

# **CONNECT 2021-2024**

Connecting universities-industry through smart entrepreneurial cooperation and competitive intelligence of students in Moldova, Georgia and Armenia

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# [Assessment of local needs for trainings and services]

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### **Executive summary**

This report is part of the Work Package 2 of the Erasmus + project 617393-EPP-1-2020-1-MD-EPPKA2-CBHE-JP "Connecting universities-industry through smart entrepreneurial cooperation and competitive intelligence of students in Moldova, Georgia and Armenia". It presents the results of the investigation based on the questionnaire survey related to the entrepreneurship education in higher education institutions of the Republic of Moldova.

The analysis describes findings related to the main current needs and necessary skills to be developed within the entrepreneurial education in public universities of Moldova.

This report consists of four chapters that consolidate the results of the surveys of four categories of interviewed stakeholders, namely: students, teachers, start-ups and incorporated companies.

These results will be used as a basis for the improvement of the existing or the development of new entrepreneurship study programs in higher education.

The investigations were conducted by four public universities of Moldova – Moldova State University, Technical University of Moldova, State Agrarian University of Moldova and Academy of Music, Theatre and Fine Arts of Moldova.





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### Introduction

Reinforcement of university-industry relationship based on smart (multidimensional) entrepreneurial approach in higher education institutions and enhancement of students 'and graduates' competitive intelligence (behaviours, skills, mindsets) and their ability to create jobs is a priority for HEIs in Moldova.

To build the university capacity to create, accelerate and sustain innovative entrepreneurial students' ideas, as well as to promote collaboration between and among HEIs-students-industry and to improve the quality of HE, the level of competencies and skills of teachers, students in HEIs and enhance its relevance for the labour market and society, with the support and assistance of EU partners, we resorted to conducting a questionnaire research for four groups of respondents (main stakeholders): companies/ start-ups, incorporated companies, academic staff and students.

This report focuses on the results of the survey of these mentioned categories of interviewees: students, teachers, start-ups and incorporated companies. The questioning of the four categories of stakeholders allows to obtain a clear vision on the main problems and obstacles that prevent the teaching, implementation and development of entrepreneurial activities in the Republic of Moldova, providing space for transposition of best practice on entrepreneurship, digital, communication and artistic / self-expression education.

Regarding the "education-industry" interconnection, public higher education institutions try to focus on accelerating the interaction between local actors involved in the Knowledge Triangle, improving the education system, research and development and society's perception of innovation, facilitating the transfer of the results of research into innovative products and services, including their commercialization, to ensure a new quality of economic growth, to develop the culture of education, research, innovation and to contribute to improving the quality of life of citizens, developing students' competitive intelligence and skills, adjusted to business and creative industries.

In this context must be mentioned that business-oriented entities and personalities are not involved sufficiently in the teaching process at most of universities in Moldova.

The private sector is widely represented in engineering specialties, IT specialties, environment represented in economic specialties and is less represented in the areas as journalism, arts education, psychology, social sciences, humanities, education sciences.

For example, the interconnection university-industry is partially covered via collaboration with North Regional Development Agency, companies from the Free Economic Zone, DRA Draexlmaier Automotive, Bipmobile S.R.L, Endava Company Chisinau, AMSoft Balti Company, ULS SRL Company, PowerIT CompanyMakani Design (students form fashion design work at the production unit), Comfort Furniture Factory (interior design), Arbor Association from Bucharest (creative practice, co-projects), other organizations based on partnership convention.

The majority of students from the fields of Letters, Educational Sciences, Psychology and Arts, Social Work, Law, Math and Sciences, and Environmental Sciences are made their internships and practice activities (eventually, are working after graduation) at state institutions: schools, kindergartens, music schools and colleges, social assistance services, the judiciary, the economy etc., while the private sector takes a modest part.

Still, there is a wide diversity of companies, private sector organizations, which remain untapped as potential.

Due to the involvement of students, the results of this research can become the basis for improving the approach to entrepreneurship education by involving students who do not automatically come into contact with entrepreneurial studies, enhancing problem-based learning, entrepreneurial skills, behaviours, mindsets (through the interdisciplinary approach by revising of curricula and dissemination events).





By participating in the survey of start-ups and incorporated companies, clear areas for students' entrepreneurial behaviours, skills, mindsets of future start-ups and support for recently incorporated companies at university settings are outlined.

The analysis of the survey results shows also that the academic staffs from the universities of RM need training and support in the field of entrepreneurship, creative industries, and software skills, to strengthen the experience university-industry collaboration through smart entrepreneurial cooperation and ensure competitive intelligence of students.

The results of the research presented in this report are a good foundation for the development of innovative courses, but also for the involvement of academic staff and students in training to further develop additional hard and soft skills.





### 1. Analyzing the company's assessment of local needs results

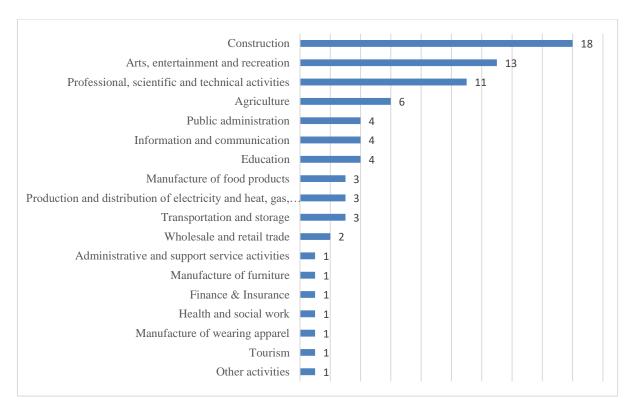
The survey research was based on questionnaire, which was performed to the company's in order to identify the shifting demands of the labor market and to improve the entrepreneurial skills of students, thereby strengthening the university-industry cooperation. It consists of 30 structured survey questions that motivate the Moldavian companies to respond. The universities from Republic of Moldova conducted their own survey and received responses from 78 companies.

### 1.1. General data about the respondents

### 1. Which of the following fields does your organization specialize in?

In order to understand the main field of activity of the respondents' company, an extensive list of fields of activity was proposed, which included over 37 activities. In order to ensure a good processing of the information, the decision was taken to group the activities included in the questionnaire into larger groups according to the Classifier of Activities in the Economy of Moldova-2, <a href="www.statistica.gov.md">www.statistica.gov.md</a> as well as based on statistical data presented by the National Bureau of Statistics of the Republic of Moldova.

Therefore, the 37 activities proposed in the questionnaire were grouped into 18 areas, shown in chart below.



