



Management Innovation Development

MIND

WP1

Mapping competences of young entrepreneurs



Co-funded by the
Erasmus+ Programme
of the European Union



GENERAL INSTRUCTIONS

Project Acronym:	MIND
Project full title:	Management – Innovation - Development
Project No:	561539-EPP-1-2015-1-ES-EPPKA2-CBHE-JP
Funding Scheme:	ERASMUS + KA2
Coordinator:	Universidad Las Palmas de Gran Canaria ULPGC, SPAIN
Project start date:	October 15, 2015
Project duration:	36 months
Leader of WP1:	Slovak University of Technology in Bratislava

The project's objective is to strengthen on the most important aspects of the countries strategy - the establishment and development of small and middle entrepreneurship and innovation development. The Project will foster growth and development of start-ups and private enterprises in the Central Asia (CA) through Education - it will enhance their competitiveness and management effectiveness by providing newly started enterprises with practical business development advice.

The Project aims to strengthen the stability of Central Asian universities and to improve the attractiveness of the educational programs. The importance of education for sustainable development, are prioritized in the National Sustainable Development Strategies in CA Countries where it states that the quality of education is one of the most reliable indicators of the future development of any nation.

The first stage of the Project foresees to define a competency framework for the training in relevant topics. This map will provide the state of the art of the range of competencies (described under roles, technical, participative and social skills, and expertise) of the project target and allow a better analysis for the identification of the most suitable training.

The consortium of the Project includes HEI's that will provide the necessary expertise and support in the project implementation. The project includes a well-balanced consortium (partners) of: 9 CA HEI's; 1 Kyrgyz consulting company (P7):

- P6** – Kyrgyz National University, Kyrgyzstan - **KNU**
- P7** – Capacity Building Consulting Group, Kyrgyzstan - **CBC Group**
- P8** – Osh Technological University, Kyrgyzstan - **OshTU**
- P9** – Talas State University, Kyrgyzstan - **TaISU**
- P10** – Tashkent State University of Economics, Uzbekistan - **TSUE**
- P11** – Bukhara State University, Uzbekistan - **BSU**
- P12** – Samarkand Agriculture Institute, Uzbekistan - **SAI**
- P13** – Technological University of Tajikistan, Dushanbe, Tajikistan - **TUT**
- P14** – Russian-Tajik (Slavonic) University, Dushanbe, Tajikistan - **RTSU**
- P15** - Khorog State University named after M.Nazarshoev, Tajikistan - **KhSU**

The Slovak University of Technology in Bratislava is responsible for the Mapping competences of young entrepreneurs. Map of training needs.

The responsible leader of the WP1 – Slovak University of Technology in Bratislava has prepared after the Kick of meeting of the Project in February 2016 in Las Palmas de Gran Canarias under the coordination and in cooperation with all partners of the project needs analysis guidelines and questionnaires of all targeted groups.

ACTIVITY DESCRIPTION

The data collection guidelines document was the first output of the MIND Project, specifically Activity: **Survey definition and data collection**. The document was included the description and all relevant details of this activity, including tasks and responsibilities to be undertaken by each CA partner institution.

The activity was described as follows:

Tab.1 Activity description

1.1	Needs Analysis and data collection
Duration	1,5 Months
Objective	Analyze the entrepreneurship and innovation situation in each CA partner institution
Inter-dependencies	The results of this study will form the knowledge base for all further project activities and potential impact on further actions.
Activities Description	<ul style="list-style-type: none"> • Definition of the data collection and analysis methodology • Preparation of the Needs Analysis • Strategy for involvement of all targets (HEIs managers, HEIs academics and researchers, research institute, starting entrepreneurs/managers) • Visit to other HEIs and target groups for data collection based on interview •
Expected results	1 needs analysis methodology, questionnaires, 1 interview for data collection, , raw data from more than 300 respondents from institutions mentioned above will represent and express needs analysis.
Target groups	HEI & Research Institutes (academics, managers, researchers, R&I Units staff), starting entrepreneurs/managers
Coordinator	STUBA led the methodology development, guided partners in the data collection phase and proposed the templates for the partners' reports and the summary activity report.
Participants	Each CA partner institution collected data, analyzed and prepared individual reports.

METHODOLOGY

We suggested to use the following procedure and methodology for Data Collection:

1. On-line and paper-based surveys for 2 different target groups
2. Interviews to generate deeper understanding and follow up
3. Goal – to collect more than 300 respondents across 2 target groups
4. The filled questionnaires, the final analysis, table and report were sent to: leader of WP1 (eva.jankovichova@stuba.sk) and the complete questionnaires to Project coordinator (mind@ulpgc.es).

TARGET GROUPS

1. Higher Education Institution (HEIs)

- 1.1 Academics
- 1.2 Managers
- 1.3 Researchers
- 1.4 R&I Units staff

2. Starting entrepreneurs/managers

- 2.1 Local enterprises
- 2.2 SMEs

NUMBER OF RESPONDENTS

- 1. HEIs: 30 respondents
- 2. Starting entrepreneurs/managers: 5 respondents

METHODS FOR DATA COLLECTION, FINAL TABLE AND REPORT

Each CA project partner institution was asked to clearly define their sample size using the final following table and wrote a report.

The partner institutions sent the results of their filled questionnaires, the final analysis, table and report to eva.jankovichova@stuba.sk.

The complete questionnaires to mind@ulpgc.es.

Tab.2 Final table

THIS FINAL TABLE WAS ADAPTED BY EACH PARTNER TO THEIR PARTICULAR NEEDS			
Target group - criteria	Respondents	Sample Selection Process	Method of data collection
1. HEIs, Academics, Researchers <ul style="list-style-type: none"> - From partner HEIs - From other HEIs - Researchers - R&I Units staff 	<u>Partner HEIs</u> <ul style="list-style-type: none"> • managers • academics • researchers • R&I Units staff <u>Other HEIs</u> <ul style="list-style-type: none"> • managers • academics • researchers • R&I Units staff <u>Other RIs</u> <ul style="list-style-type: none"> • R&I Units staff TOTAL: 30	Leadership meetings, letter from the Rector. Official and personal contacts.	Official lists, Networks On line – with follow-up meetings, focus groups, telephone interview, face to face
2. Starting entrepreneurs/managers <ul style="list-style-type: none"> - Local enterprises - SMEs 	Entrepreneurs / managers TOTAL: 5	Make a list of enterprises Associations, Chamber of commerce	On-line, phone calls, meetings, focus groups, face to face
TOTAL	35		

The Slovak University of Technology prepared questionnaires for two target groups: Higher Education Institution (HEIs) and starting entrepreneurs/managers.

One questionnaire was looking at the Management, Innovation and Development system – **in Higher Education Institutions (HEIs)**.

It contained questions on the following areas:

- **A** - General information about each CA project partner institution
- **B** - Mapping existing and suggested competences at topics/subjects
- **C** - Methods and forms of acquisition of these competences

Second questionnaire was focused on the Management, Innovation and Development system – **in enterprises**.

- **A** - General information about institution/company
- **B** - Mapping existing competences of young entrepreneurs/managers
- **C** - Mapping the required competences of young entrepreneurs/managers
- **D** - Methods and forms of acquisition of these competences

Questionnaire scale was used:

1 = Most Preferable and **4 = Least Preferable**

(B/C - Mapping existing/ required competences of young entrepreneurs/managers)

1 = Very Important **2 = Important** **3 = Not very important** **4 = Not at all important**

(D - What are the appropriate methods and forms of education to improve these competences?)

Key competencies

Key competencies represent a whole package of knowledge, skills and attitudes which are necessary for each individual to be able to fulfill personal development, social inclusion, and to be able to improve employability. These competences should be achieved by the end of compulsory education or training and should be the base for further education in the overall understanding of the lifelong learning in humans.

