications connected with **planning and organizing** regular trainings are proposed quite often to the employees, helping them in diminishing shortages and improving their skills. This kind of learning has been most often chosen to develop such qualifications as: managing time (9 of 20 indications – as many as in case of giving oral instructions), project conducting and management (9 of 21 indications – in case of 7 respondents oral instructions have been also given) and management of people and resources (9 of 22 indications), however in the last case oral instruction are given more often (10 indications). To develop other abilities (self organization at work, seeking access to resources, decision making and understanding processes and systems) most employees use oral instructions (9-10 indications) as well as written information (1-5 indications).

Most of the respondents assessed that when it comes to **self awareness** understood as building career tracks as well as evaluating and monitoring the employees achievements, they provided only oral instructions to improve those qualifications of their employees (10-12 indications to 15-17 total).

Employees' qualifications in the area of **learning** are very important to entrepreneurs. In case of such abilities as critical thinking, building openness to new ideas and techniques, building high learning preference, training in different methods, providing group tasks and interactive activities in learning mostly oral instructions have been applied (11 of 14 indications for total 16-21).

Similarly in the case of **technology** skills the inexperienced workers mostly receive oral instructions in order to improve their qualifications. This kind of support has been indicated by 10-14 respondents in such areas as: knowledge how to apply technology to work, computer skills on the level allowing to process normal professional matters, building willingness to upgrade computer skills to process advanced professional matters, building willingness to upgrade technology skills, building willingness to use different technologies, using technology to seek, process and present the information, training physical abilities for the application of technology, providing confirmations or paying for confirmations proofing physical abilities to apply technologies. In case of some qualifications employees also use regular trainings (6-8 entrepreneurs) as well as written information (3-5 cases). What is more, additional training regarding advanced software handling has been proposed as a way of improving qualifications.

As other form of rising qualifications internal workshops organized within company's structures have been presented.

4.2. Attitudes

Participants of the research were also supposed to assess, how their companies may create and form expected attitudes in new and inexperienced employees. Among possible attitudes following items have been highlighted: Personal values (respect for the others, honesty – personal ethics, loyalty to the company), Commitment (willingness to take tasks, willingness to work overtime if necessary (time flexibility), personal mobility (willingness to work in different locations)), Reliability (responsibility taking, willingness of sharing own knowledge

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and experience, openness to the others' problems, competition with other employees (negative)) and Presentation (sociability, positive personal presentation, family tradition continuation). It may be said that most of entrepreneurs prefer to give oral instructions within all presented qualities (13 to 17 indications on 17-23 total) to train preferred attitudes. Written instructions are used very rarely. Furthermore, young employees are only occasionally offered to take part in regular trainings regarding attitudes development. None of the respondents marked trainings as a way of increasing competences in the area of commitment and presentation.

Apart from oral instructions, written information and regular trainings one of the respondents also mentioned creating internal workshops within company as a way of creation proper employees' attitude. No other qualities have been proposed or added by the research participants to those included in the survey.

4.3. Participants comments

Survey participants had also a possibility to propose other actions, which could help in creation and development of the most needed qualifications and abilities in newly employed graduates. 11 out of 20 respondents (which states for 55%) commented on this aspect. Taking into consideration these comments and survey results it may be concluded that oral instructions are the dominating form of qualifications development and proper attitudes creation. In some cases it happens only once – at the beginning of work of new employee within organization (or at the beginning of a new project or when new technology is implemented), or few times – depending on situation and needs. Sometimes oral instructions are given only when there arise some problems with tasks fulfillment. Some entrepreneurs also refer their employees to external trainings and workshops (general and specialized), when there appears such need, when employees want to take part in it and provided that training is connected with undertaken job and will bring benefits.

In one company new employees adaptation within the structures and expectations of the organization is one of the elements of Human Resources Management system, during which new employee is acquainted with all the processes within the organization, internal rules and legal regulations, work ethics, etc.

3 out of 11 respondents highlighted also the practical side of qualification development process, claiming that specific, concrete activities are the best way to create necessary attitudes and skills. It is worth to quote one statement: "The best way to learn necessary attitudes and skills is practice which has to be accompanied by a lot of time and patience. Depending on personality and character of our graduate it very often happens that we have to change his/her scope of work and tasks. It comes out that the primary scope of work did not successfully match the person it was created for and its change brings great results in the employee performance".