The survey shows of the total respondents, 54% are focused on Construction, Arts, entertainment and recreation and Professional, scientific and technical activities, 37% are focused on Agriculture, Public administration, Information and communication, Education, Manufacture of food products, Production and distribution of electricity and heat, gas, hot water and air conditioning, Transportation and storage, Wholesale and retail trade.

Conclusion: The research carried out allowed to cover a wide range of different fields of economic activity practiced in the Republic of Moldova, which will allow the highlighting of comprehensive results.



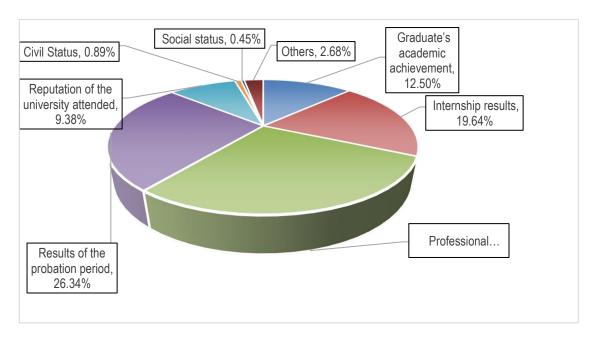


### 1.2 Obstacles for taking up entrepreneurship

1. What are your criteria for hiring young candidates?

Moldavian universities survey's respondents came with several main criteria for hiring young candidates. As shown in the chart the main 3 highlighted criteria were:

- Professional work experience 28,13% of respondents;
- Results of the probation period 26,34% of respondents;
- Internship results 19,64% of respondents.



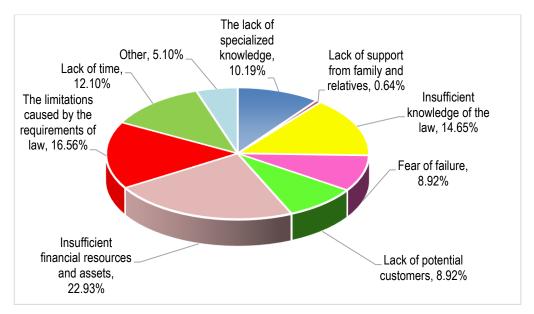
*Conclusion*: The desired young candidate should provide the practical abilities catch from different kinds of experience because it proves the capability of the individual to work in the specific field of work.

2. Which were some of the challenges that you faced in running (founding) your business?

Understanding the main challenges of Moldavian companies (see the chart below), the survey shows that 22,93% of respondents had the insufficient financial resources and assets, 16,56% of respondents claimed the limitations caused by the requirements of law and 14,65% of respondents relate the insufficient knowledge of the law.





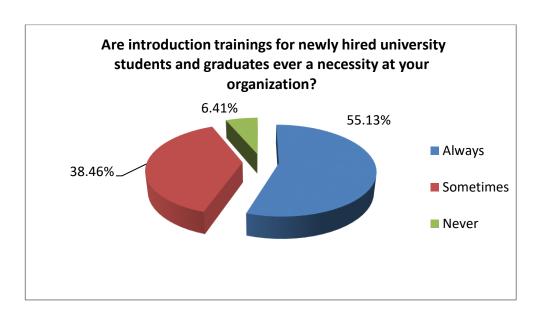


Conclusion: Running the business comes with a host of challenges based on financial and law factors. Thus, the insufficient knowledge of the law generates the difficulties in ensuring the compliance with the legal provisions.

### 1.3 Needs for entrepreneurial education

1. Are introduction trainings for newly hired university students and graduates ever a necessity at your organization?

In order to ensure the organizational knowledge for newly hired university students and graduates ever as information that is used and shared to achieve the company's objectives 55,13% of respondents said that the introduction trainings are always providing, 38,46% of respondents reflect that the trainings for hiring new employees accomplished sometimes. Unfortunately, there are such companies (6,41% of respondents) in which introduction trainings is not applied to new employees.

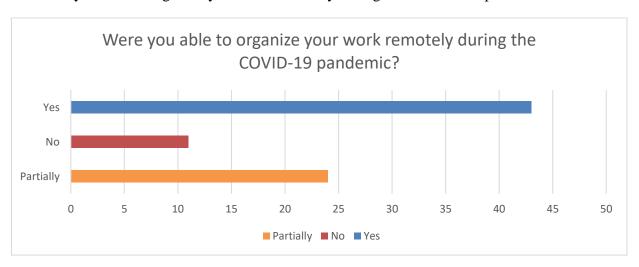






Conclusion: A large part of Moldavian companies do track their introduction trainings programs for newly hired university students and graduates because they see clear benefits of such kind of trainings which improve the on boarding new employees.

2. Were you able to organize your work remotely during the COVID-19 pandemic?



Asked if companies were able to organize their work remotely during the COVID-19 pandemic, the 55% of respondents answered "Yes", 14% "No" and 31% "partially".

Conclusion: only one half of companies ahave been able to organize on-line work during COVID-19 pandemic.

3. Will you be interested to have trainings for your employees on the courses of the CONNECT project free of charge (courses on hard and soft skills: acceleration program, digital skills, theater and dance).



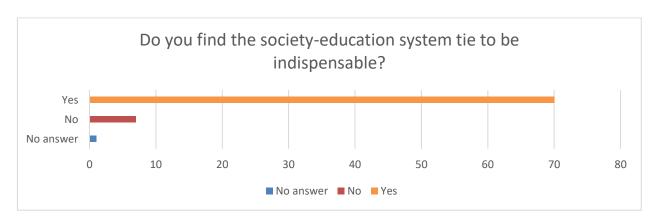




Asked if companies will be interested to have trainings for their employees on the courses of the CONNECT project free of charge, they were answered, that between two programs –Acceleration Program for very beginners: From Idea to Business Concept: An entrepreneurial Journey and Acceleration Program for incorporated companies (advanced level), respondents prefer first program (67%), while advanced level has been chosen by 37% of respondents. Trainings on digital skills have been chosen by over 70% of respondents, while artistic tools (theatre methods, video and photography) selected about 60%.

Conclusion: Artistic companies feel an acute lack of knowledge and practical tools in acceleration and digital tools but underappreciated the important of artistic skills in entrepreneurial skills development.

4. Do you find the society-education system tie to be indispensable?

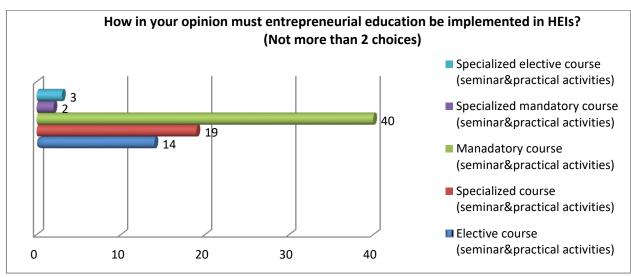


Asked if companies find the society-education system tie to be indispensable, about 90% answered "Yes".