Key competencies emerge in a wide range of education and training.

(Source: *Commission Staff Working Paper: Progress Towards the Common European Objectives in Education and Training – Indicators and Benchmarks*, 2010/2011, EU 2011, ISBN 978-92-79-20231-5).



Target 1

1.1 Map of students training needs in HEIs

A - General information about CA partner institutions

The information from questionnaires consisted of three topics, namely general information about institution, number of students (undergraduate, masters, PhD), lectures and researchers and information about number of degree/non-degree programs.

P6 – Kyrgyz National University, Kyrgyzstan - KNU

Country:	Kyrgyzstan
Institution name:	Kyrgyz National University
Address (Please include ALL campus addresses if applicable):	Main campus -547, Frunze street, Bishkek-720033, Kyrgyzstan tel.00 996 312 32-33-84 fax.00 996 312 32 31 24 Campus 2: Bishkek, str. Kiev - 132 Campus 3: Bishkek, str. Turusbekova - 116 Campus 4: Bishkek, str. Manas - 66 Campus 5: Bishkek, str. Manas - 66 Campus 6: Bishkek, str. Abdymomunova - 238 Campus 6A Street, Bishkek. K.Akieva - 85 Campus 7: Bishkek, ul.Turusbekova - 109 Campus 8: Bishkek, ul.Zhibek Joly - 394
Your role/s in the institution (Vice-dean, teacher, researcher, etc.):	Rector- Chinara Adamkulova

How many students are there at your institution?	Undergraduate	Masters	PhD
	14,788	1,046	237
How many lecturers are there at your institution?	Total: 1,963 including 541 professors, 117 doctors. (full time – 1600)		
How many researchers are there at your institution?	41		
Indicate the percentage of the lecturers mentioned above which are employed on a full-time basis.	82%		

How many degree programs does your institution offer?	Undergraduate	Master	PhD
	21	21	21
How many non-degree programmers does your University offer?	Online	Professional training	Other (specify)
	No	No	No

P7 – Capacity Building Consulting Group, Kyrgyzstan - CBC Group

Country:	Kyrgyzstan
Institution name:	Capacity Building Consulting Group
Address (Please include ALL campus addresses if applicable):	72 Fatyanov str., Bishkek, Kyrgyz Republic
Role/s in the institution (Vice-dean, teacher, researcher, etc.):	Senior and junior consultants 16 Managing board 4

Number of survey participants	Total: 20
-------------------------------	-----------

P8 – Osh Technological University, Kyrgyzstan - OshTU

Country:	Kyrgyzstan
Institution name:	Osh Technological University
Address (Please include ALL campus addresses if applicable):	Isanova st, 81 Main building Isanova st, 57 College
Your role/s in the institution (Vice-dean, teacher, researcher, etc.):	Head of department «Management», Teachers

How many students are there at your institution?	Undergraduate	Masters	PhD
	6,548	123	39
How many lecturers are there at your institution?	Total: 574 including 125 professors, 449 junior and senior teachers		
How many researchers are there at your institution?			
Indicate the percentage of the lecturers mentioned above which are employed on a full-time basis.			

How many degree programs does your institution offer?	Undergraduate	Master	PhD
	45	10	10
How many non-degree programmers does your University offer?	Online	Professional training	Other (specify)

P9 – Talas State University, Kyrgyzstan – TalSU

Country:	Kyrgyzstan
Institution name:	Talas State University
Address (Please include ALL campus addresses if applicable):	K.Nurzhanov str, 25 Main building Ch.Aitmatov, 192 Humanitarian faculty K.Nurzhanov str.40 Technological faculty Myrzaliev str.65 Natural sciences and Pedagogy faculty
Your role/s in the institution (Vice-dean, teacher, researcher, etc.):	

How many students are there at your institution?	Undergraduate	Masters	PhD
	2,280	760	960
How many lecturers are there at your institution?			
How many researchers are there at your institution?			
Indicate the percentage of the lecturers mentioned above which are employed on a full-time basis.			

P10 – Tashkent State University of Economics, Uzbekistan - TSUE

Country:	Uzbekistan		
Institution name:	Tashkent State University of Economics		
Address (Please include ALL campus addresses if applicable):	49, Uzbekistan avenue, Tashkent city, Uzbekistan		
Your role/s in the institution (Vice-dean, teacher, researcher, etc.):	Vice rector, lecturer, head of international department		
How many students are there at your institution?	Undergraduate	Masters	PhD
	Total: more than 6,000 students		
How many lecturers are there at your institution?	Nearly 600 professors		
How many researchers are there at your institution?			
Indicate the percentage of the lecturers mentioned above which are employed on a full-time basis.			

P11 – Bukhara State University, Uzbekistan - BSU

Bukhara State University sent no information, no questionnaire replies.

P12 – Samarkand Agriculture Institute, Uzbekistan – SAI

Samarkand Agricultural Institute (SAI) is one of the largest agricultural higher education institutions in Central Asia. The institute has about 5200 students. It has five faculties train personnel in 17 directions of education.

The following faculties make part of our Institute: (1) faculty of management in agriculture (2) faculty of Agronomy (3) faculty of Veterinary (4) faculty of Agricultural engineering (5) faculty of Zoo engineering and karakul sheep breeding. Aiming to evaluate the establishment and development of small and middle entrepreneurship and innovation development as well as to evaluate qualification requirements, we surveyed administrative and academic staffs as well as researchers of our Institute and other HEIs of Samarkand region.

Country:	Uzbekistan		
Institution name:	Samarkand Agriculture Institute		
Address (Please include ALL campus addresses if applicable):			
Your role/s in the institution (Vice-dean, teacher, researcher, etc.):	Vice rector, lecturer, head of international department		
How many students are there at your institution?	Undergraduate	Masters	PhD
	Total: about 5,200 students		

P13 – Technological University of Tajikistan, Dushanbe, Tajikistan – TUT

There are 9 faculties and more than 22 departments in the structure of the University in the city of Dushanbe, which full fills the full time education and education in correspondence of more than of 5000 students in 44 different specialties. There are about 250 teaching staff including academic and corresponding members. Tajik Academics of Sciences, doctors and candidates of sciences, professors and associate professors.

Country:	Tajikistan		
Institution name:	Technological university of Tajikistan		
Address (Please include ALL campus addresses if applicable):	N. Qaraboev street 63/3, Dushanbe town, 734061, Republic of Tajikistan		
Your role/s in the institution (Vice-dean, teacher, researcher, etc.):			
How many students are there at your institution?	Undergraduate	Masters	PhD
	Total: more than 5,000 students: 96%	3.8%	0.2%
How many lecturers are there at your institution?	About 250 teaching staff including academic and corresponding members.		
How many researchers are there at your institution?			
Indicate the percentage of the lecturers mentioned above which are employed on a full-time basis.			