Unfortunately 3 out of 20 survey participants admitted that they do not employ graduates without professional experience.

5. Recommendations of enterprises to higher education institutions

Entrepreneurs taking part in the survey were also asked to assess and mark (in scale from 1 to 10) the importance of proposed recommendations to higher education institutions regarding educational offer and level of cooperation with business. In opinion of survey participants not only theoretical knowledge acquired during studies is of great importance but also practical skills and abilities which may be used at work. This is why the most important recommendation is a necessity to certify not only achieved knowledge but also acquired skills (a list of achieved skills and on which level). It was also highlighted that there is a great need of closer cooperation between education institutions and entrepreneurs to consult educational curricula with business. It is also necessary to react actively on educational needs of businesses and negotiate with entrepreneurs the detailed scope of skills and knowledge training in particular areas.

The least expected, but also important for the entrepreneurs (taking into consideration the average result 106 and 119) is giving businesses a possibility to influence the educational curricula (in much wider scope than within simple consultations) and including Business Associations in the Boards of higher education institutions.

Three respondents proposed their own recommendations assessing them as the most important from their point of view. These were: necessity to implement advanced practical classes of information technology (IT) for every studies faculty, lasting at least few semesters, necessity to organize internships (by the education institutions) compliant with the major subject studied and verifiable by specially designed exams which could enable students to gain necessary practical skills. The last but not least recommendation is the necessity to intensify activities undertaken by career departments within higher education institutions.

Table 2. Entrepreneurs recommendations ranking

RECOMMENDATIONS	Votes in total
Higher education institutions should prove not only achieved knowledge level but skills achievement level as well	168
Each higher education institution should list what skills are achieved during realization of its curricula and on what level	163
Higher education institutions should consult their curricula with business associations	161

Higher education institutions should be more proactive and responsive to enterprises needs	160
Higher education institutions should have similar (independent) skills achievement tests allowing to compare their efficiency in reaching the skills competence levels	158
Higher education institutions should negotiate with business the detailed scope of skills and knowledge training in particular areas	152
Recognition of necessary skills achievement levels should be statutory tasks of higher education institutions	131
Higher education institutions should link the skills trained by them to their commercial use	127
Higher education institutions should continue training in literacy and numeracy to achieve higher levels	125
Higher education institutions should include Business Associations in their Boards	119
Businesses should have the right to influence on the educational curricula	106

5.1. Respondents comments

Survey participants had also a possibility to present their own comments and recommendations. Fifteen entrepreneurs have shared their opinion, which we present below in form of postulates:

1. Higher education institutions should learn how to use theoretical knowledge in practice.
2. It is needed to increase the number of hours of internships and student practices, so the students could be involved more deeply in cooperation with future employers. Good idea to get first contact with future employees and to verify possessed knowledge and skills would be “first work” programmes for the best students.

3. It is needed to implement as a rule ability to use defined cycle of constant development “Plan-Do-Check-Act”
4. Higher education institutions should run classes strengthening personality features, students’ attitudes, targeting on success, defining targets and their realization. Higher education institutions should prepare graduates to work with the feeling of responsibility and humility. More care should be given to preparation to work in a team.
5. Higher education institutions should verify their educational curricula basing on entrepreneurs’ needs. Education institutions should concentrate on the needs of companies applying advanced technologies and on society’s needs.
6. Each institution should state the minimum level of skills which their graduate would obtain and should verify assessed skills at the end of the learning process using the competence tests (consolidated test for each faculty).
7. It is needed to implement western system of learning based on the analysis of business situations and cases. Students should not only rely on theory but also face real business challenges. Theoretical issues should be presented in the form of workshops – case studies (team work in order to manage real tasks and problems). Learning programs should allow for higher scope of effects simulations of the solutions proposed by the students as an answer to the real business problems.
8. It is needed to run mentoring programs, during which student could gain knowledge from a certain person holding a high post in an acclaimed company.
9. Relations between higher education institutions and businesses should be strengthened, i.e. by running together researches and projects, free flow of human resources, exchange of ideas and know-how.
10. It is needed to implement additional linguistic courses (foreign languages).