Conclusion: companies recognize the importance of connection between society and education.

5. How in your opinion must entrepreneurial education be implemented in HEIs? (Not more than 2 choices)

One of the topics of the survey of companies was their vision of how entrepreneurship education should be implemented in HEIs. The result of the analysis of the opinions of representatives of the companies about this topic is presented in the chart below.







As can be seen, the majority of respondents consider the mandatory courses the best way of entrepreneurship education in HEIs. At the same time, all interviewees agree that entrepreneurship education should be conducted in the form of seminars and practical activities.

6. Please, suggest topics related to entrepreneurship that you find more pertinent for university courses/seminars.

It should be mentioned that the companies participating in the survey represent various fields of economic activity: IT, law, audit, consulting, agriculture, media and arts, etc. Therefore, the proposals for the topics of entrepreneurship courses are very varied, but they also have some commonalities.

Thus, the common themes would be: the basics of entrepreneurship, macro and microeconomics, financial management, HR management, change management, crisis management, risk management, financing planning, marketing, business digitalization, digital business promotion, etc.

And among the specific ones we could mention: Social entrepreneurship; course of music industry: concept, product, and realization; efficiency of copyright and intellectual property management (video, performing arts, etc.), their accounting and capitalization; management in creative and cultural industries; farming, etc.

7. What specializations do you think the labor market lacks now? Asked about the lack of specialties on the labor market in the Republic of Moldova, the representatives of the companies mentioned the lack of qualified specialists in general, regardless of the field of activity.

At the same time, the interviewees mentioned a number of missing specialties arising from the field of activity of their companies: Data analysts, teachers, doctors and nurses, engineers in various fields of industry, specialists in sustainable business, IT specialists, bakers, confectioners, and other qualified personnel specialized in the field of food production, farmers, veterinarians, metalworkers, turners, art manager, art curator, art critic, light and sound engineers, stage-setters, property masters upholsteres, hair-dressers, makeup artists, scenographers, theatre costume designers, etc.

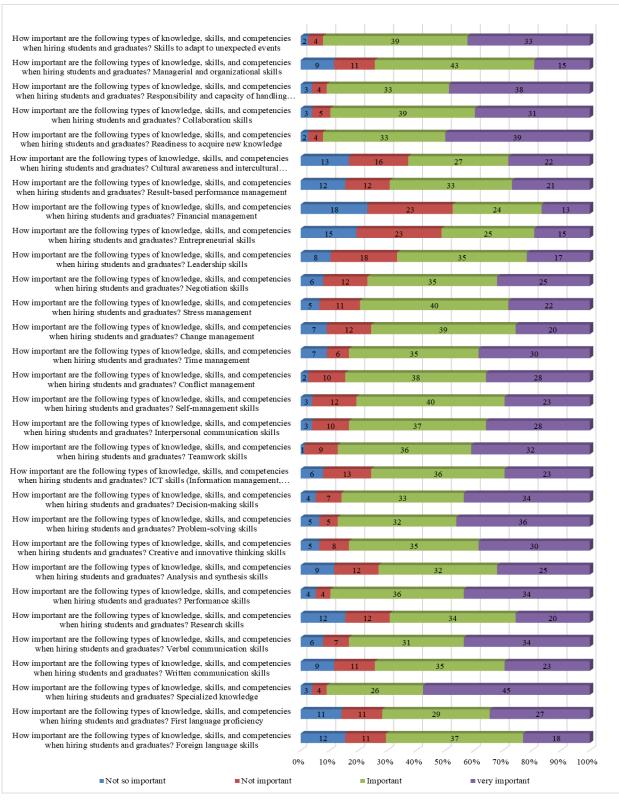
### 1.4 Skills important for a successful career

1. How important are the following types of knowledge, skills and competences when hiring students and graduates?

Being asked about types of knowledge, skills and competences when hiring graduates most of the representatives of the companies (45) consider that specialized knowledge is very important when hiring students and graduates. Special knowledge is vital for competitiveness and employability in order to increase productivity of company







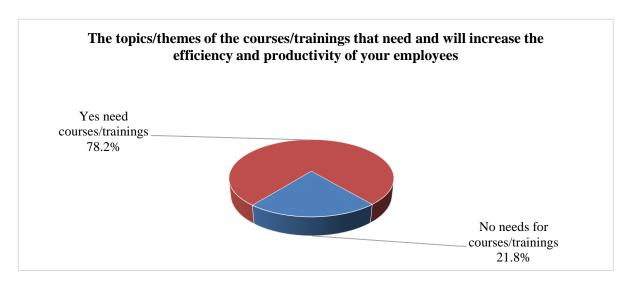
Conclusion: Obviously, people with specialized knowledge will find it easier to get involved in the field of work, but let's remember about the skills development and their inclusion in the study process. These are: "Conflict management", "Self-management skills", "Teamwork skills", "Communication skills", which are equally essential when we talk about entrepreneurship education.





2. Please mention the topics/themes of the courses/trainings that will increase the efficiency and productivity of your employees.

Most of the respondents (61) responded that courses are needed in order to increase the efficiency and productivity of employees. As technology advances and workplace methods and strategies improve, there comes a need for employees to align with these changes in terms of knowledge, skills, values and abilities. One of the best ways to enhance knowledge and skills is through courses and training.



Conclusion: The topics most relevant to develop entrepreneurial skills are: Adaptation aspects; Digital business instruments; Management course and internal audit in the ISO system; new methods of trading, intellectual property law. Also some courses are demanded by the respondents such as: Course in the field of labour safety for employees, Management of the organization of working time.

3. Are you willing to cooperate with Higher Education Institutions in the framework of any of the following activities:

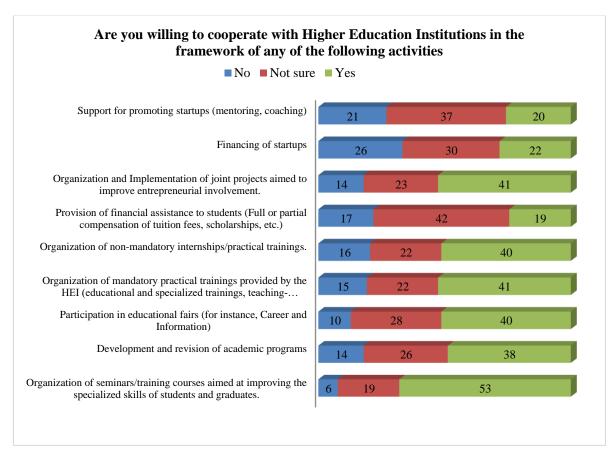
The majority of the interviewees (53) are willing to cooperate with Higher Education Institutions in the framework of the activities (see the chart below): Organization of seminars/training courses aimed at improving the specialized skills of students and graduates.