P14 – Russian-Tajik (Slavonic) University, Dushanbe, Tajikistan – RTSU

Number of students studying in your institution	Bachelor	Masters	PhD
	5,258	742	23
Number of teachers working in your institution	326		
Number of researchers in your institution	56 Doctors of Science , 144 PhD		
Indicate the percentage of teachers mentioned above, which operate on a permanent basis.	61.3%		

Masters programs offered by the university	Bachelors	Masters	PhD
	16	21	4
Non-masters programs offered by the university	Online	Professional trainings	Others (please indicate)

P15 - Khorog State University named after M. Nazarshoev, Tajikistan - KhSU

Country:	Republic of Tajikistan
Institution name:	Khorog state university named after M. Nazarshoev Ministry of education Republic of Tajikistan
Address (Please include ALL campus addresses if applicable):	22 Lenin Street, Khorog GBAO Tajikistan,736000 tel.: + 992 93 598 45 63
Your role/s in the institution (Vice-dean, teacher, researcher, etc.):	

Number of students studying in your institution	Bachelor	Masters	PhD
	Total: about 4,833	142	10
Number of teachers working in your institution	314		
Number of researchers in your institution			
Indicate the percentage of teachers mentioned above, which operate on a permanent basis.	57.8%		

Masters programs offered by the university	Bachelors	Masters	PhD
	48	13	4
Non-masters programs offered by the university	Online	Professional trainings	Others (please indicate)

Partial conclusion:

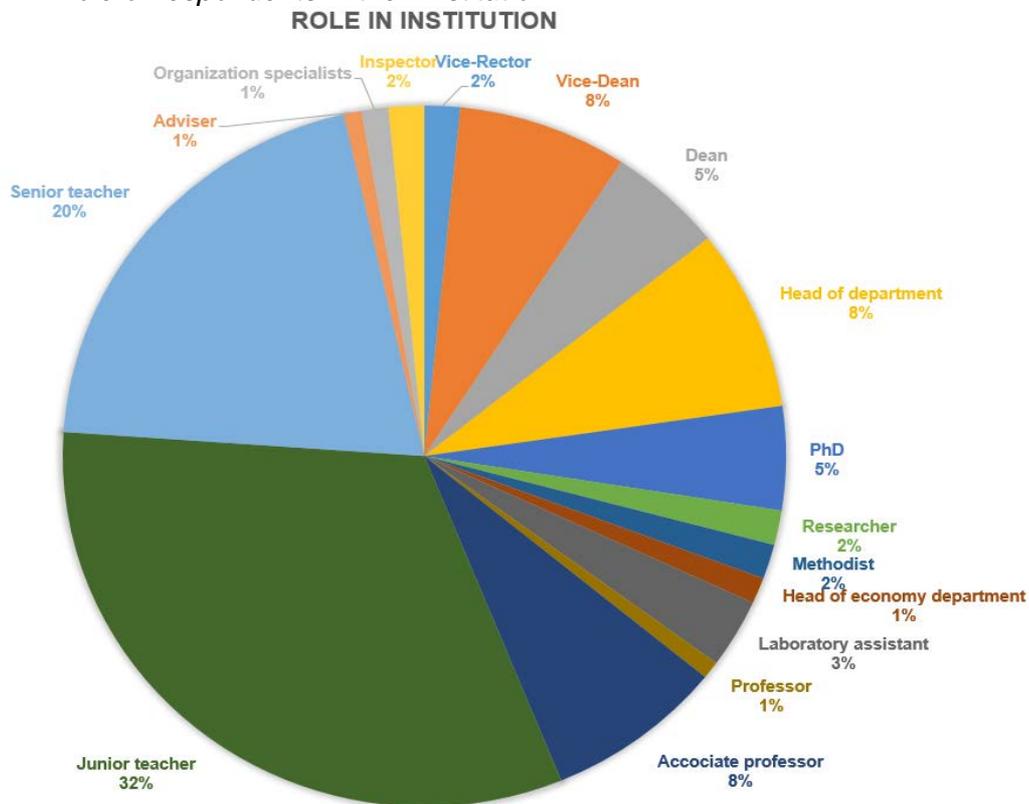
General information about CA partner institutions from questionnaires was incomplete from many partners. Missing the particular data and figures.

Bukhara State University sent no information, no questionnaire replies.

B - Mapping existing and suggested competences at topics/subjects

Analysis of respondents was the following:

Graph 1 Role of respondents in their institution



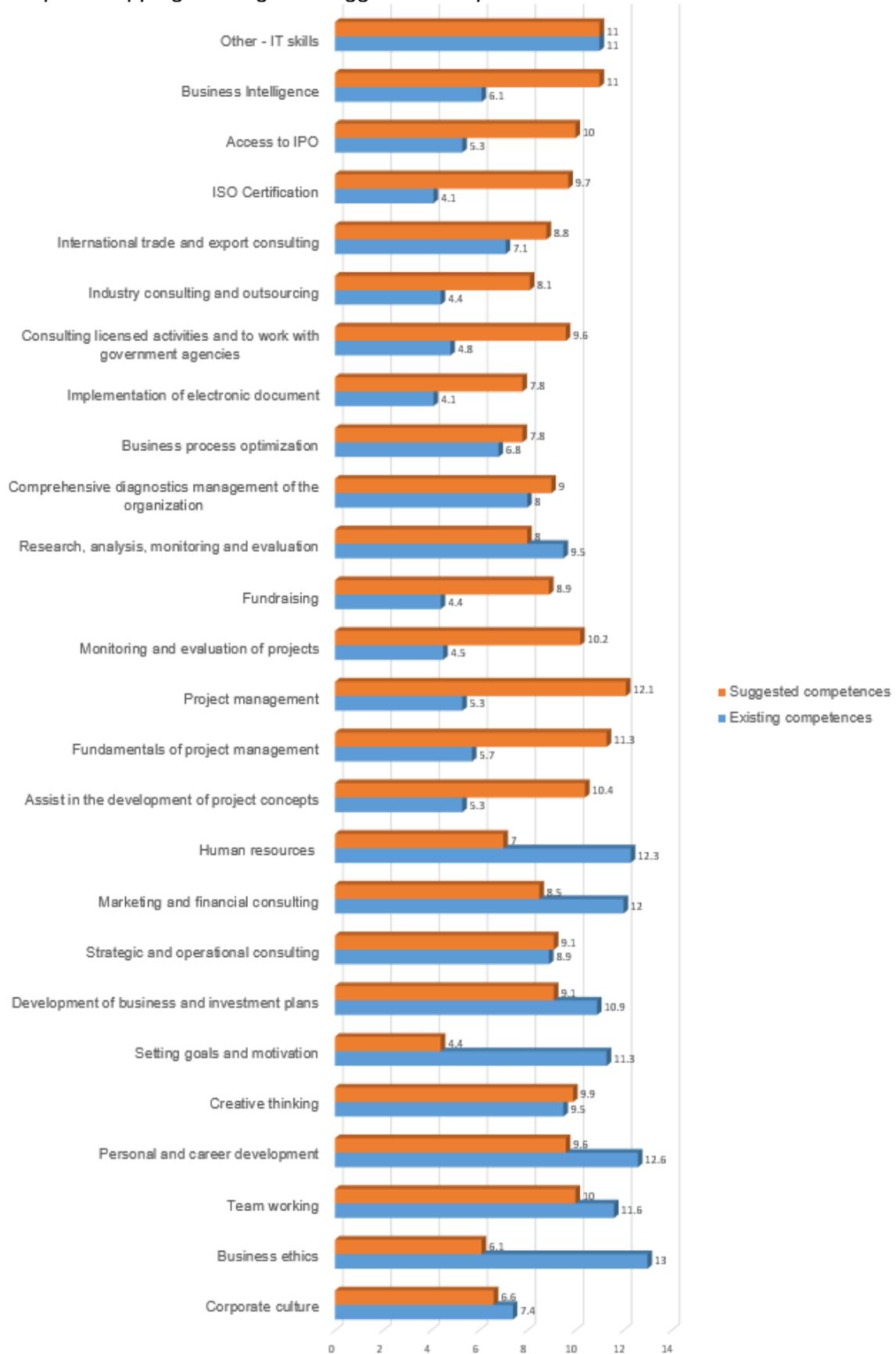
Total number of respondents from HEIs and consulting companies was 271. Individual Project partners contacted different number of respondents, from 20 to 50. Graph 1 (*The role of respondents in their institution*) illustrates the survey results from 271 respondents. We can see that most of all respondents were junior teachers (32%) and senior teachers (20%).

Tab. 3 Mapping existing and suggested competences

Areas of competences	Existing competences	Suggested competences
Corporate culture	7.4	6.6
Business ethics	13.0	6.1
Team working	11.6	10.0
Personal and career development	12.6	9.6
Creative thinking	9.5	9.9
Setting goals and motivation	11.3	4.4
Development of business and investment plans	10.9	9.1
Strategic and operational consulting	8.9	9.1
Marketing and financial consulting	12.0	8.5
Human resources	12.3	7.0
Assist in the development of project concepts	5.3	10.4
Fundamentals of project management	5.7	11.3
Project management	5.3	12.1
Monitoring and evaluation of projects	4.5	10.2
Fundraising	4.4	8.9
Research, analysis, monitoring and evaluation	9.5	8.0
Comprehensive diagnostics management of the organization	8.0	9.0
Business process optimization	6.8	7.8
Implementation of electronic document	4.1	7.8
Consulting licensed activities and to work with government agencies	4.8	9.6
Industry consulting and outsourcing	4.4	8.1
International trade and export consulting	7.1	8.8
ISO Certification	4.1	9.7
Access to IPO	5.3	10.0
Business Intelligence	6.1	11.0
Other: IT skills	11.0	11.0



Graph 2 Mapping existing and suggested competences



Partial conclusion:

Coming from the survey, following findings can be pointed out the most existing and suggested competences on the undersigned topics/subjects:

Existing competences

- Business ethics
- Personal and career development
- Human resources
- Marketing and financial consulting
- Team working

Suggested competences

- Project management
- Fundamentals of project management
- Business Intelligence, IT skills
- Assist in the development of project concepts
- Monitoring and evaluation of projects

C - Methods and forms of acquisition of these competences

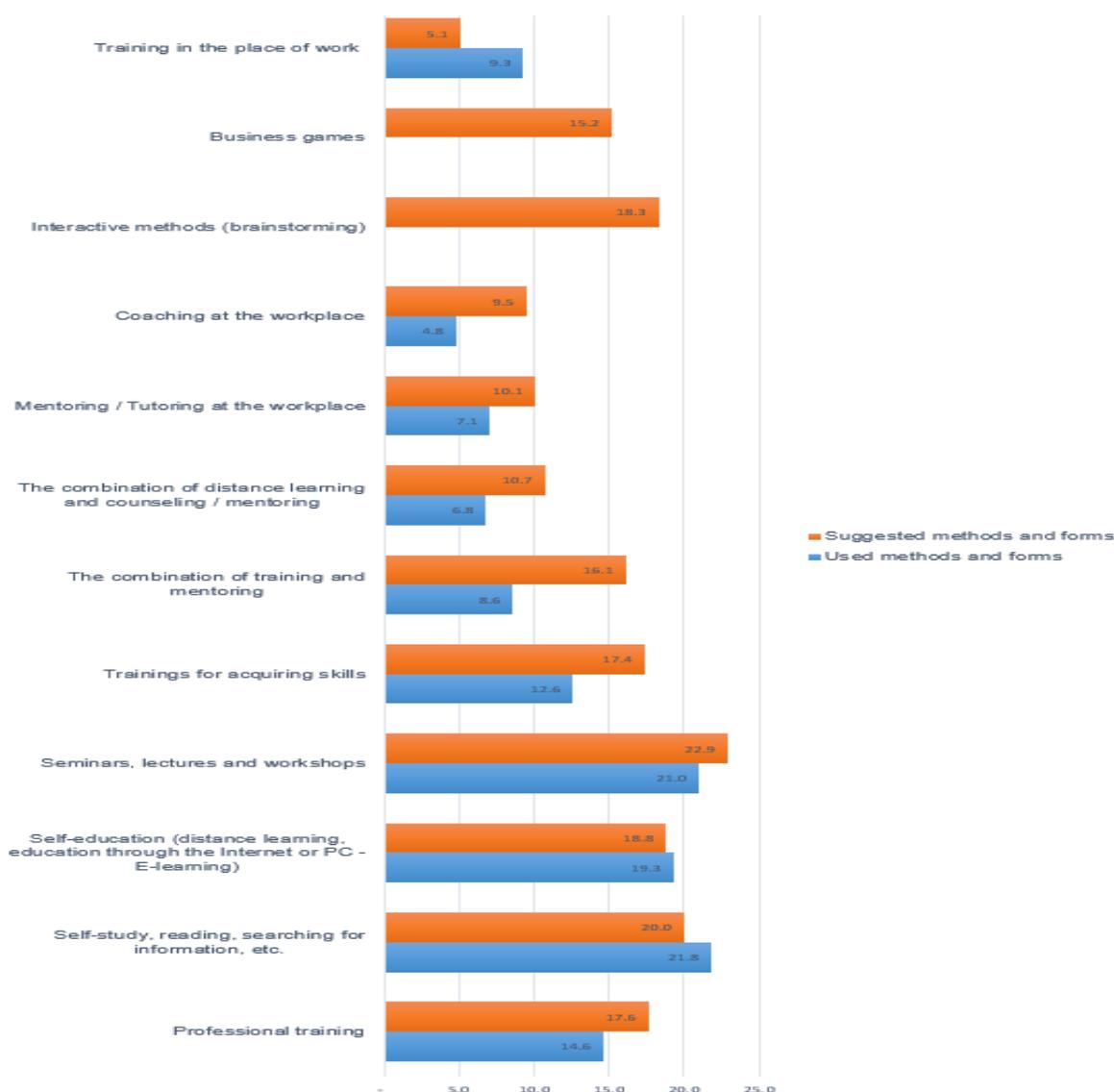
The respondents answered on the question: *What methods and forms of education do you use and propose to acquisition these competences? in Table 4 (Graph 3).*

Tab. 4 Methods and forms of acquisition competences

Methods and forms	Used	Suggested
Professional training	14.6	17.6
Self-study, reading, searching for information, etc.	21.8	20.0
Self-education (distance learning, education through the Internet or PC - E-learning)	19.3	18.8
Seminars, lectures and workshops	21.0	22.9
Trainings for acquiring skills	12.6	17.4
The combination of training and mentoring	8.6	16.1
The combination of distance learning and counseling / mentoring	6.8	10.7
Mentoring / Tutoring at the workplace	7.1	10.1
Coaching at the workplace	4.8	9.5
Interactive methods (brainstorming)		18.3
Business games		15.2
Other: Training in the place of work	9.3	5.1



Graph 3 Methods and forms of acquisition competences



Partial conclusion:

Regarding the Table 4 and Graph 3 the respondents used/proposed mostly the following forms and methods:

Used forms and methods

- Self-study, reading, searching for information, etc.
- Seminars, lectures and workshops
- Self-education (distance learning, education through the Internet or PC - E-learning)
- Professional training
- Training for acquiring skills

Proposed forms and methods

- Seminars, lectures and workshops
- Self-study, reading, searching for information, etc.
- Self-education (distance learning, education through the Internet or PC - E-learning)
- Interactive methods (brainstorming)
- Professional training