Conclusion: The collaboration between academic and entrepreneurial environment is a common point of interest for both parties. The entrepreneurial environment is willing to increase its participation in the educational process of the institution

The entrepreneurial environment is invited to take part in different educational activities at the university and share its experience. For increasing the competitiveness of the university the local entrepreneurs come with the ideas for curricula improvement.







4. How important do you think is the specialized knowledge of the following fields for entrepreneurship?

HEIs capitalize on the opinion of companies regarding the typology of the important skills for a successful career. Thus, the respondents generated opinions about the importance of specialized knowledge of the following fields for entrepreneurship: Economics of entrepreneurship, Law, Management, Marketing, Foreign Languages, Communication, Information Technologies, Accounting etc.

# 25 20 15 10 5 Economics of entrepreneurship Extremely important Somewhat important | Imprtant Not so important

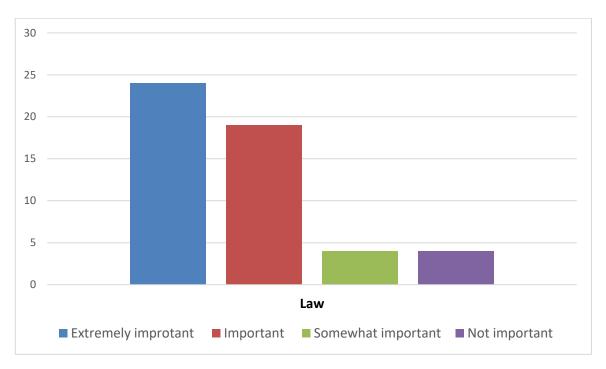
The field of economics of entrepreneurship





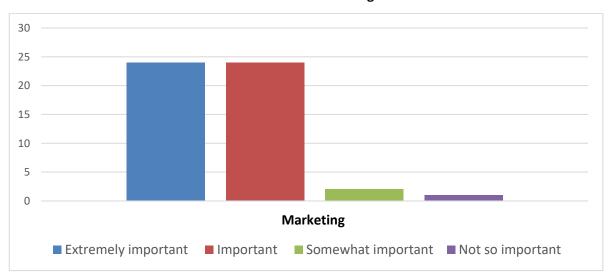
Analyzing the company's assessment of local needs results shows that about 90% of respondents consider that specialized knowledge in the field of economics of entrepreneurship is important. So, kknowledge in the field of economics of entrepreneurship is believed to be extremely important by 22 respondents. 23 think of it as important, 4 as somewhat important, and 2 not so important.

### The field of Law



About 90% of respondents consider important that specialized knowledge in the field of law. So, of great importance is the knowledge of law. 24 of the respondents believed it to be *extremely important*, 19 - important, 4 - somewhat important and 4 - not important. Our respondents realize that good knowledge of the legislature is a guarantee in dealing with legal issues related to their businesses.

The field of Marketing



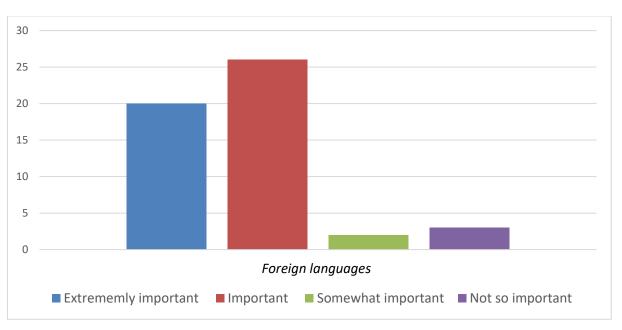
Of equal importance is the knowledge in the field of marketing 24 considered it extremely important, 24 - important, 2- somewhat important, and 1 - not so important). Entrepreneurs realize that this





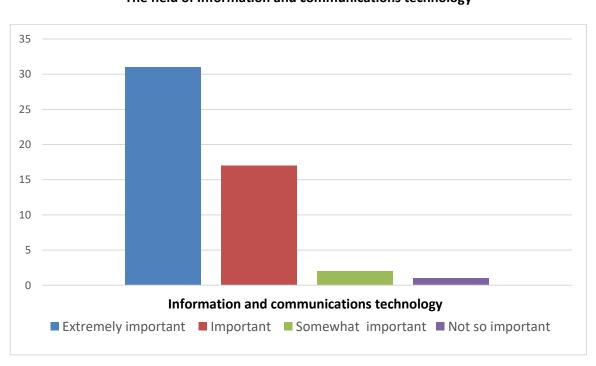
knowledge will help them boost their sails and increase the quality of the services they provide. They need to know how to collect data and research the market in order to be more successful. Over 90% of respondents prioritize these skills.





Equally important (about 90% of responses) is allocated to knowledge in the field of foreign languages. When it comes to knowledge in the field of foreign languages, 20 respondents consider it to be extremely important, 26 – important, 2 – somewhat important, 3 – not so important. These results still indicate the respondents' realization that knowledge of a foreign language can enhance their performance and get to a larger audience.

### The field of Information and communications technology







Our respondents believe that the specialized knowledge in the field of Information and communications technology is of utmost importance at present. Thus, 31 out of 51 respondents considered this knowledge to be extremely important, 17 thought of it as important, 2 thought it to be somewhat important and only one chose the option unimportant. This might come as no surprise taking into account the digitalization process as well as the fact that in order to be a successful entrepreneur one should get to their audience as fast as possible, whereas the online medium offers the best platform to stay connected to the audience and facilitates the communication with the audience.

# 35 30 25 20 15 10 Accounting Extremely important Important Somewhat important Not so important

### The field of accounting

Knowledge in the field of accounting is still important in the opinion of 29 respondents. 13 believe it to be extremely important, whereas 4 consider it somewhat important and the other 4 not so important.

Conclusions: analyzing the company's assessment of local needs results highlights the needs of specialized knowledge of the following fields for entrepreneurship: Economics of entrepreneurship, Law, Management, Marketing, Foreign Languages, Communication and Information Technologies, Accounting, appreciated as important or extreme about 90% of respondents.