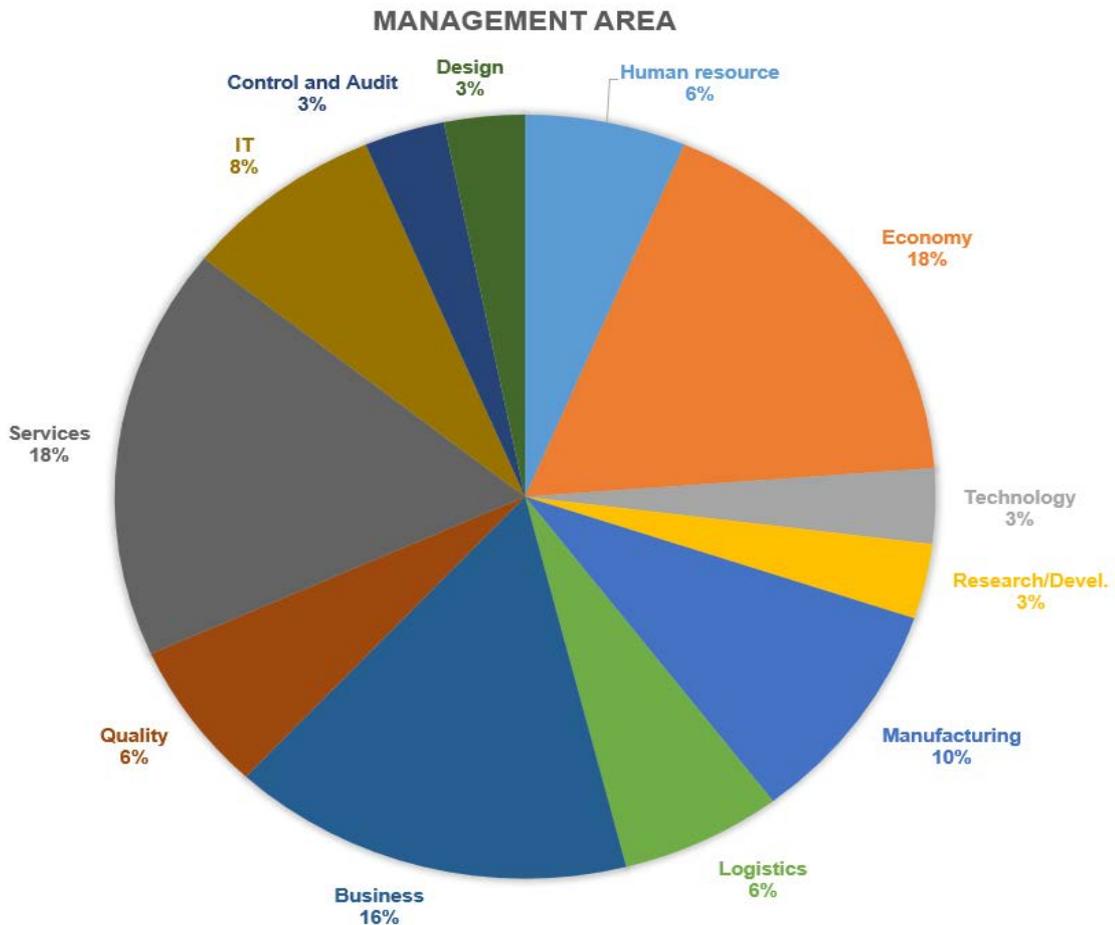
Target 2

Map of students training needs in enterprises

A - General information about institution/company

The information from questionnaires was based on the Management, Innovation and Development system – **in enterprises**, consisted of three topics, information about institution of highest level of education, management area and geographical area of activity.

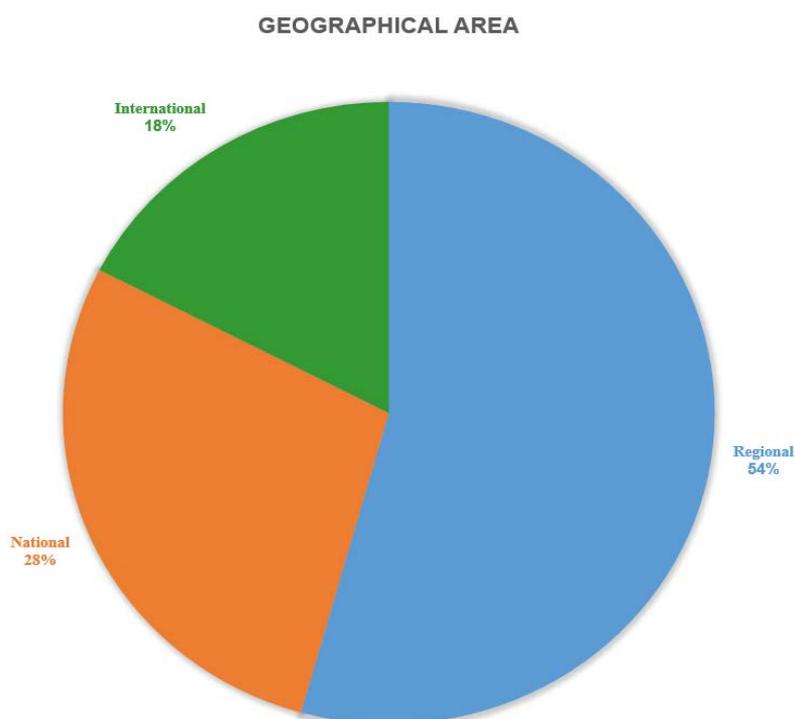
Graph 4 Management area of enterprises



Total number of respondents from business sector was 44. The individual Project partners contacted different number of respondents, from 4 to 10 companies. Graph 4 (*Management area of enterprises*) illustrates the survey results from 44 respondents. We can see that most of all respondents were from economy and services area (18%) and 16% from business area.



Graph 5 Geographical areas of enterprises



Partial conclusion:

General information about CA partner institutions from questionnaires was incomplete from many partners. Missing the particular data and figures, for example job position, year of establishment, number of employees, etc.

Bukhara State University sent no information, no questionnaire replies. Capacity Building Consulting Group from Kyrgyzstan didn't send report about business sector. The most companies were from regional areas - 54%, then national 28% and international 18%.

All respondents have achieved **higher education**.

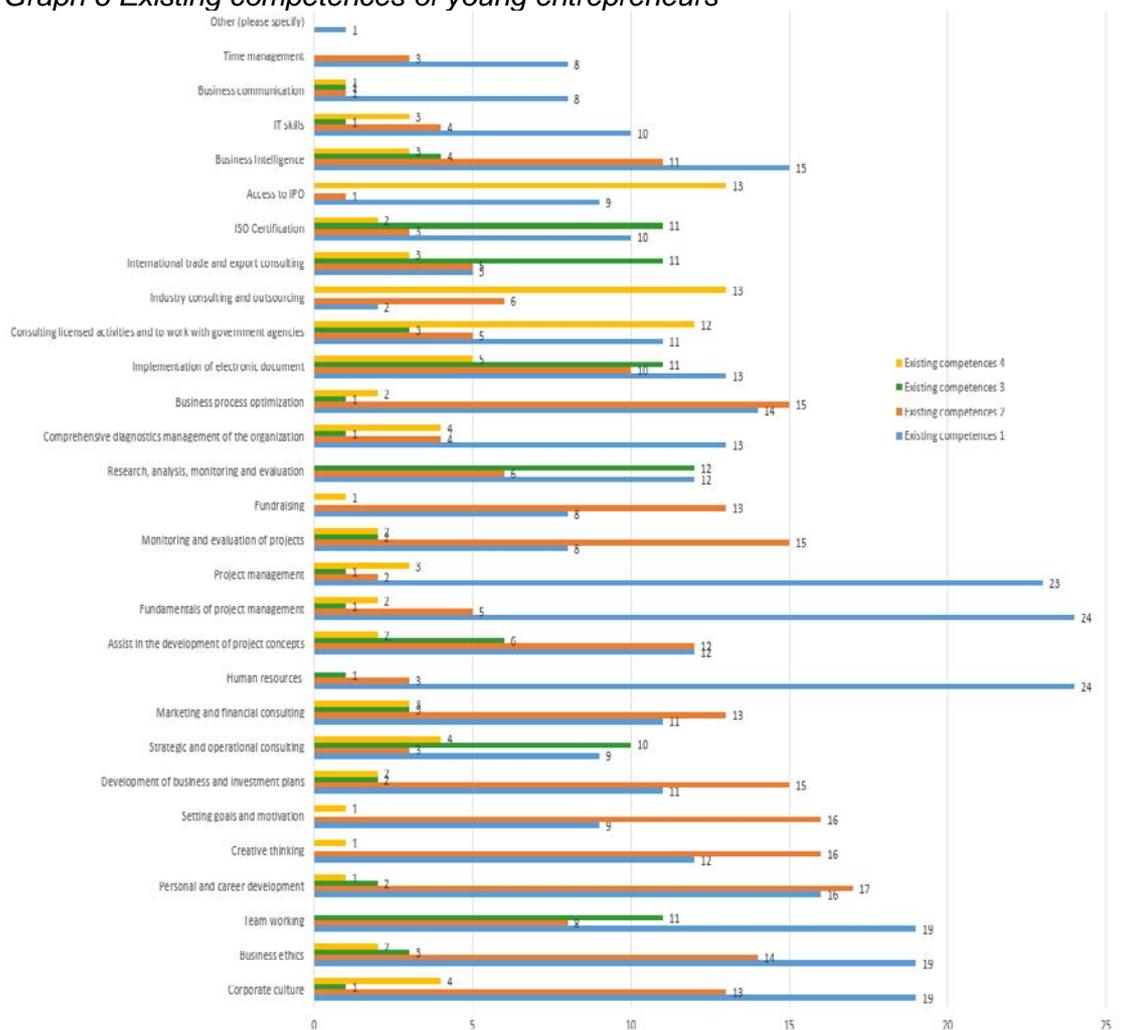
B/C - Mapping existing/required competences of young entrepreneurs/managers
Scale was: **1 = Most Preferable** and **4 = Least Preferable**