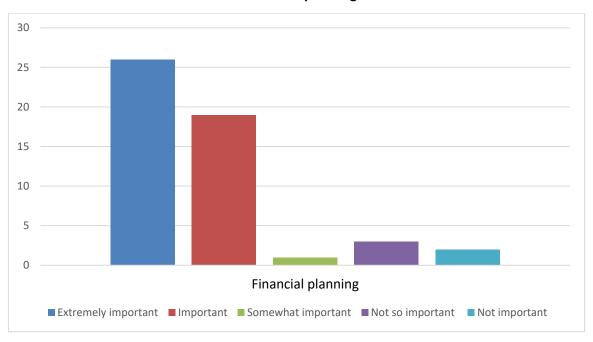
### 5. How important are the following skills for establishing a business?

We were also interested in the importance of the following skills for organizing a business: financial planning, analysis and market research, taking the initiative, setting goals and achieving them, creative thinking, a sense of responsibility, the ability to listen, the ability to persuade, networking, time management.



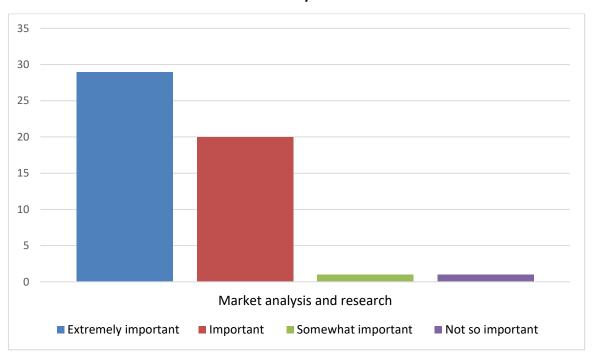


### Financial planning skills



Financial planning was viewed as an extremely important skill by 26 of the respondents, and important by 19. Thus, the respondents realize the importance of strategic financial planning for the prosperity of the business. The planning done at the beginning helps not only to envision success, but also track some of the problems that might arouse.

### Market analysis and research

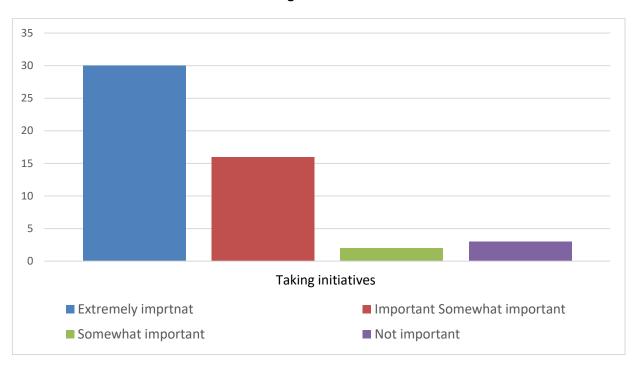


For a business to prosper, the 29 of the respondents believed that the skill of market analysis and research is extremely important, and 20 that it is important. This skill is crucial when trying to understand what the demands of the market are, on the one hand, and what can be done to run one's business more successfully.



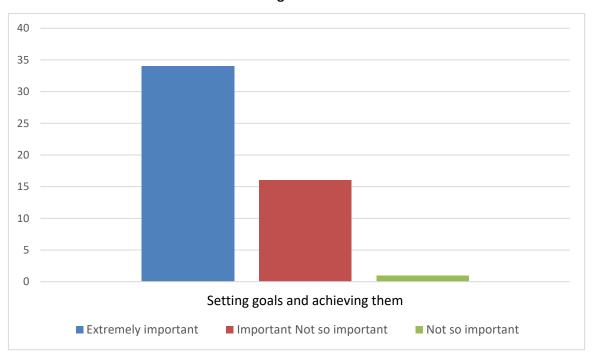






Although taking initiatives implies risk taking, 30 respondents think that it is an extremely important skill for establishing a business, and 16 view it as important. The respondents realize that one needs to bring something new to the market, in order to become more visible and get profit. So, taking initiatives is an essential step in getting the attention of the targeted audience.

### Goal setting and achievement skills



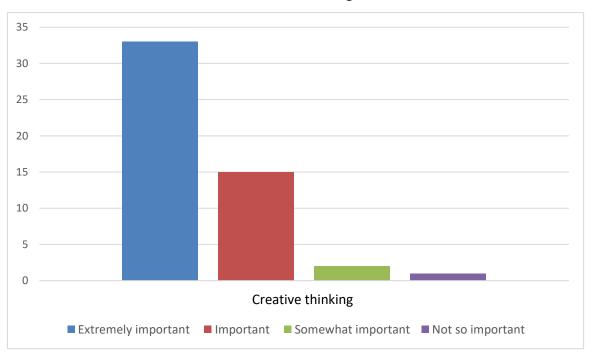
The majority of the respondents (34) believe that goal setting and achievement is vital for a business to succeed. 16 thought that it is important, and only one respondent considered it not so important. Thus,





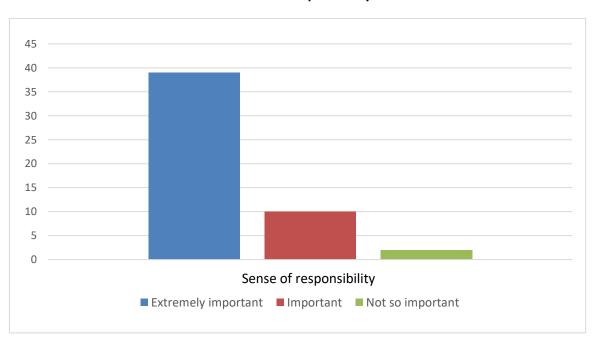
the respondents are aware of the psychological implications of goal setting in the process of running a business. The goals give the direction that keep all the parties involved focused on what really matter to the prosperity of the business. This consistent focus eventually leads to the achievement of the set goals.

### **Creative thinking skills**



Creative thinking is another top skill that our respondents believe is extremely important for those wanting to start a business. Indeed, creativity is a 21<sup>st</sup> century skill, and in order to stand out in the myriad of business one needs to offer something new, a new approach to what already is on the market. Thus fostering creativity is essential for the prosperity of a business.