Table 5 Existing/required competences of young entrepreneurs

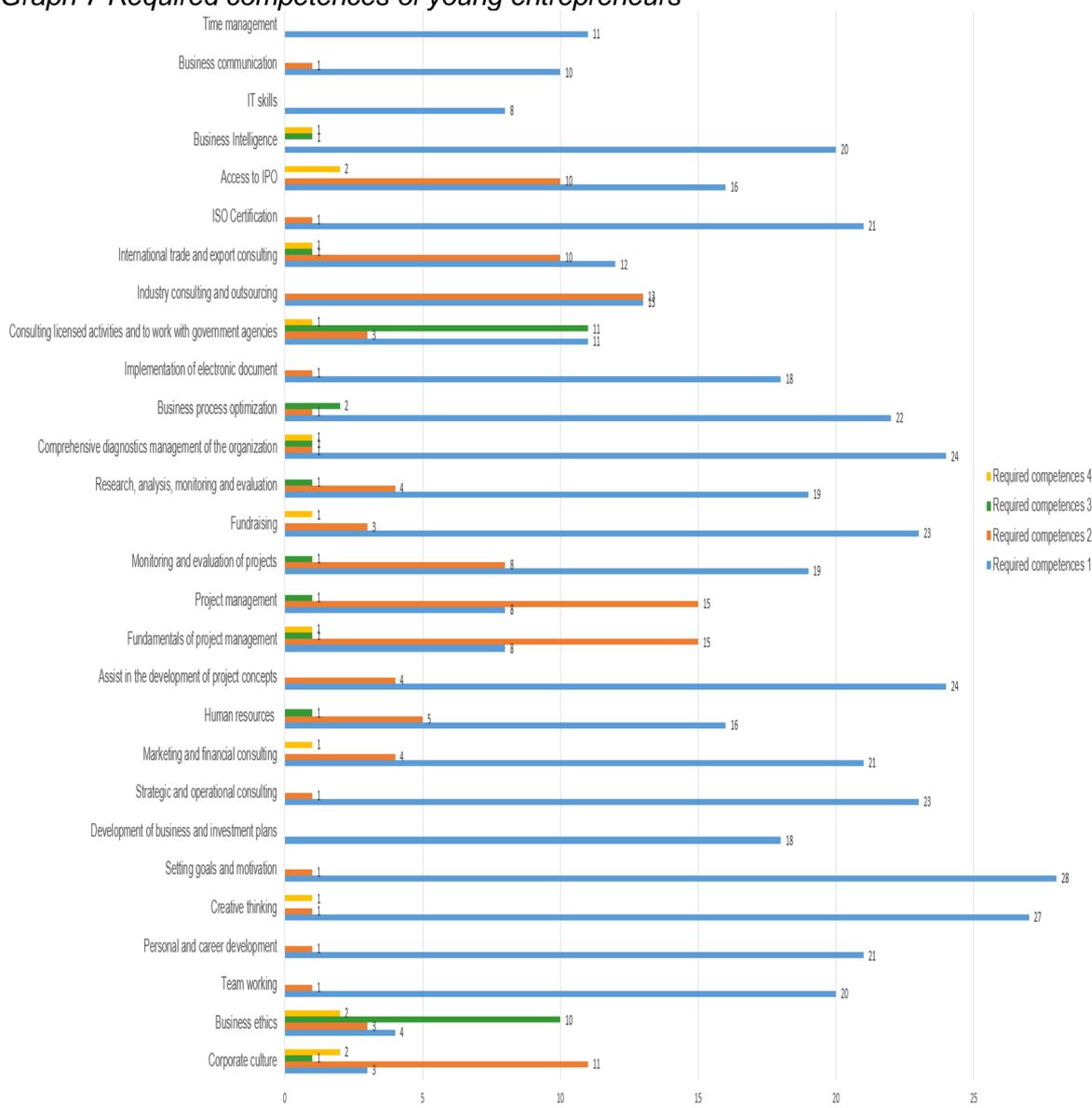
Areas of competences	Existing competences				Required competences			
	1	2	3	4	1	2	3	4
Corporate culture	19	13	1	4	3	11		2
Business ethics	19	14	3	2	4	3	10	2
Team working	19	8	11		20	1		
Personal and career development	16	17	2	1	21	1		
Creative thinking	12	16		1	27	1		1
Setting goals and motivation	9	16		1	28	1		
Development of business and investment plans	11	15	2	2	18			
Strategic and operational consulting	9	3	10	4	23	1		
Marketing and financial consulting	11	13	3	3	21	4		1
Human resources	24	3	1		16	5	1	
Assist in the development of project concepts	12	12	6	2	24	4		

Fundamentals of project management	24	5	1	2	8	15	1	1
Project management	23	2	1	3	8	15	1	
Monitoring and evaluation of projects	8	15	2	2	19	8	1	
Fundraising	8	13		1	20	3		1
Research, analysis, monitoring and evaluation	12	6	12		19	4	1	
Comprehensive diagnostics management of the organization	13	4	1	4	24	1	1	1
Business process optimization	14	15	1	2	22	1	2	
Implementation of electronic document	13	10	11	5	18	1		
Consulting licensed activities and to work with government agencies	11	5	3	12	11	3	11	1
Industry consulting and outsourcing	2	6		13	13	13		
International trade and export consulting	5	5	11	3	12	10	1	1
ISO Certification	10	3	11	2	21	1		
Access to IPO	9	1		13	16	10		2
Business Intelligence	15	11	4	3	20		1	1
IT skills	10	4	1	3	8			
Business communication	8	1	1	1	10	1		
Time management	8	3			11			
Other (please specify)	1							

Graph 6 Existing competences of young entrepreneurs



Graph 7 Required competences of young entrepreneurs



Partial conclusion:

Business sector gives these priorities from a group of existing/required competences:

1 = Most Preferable

Existing competences:

- *Human resources*
- *Fundamentals of project management*
- *Project management*

- *Corporate culture, Business ethics, Team working*
- *Personal and career development*

Required competences:

- *Setting goals and motivation*
- *Creative thinking*
- *Assist in the development of project concepts, Comprehensive diagnostics management of the organization*
- *Strategic and operational consulting*

- *Business process optimization*



2 = Less Preferable

Existing competences:

- *Personal and career development*
- *Creative thinking, Setting goals and motivation*
- *Development of business and investment plans, Monitoring and evaluation of projects, Business process optimization*
- *Business ethics*
- *Corporate culture, Marketing and financial consulting, Fundraising*

Required competences:

- *Fundamentals of project management, Project management*
- *Industry consulting and outsourcing*
- *Corporate culture*
- *International trade and export consulting, Access to IPO*
- *Monitoring and evaluation of projects*

3 = Even Less Preferable

Existing competences:

- *Research, analysis, monitoring and evaluation*
- *Team working, Implementation of electronic document, International trade and export consulting, ISO Certification*
- *Strategic and operational consulting*
- *Assist in the development of project concepts*
- *Business Intelligence*

Required competences:

- *Consulting licensed activities and to work with government agencies*
- *Business ethics*
- *Business process optimization*

4 = Least Preferable

Existing competences:

- *Industry consulting and outsourcing, Access to IPO*
- *Consulting licensed activities a work with government agencies*
- *Implementation of electronic document*

Required competences:

- *Corporate culture, Business ethics, Access to IPO*

D – Methods and forms of competences “B” acquisition

The respondents answered on the following questions:

What are the appropriate methods and forms of education to improve these competences?

1. Where/how you acquired the above competences?

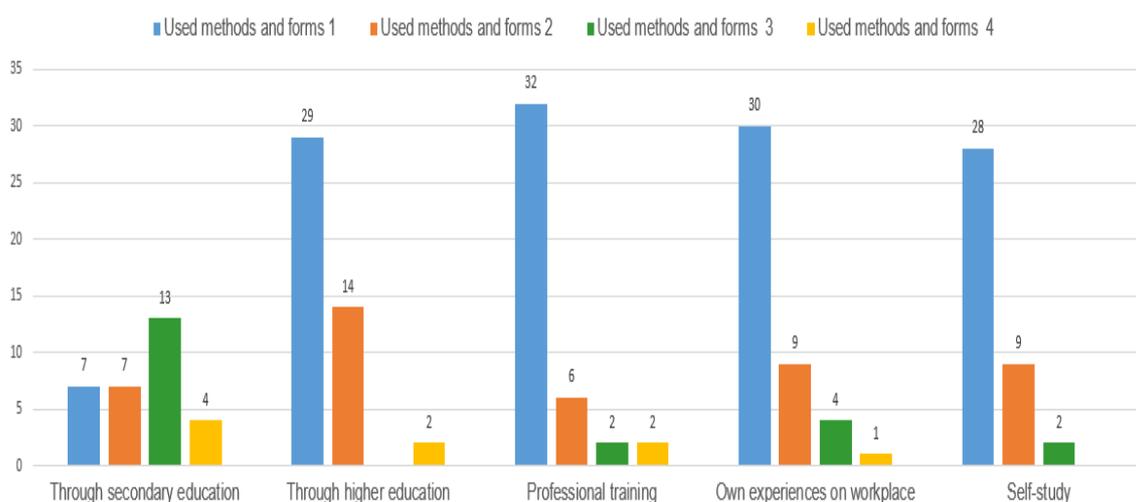
The scale was used:

1 = Very Important 2 = Important 3 = Not very important 4 = Not at all important

Table 6 Methods and forms of competences acquisition - used

Methods and forms				
	1	2	3	4
Through secondary education	7	7	13	4
Through higher education	29	14		2
Professional training	32	6	2	2
Own experiences on workplace	30	9	4	1
Self-study	28	9	2	
Other				

Graph 8 Methods and forms of competences acquisition - used



2. What do you think is the most efficient way of acquiring and improving above competences?

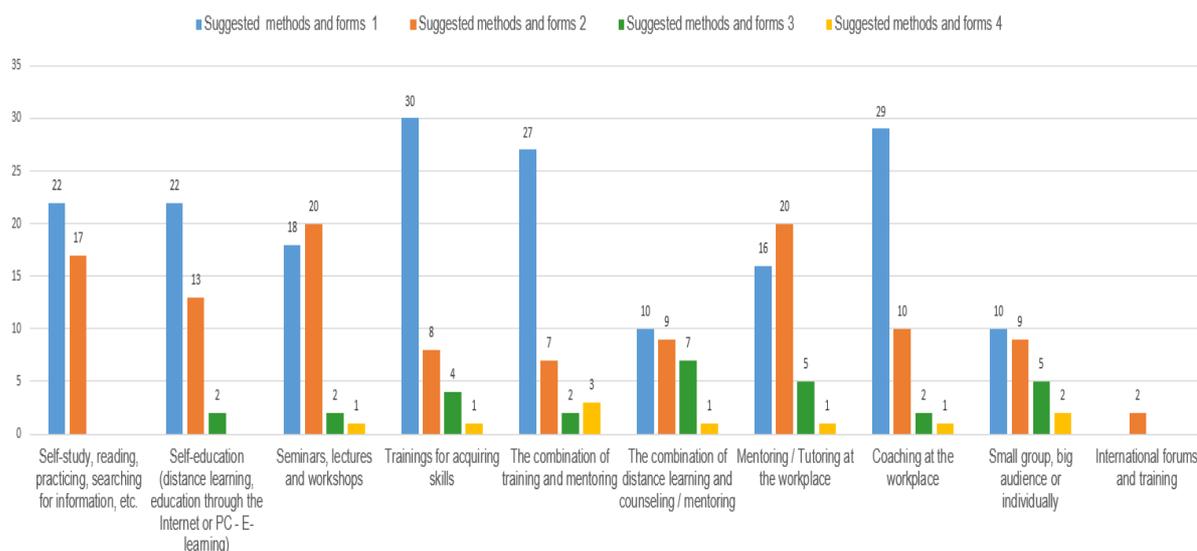
The scale was following:

1 = Very Important 2 = Important 3 = Not very important 4 = Not at all important

Table 7 Methods and forms of competences acquisition - suggested

Methods and forms				
	1	2	3	4
Self-study, reading, practicing, searching for information, etc.	22	17		
Self-education (distance learning, education through the Internet or PC - E-learning)	22	13	2	
Seminars, lectures and workshops	18	20	2	1
Trainings for acquiring skills	30	8	4	1
The combination of training and mentoring	27	7	2	3
The combination of distance learning and counseling / mentoring	10	9	7	1
Mentoring / Tutoring at the workplace	16	20	5	1
Coaching at the workplace	29	10	2	1
Small group, big audience or individually	10	9	5	2
Other: International forum and trainings		2		

Graph 9 Methods and forms of competences acquisition - suggested



Partial conclusion:

The respondents acquired the above competences “B” and consider them very important:

- Professional training
- Own experiences on workplace
- Through higher education
- Self-study
- Through secondary education.

The respondents believe that the most efficient way of acquiring and improving above competences are:

- Trainings for acquiring skills
- Coaching at the workplace
- The combination of training and mentoring
- Self-study, reading, practicing, searching for information, etc., Self-education (distance learning, education through the Internet or PC - E-learning)
- Seminars, lectures and workshops.