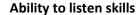
### Sense of responsibility skills

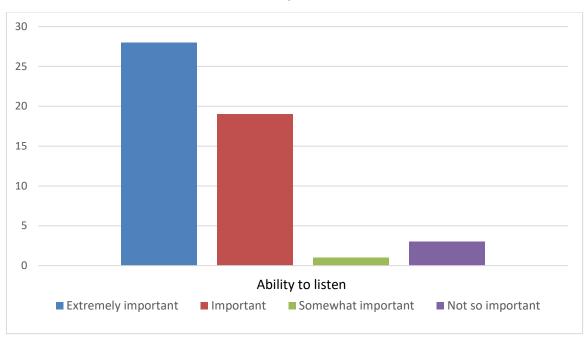






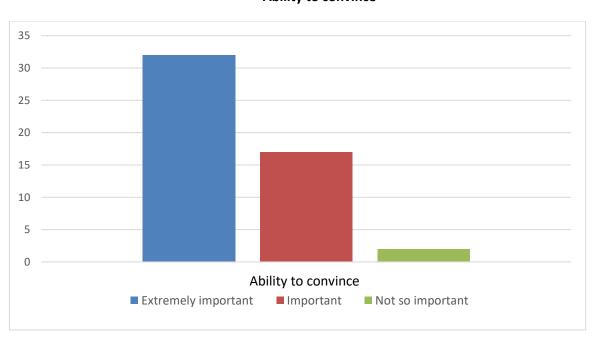
Sense of responsibility is viewed as extremely important by 39 respondents and as important by 10. Only 2 respondents believe it not to be so important. When starting a business, one needs to be aware of the responsibility they have towards themselves, their employees, and their customers.





In the opinion of 28 respondents the ability to listen is extremely important. 19 respondents view it as important. We can say that the majority of the respondents understand the importance of active listening in the process of running a business. Entrepreneurs need to carefully listen to understand the needs of the clients, as well as the needs of the employees. This way, the business will be able to better meet the expectations of the parties involved in its prosperity.

### **Ability to convince**

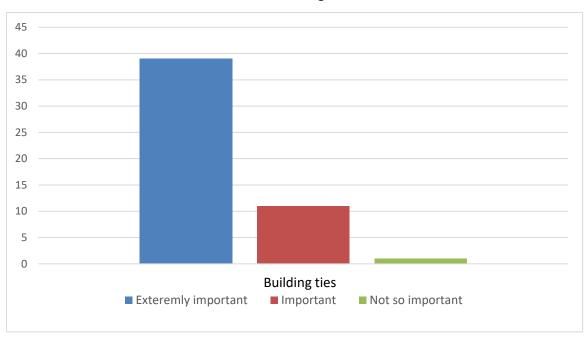






32 respondents think that the ability to convince is extremely important, 17 that it is important and 2 that it is not so important. Persuasion is important in convincing the target audience in the quality of the offered products, on the one hand, and the employees to stay motivated and engaged to work for the good of the company.

### **Building skills**



The respondents seem to realize the importance of networking at present as 39 viewed building ties as an extremely important skill, and 11 as important. Only one respondent thought it is not so important for establishing a business. Building professional networks increases the prospects of success of one's business. Sharing ideas and information is vital at present to achieve the set goals.

### Time management skills





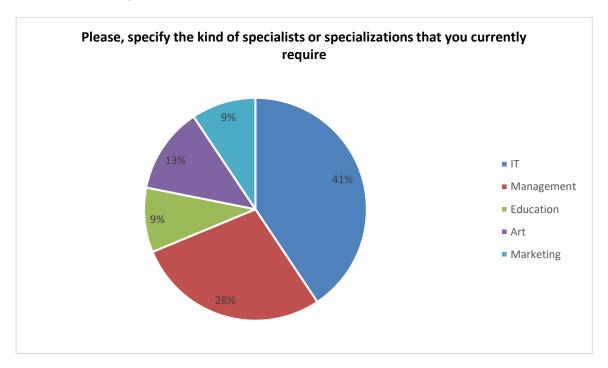


Time management is viewed as extremely important by 31 respondents, as important by 18, and as not so important by 2. Thus, managing one's time is essential whenever starting new ventures. Alongside with planning, time management can ensure the smooth progression of the business.

Conclusions: Analyzing the company's assessment of local needs results shows that more than about 50% of respondents assign extreme importance to the following skills for establishing a business: financial planning, market analysis and research, taking initiative, setting goals and achieving them, creative thinking, sense of responsibility, ability to listen, ability to convince, building ties, time management. In a similar percentage, other respondents give these skills the important rating. However, on the country sample, we find that the 2 most relevant skills were: building skill, responsibility skill (about 80% of respondents assigned for these skills the grade "extremely important").

# 6. Please, specify the kind of specialists or specializations that you currently require. (Provide the exact specialization name)

Upon analysis, what companies seem to need at present are professionals in their field. Thus, the respondents seem to lack employees with specialized knowledge in a concrete domain (e.g. specialist in the field of customs clearance, construction laboratory engineer, hairdresser, farmer, secretary, project coordinator, etc.). It becomes rather apparent that companies lack qualified personnel who will be able to deal with the set specific tasks professionally. However, we were able to trace some recurrent themes, which are presented in the chart below.



As seen, companies still need specialists in IT. This can be accounted for the rapid digitalization of businesses. Although the companies still need qualified personnel in specific fields, their biggest concern seems to be finding IT specialists that will be able to create either content or various programs meant to facilitate the work of their business, on the one hand, and make it more competitive on the market, on the other. The second most urgent area of specialization that needs to be covered is management. Companies need people able to manage departments or specific tasks. Art, education, and marketing are demanded on a more or less equal footing by the companies.





### 2. Analyzing the teacher's assessment of local needs results

Higher education has been undergoing significant transformation worldwide. These changes mainly caused by the diversification of innovations, the explosion of creative industries, the needs of soft skills required by employees, Bologna process and by a rapid growth of information and communication technologies (ICT) are reflected through a wide range of new educational concepts and approaches. Naturally, the role of teacher has been changing, from a knowledge transmitter to a learning facilitator or mentor, who is responsible for the creation of interactive learning environments.

Most teachers in Moldova are now facing this challenge: how to implement innovative ICT-based teaching and learning techniques in order to achieve better learning experiences by different types of learners?

The Connect project aims to support academic staff, across the partner universities, with required training to further develop additional hard and soft skills. The survey was applied academic staff from four public universities of RM, partners in the mentioned project in order to identify teachers' needs.