Comparison between academic and private sector

Academic sector

Existing competences

- Business ethics
- Personal and career development
- Human resources
- Marketing and financial consulting
- Team working

Private sector

Existing competences:

- Human resources
- Fundamentals of project management
- Project management

Suggested competences

- Project management
- Fundamentals of project management
- Business Intelligence, IT skills
- Assist in the development of project concepts
- Monitoring and evaluation of projects

Required competences:

- Setting goals and motivation
- Creative thinking
- Assist in the development of project

- *Corporate culture, Business ethics, Team working*
- *Personal and career development*

- concepts, Comprehensive diagnostics management of the organization*
- *Strategic and operational consulting*
- *Business process optimization*

Academic sector

Used forms and methods

- *Self-study, reading, searching for information, etc.*
- *Seminars, lectures and workshops*
- *Self-education (distance learning, education through the Internet or PC - E-learning)*
- *Professional training*
- *Training for acquiring skills*

Proposed forms and methods

- *Seminars, lectures and workshops*
- *Self-study, reading, searching for information, etc.*
- *Self-education (distance learning, education through the Internet or PC - E-learning)*
- *Interactive methods (brainstorming)*
- *Professional training*

Private sector

- *Professional training*
- *Own experiences on workplace*
- *Through higher education*
- *Self-study*
- *Through secondary education.*

The most efficient way of acquiring and improving above competences are:

- *Trainings for acquiring skills*
- *Coaching at the workplace*
- *The combination of training and mentoring*
- *Self-study, reading, practicing, searching for information, etc., Self-education (distance learning, education through the Internet or PC - E-learning)*
- *Seminars, lectures and workshops.*

Partial conclusion:

A comparison of the academic and private sectors shows that there are not many common intrusions as a result of poor orientation of the academic sector to the needs of actual practice.

Recommendations from CA partners

Recommendations coming from CA partners:

It is recommended that MIND project Central Asia partner universities should provide relevant experience to growth and development of start-ups and private enterprises in Central Asia (CA) through Education with the practical business development advice.

All interviewees of all levels of experience and length of service said that they were interested in suggested competences, and also in terms of continuing to improve their practice with proposed methods and forms. Most commonly, they were interested by suggested competences such as “Strategic and operational consulting”, “Marketing and financial consulting “, „Assist in the development of project concepts “,



„Fundamentals of project management” and “Project management”. The most of competences at subjects are existing at KNU but nevertheless the all interviewees are highly motivated in improvement and development. Improvement of subject knowledge and keeping up to date with developments in their field were areas in which teachers wanted to develop. Some teachers talked about seeking to better meet the needs of specific groups of learners, such as master and PhD students with special educational and professional needs.

Most of the interviewees reported using at least some self-study, reading, searching for information (distance learning, education through the Internet or PC - E-learning) personal exercise to review a particular lesson but other methods and forms are not highly used.

Collaboration with international colleagues was also valued by teachers, and for some, the performance management process had supported them to identify areas for improvement. Interviewees from all phases reported that it would be positive benefits if the suggested competences at subjects would be improved and adopted.

Most of the interviewees was from international companies that why generally all the competences was responded as existing. Nevertheless, the all interviewees reported that the required competences such as “Consulting licensed activities and to work with government agencies”, “Industry consulting and outsourcing” and “International trade and export consulting” are needed in the whole private enterprises. Even in existing competences by making small improvements continually, a business can benefit greatly and the improvement process made more manageable.

All interviewees are interested and responded as required the competences, which are related to the professional trainings. According to a survey: “Trainings for acquiring skills”, “Mentoring / Tutoring at the workplace”, “Coaching at the workplace” are the top priority among required competences to entrepreneurs today. Professional development can enhance the skills of both new and longtime staffers.

The other important required competence are “Development of business and investment plans”, “Strategic and operational consulting” and “Marketing and financial consulting”. Some of the types and forms of these competencies has existed for several years among companies, but consulting options have become increasingly diverse, reflecting the diverse sector of market that why the previous ones are required.
(P6)

Summarizing the comments left by the respondents it is crucial to highlight in trainings the link between all suggested topics and start-ups - their management, consulting and development. **(P7)**

The results of the survey have showed that our staff would like to change methods of teaching they use. Most respondents note that they would like combination of training and mentoring.

It is obviously that OshTU staff need of knowledge in project writing to improve their methods and knowledge by participation in international projects.

The results of survey from the company respondents showed that the students must be prepared and gain competences during their study, taking part at various trainings and seminars. Also they must develop their study by coaching at workplace, Mentoring / Tutoring at the workplace. **(P8)**



The results of survey mentioned and showed that we need some more competences for the future job. Most respondents note that they need seminars and trainings for the subjects.

The most respondents noted that organization required the highly qualified specialist of the highest category to be able to write projects on their sphere of work.

The results of survey from the company respondents showed that the students must be prepared and gain competences during their study, taking part at various trainings and seminars. Also they must develop their study by self-studying and take education (distance learning, education through the Internet or PC - E-learning) which is very important now. (P9)

Survey results shows that there is obvious need for some competences and they play important role in qualification of students. Moreover, it can be understood that not all the competences can be covered by the current study programs as the job market requirements are gradually changing.

Another important thing is respondents noted that seminars and trainings are important in acquiring above competences. In addition, results show self-study and self-education also have potential to acquire suggested competences.

Results show that respondents consider modern form and methods over the traditional ones. For example, business games, interactive methods and case studies constitute majority of the answers.

Survey results indicates that respondents have different views on each question. However, main results highlight the importance of certain competences. The existing and suggested competences covers all the aspects of the business the respondents carrying on. Their vision and approaches to business development certainly connected with education. Thus, according to their opinion seminars and trainings, self-study, research and motivation has great significance in acquiring certain competences. (P10)

We conclude that managers of SMEs and local enterprises need more self-study, reading, practicing, and searching for information, training for acquiring skills and coaching at the workplace. (P11)

The results of survey mentioned and showed that we need some more competences for the future job. Most respondents note that they need seminars and trainings for the subjects.

The most respondents noted that organization required the highly qualified specialist of the highest category to be able to write projects on their sphere of work.

Of those surveyed, analyzing the resultant became clear that students should longer participate in various seminars and trainings. Distance learning, e-government system and training via the Internet to teach students plays a significant role. (P12)

As for proposed forms and methods to obtain competencies it is necessary to strengthen the elements of professional training, training for acquisition of skills with a combination of mentoring and elements of coaching. (P13)

Thus, the analysis of questionnaires of competent young entrepreneurs showed the interest of business entities in the qualitative development of this project. The most

effective ways to acquire and improve competencies of entrepreneurs were evaluated by a scale of 1-2 as very important and important.

Analysis of the questionnaires reflected the fact that in many areas there are coincidences of opinions on competences and their acquisition practices among entrepreneurs and teachers. As an additional comment, young entrepreneurs said that they would like to receive more practical information that can be immediately applied in business development.

For the purpose of self-development, they would like to have access to a kind of information portal, such as online library exclusively for the project participants.

It would also be good to implement a program of post-Training mentoring to reinforce knowledge and long-term consulting.

Little more skills to develop projects and writing project proposals.

In addition, they would like to add motivation elements in the training program. **(P14)**

In result, realization the interrogations with various groups the population of Badakhshan, Republic of Tajikistan. Most respondents note that they need seminars and trainings for the subjects. Majority interrogated gave precise and clear to concept concerning effective adjustment of job and necessary skills for effective of realization, with which will pick up by and they very much require that entering offered the direction in the educational plans of the future trainings of the project

MIND in significant degrees facilitated a way of their enterprise activity and promoted improvement well-being the local population. Results of the questions of young business owners of the Khorog town showed preparation of future specialist who work in this field, must be theoretically prepared for this work. This educational knowledge they can get by active participation in different educational courses, forums, workshops, as well by self-learning, with the help of different books and magazine and internet. **(P15)**

MAIN CONCLUSIONS

Final conclusions for the MIND project team:

In the following, some recommendations have been suggested to be launched during the MIND project in order to help improving R&I activity in HEIs:

▶ MIND might try to introduce more content at HEIs in order to support the creation of startups in the academic field.

▶ Provide solutions to minimize the gap between needs of practice and teaching – which has led to a waste of resources and limited the training quality in universities.

▶ Strengthen institutional research capability through close connections with the private sector and provide more motivation for research activities of HEIs.

▶ Organize and help to organize training on better understanding of strategy for foundation of startups and technological incubators in order to create a link between academic and private sector.

▶ Inform about advantages of technological incubators to attract the higher education system

▶ MIND should promote the inclusion of specialized information to support startups companies creation in the academic scene.