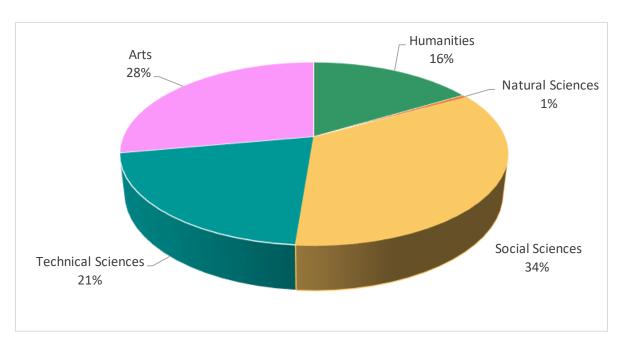
### 2.1General data about the respondents – approach per country

1. The field of your current academic involvement:

The higher education institutions' academic staff is classified into five areas of activity:

- Humanities
- Natural Sciences
- Social Sciences
- Technical Sciences
- Arts

202 participants from 5 universities from the Republic of Moldova participated in this survey, the structure is reflected in the diagram below







The majority of respondents are teachers in the social sciences who account for about 34% of respondents. As this field includes two fields, economic and legal, it is worth mentioning that this field is mainly represented by lawyers. Two other representative fields of the participants are represented by teachers specializing in arts (28%) and technical field (21%).

*Conclusion*: The sample of academic staff who participated in this survey is representative, including participants from different fields.

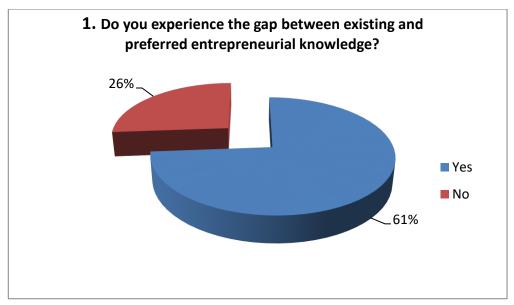
### 2.2 Needs for entrepreneurial education

1. Do you experience the gap between existing and preferred entrepreneurial knowledge?

Below we present the results of the survey made by all partner universities from Moldova made in their own institution.

### MSU

In the chart above it is shown the percentage of teaching staff of the MSU that experience the gap between existing and preferred entrepreneurial knowledge.



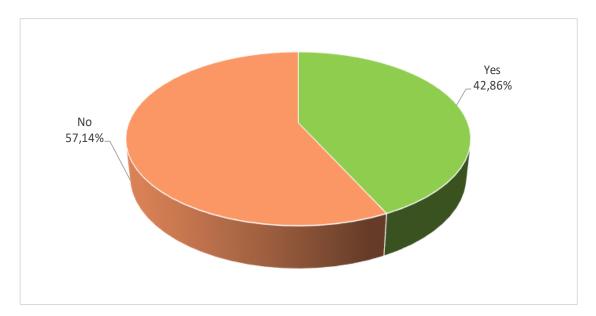
Conclusion: more than a half (61%) of MSU's teaching staff acknowledges that they feel the gap between their existing and preferred entrepreneurial knowledge.

### **TUM**

42.86% of the total number of respondents, represented by the Technical University of Moldova's teachers, confirms that they experience the gap between existing and preferred entrepreneurial knowledge.



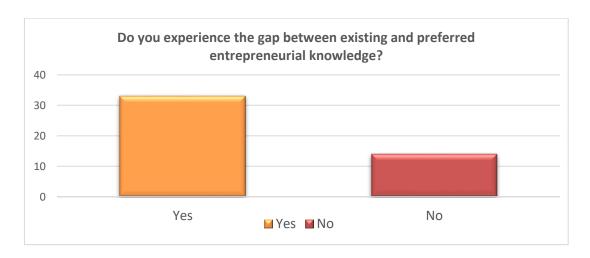




Conclusion: The gap between existing and preferred entrepreneurial knowledge is important for the academic staff of the Technical University of Moldova.

### **AMTAP**

Asked if teachers experience the gap between existing and preferred entrepreneurial knowledge, about 70% of respondents answered "yes".



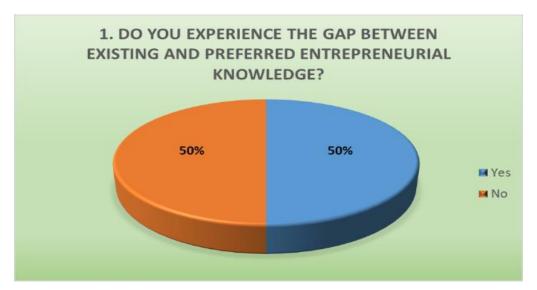
Conclusion: Majority of teachers feels the lack of knowledge in entrepreneurship.

### **SAUM**

In the diagram below 50 % of respondents from agricultural field answered that they face the gap between existing and preferred entrepreneurial knowledge.



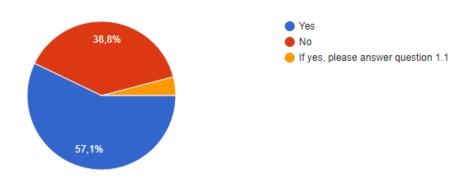




Conclusion: The results show the importance of entrepreneurial education in agricultural field of study, because the young people with entrepreneurship education are more likely to set up their own companies.

### **USARB**

1. Do you experience the gap between existing and preferred entrepreneurial knowledge?



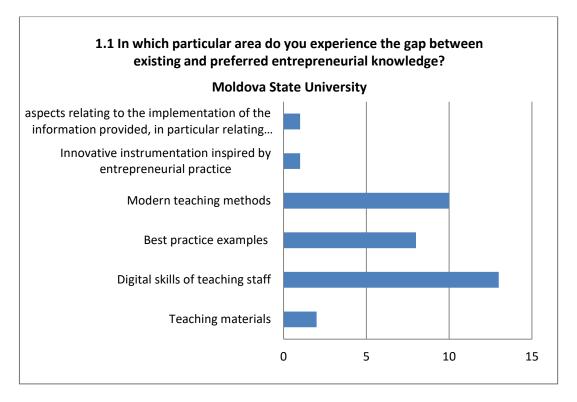
Out of the 49 representatives of USARB academic staff, participants in the survey, 28 people (57.1%) have experienced the gap between existing and preferred entrepreneurial knowledge, and 19 people (38.8%) did not face this experience.

1.1 In which particular area do you experience the gap between existing and preferred entrepreneurial knowledge?

Asked to rate the area where they experience the gap between existing and preferred entrepreneurial knowledge, the respondents of **MSU** answered that the main areas are "Digital skills of theaching staff", "Modern teaching methods" and "Best practice examples.

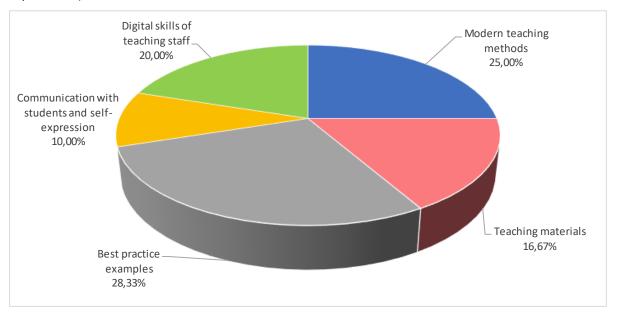






Conclusion: The digital skills are the principal area where the teaching staffs of the MSU experience the gap between existing and preferred entrepreneurial knowledge.

The most part of the respondents from the **Technical University of Moldova** feel the gap between existing and preferred entrepreneurial knowledge in terms of the best practical examples (28.33% of respondents).



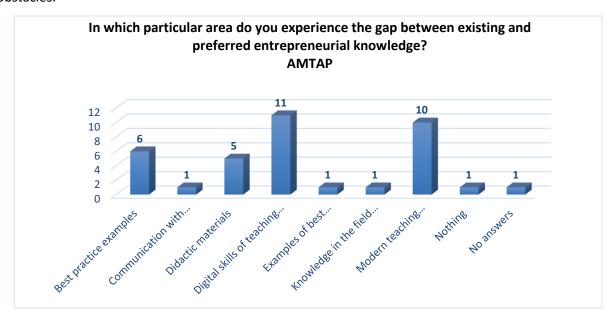
On the second position in this sense are placed modern teaching methods (25% of the respondents), being followed by digital skills of the teaching staff (20% of the respondents).

Conclusion: The academic staff of the Technical University of Moldova experiences the gap between existing and preferred entrepreneurial knowledge in several important fields.



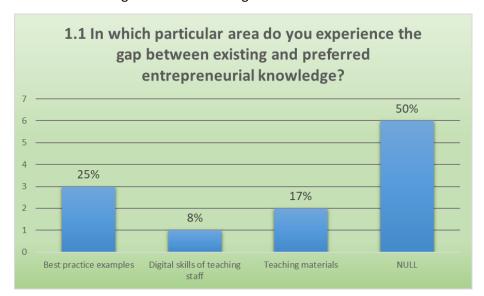


Asked to indicate a particular area where teachers from **AMTAP** feel the gap between existing and preferred entrepreneurial knowledge, they answered that "Digital skills of teaching staff", "Modern teaching methods" as well as, Best practice examples" and "Didactic materials" represent the biggest obstacles.



Conclusion: The insufficient digital skills and modern teaching methods are the most common obstacles that could stop the beginning of an entrepreneurial skills teaching at HEI.

The data of the SAUM's interview shows that the respondents are experiencing the gap between existing and entrepreneurial knowledge in best practices examples and teaching materials, less respondents are interested in digital skills of teaching staff.



Conclusions: It means that the entrepreneurial education must be based on the best practice examples in combination with teaching materials.

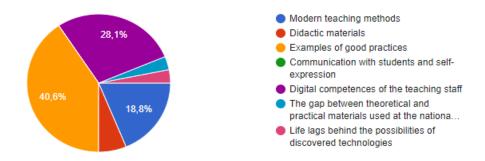
Out of the 49 representatives of the academic staff from **USARB**, participants in the survey, 13 teachers (40.6%) mentioned the lack of the best practice examples, and 9 teachers (28.1%) indicated as a gap the digital skills of teaching staff, and 5 teachers (18.8%) answered "Modern teaching methods".





1.1 In which particular area do you experience the gap between existing and preferred entrepreneurial knowledge?

32 ответа

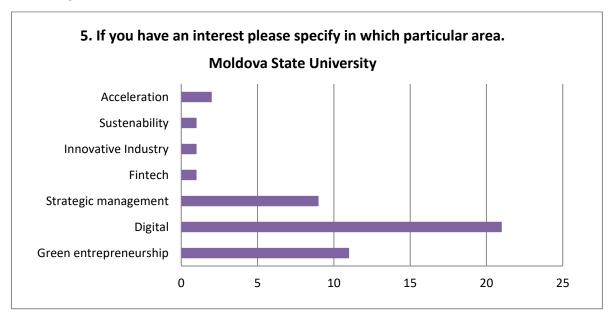


### 2. If you have an interest please specify in which particular area:

The collecting and analyzing of the answers received as a result of the surveys facilitated the identification of a particular area of interest of the academic staff of the partner universities of RM.

### MSU

To the question about particular area in which they have a special interest, the academic staff of the MSU mentioned "Digitalization", "Green entrepreneurship" and "Strategic management" as most interesting.



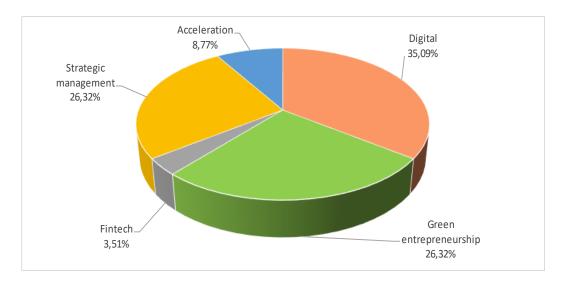
Conclusion: The Digital is the area in which academic staff of the MSU is most interested.

### **TUM**

The most part of the total number of respondents represented by the Technical University of Moldova's teachers have an interest in digital skills field (35.09% of the respondents). The next two identical important positions belong to teachers who show interest in strategic management (26.32% of the respondents) and green entrepreneurship (26.32% of the respondents).



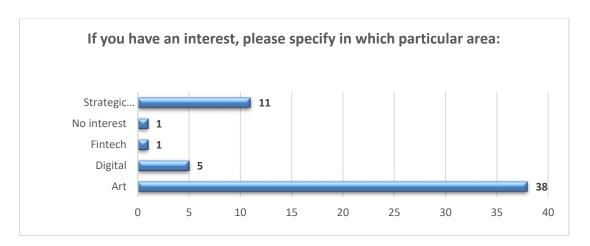




*Conclusion*: The professors from the Technical University of Moldova show interest in different areas, the most important being the area of digital skills.

### **AMTAP**

Asked to indicate a particular area of entrepreneurial knowledge where AMTAP's teachers have interest, they answered that "Art" and "Strategic management" are leading while "Digital" takes the third place.



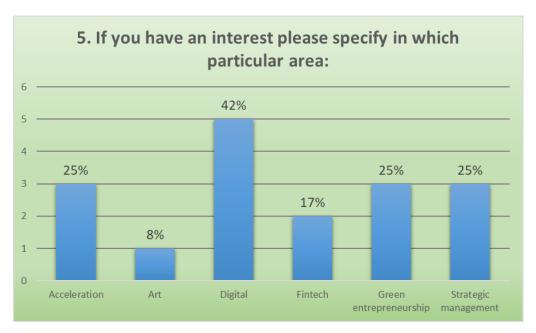
Conclusion: The insufficient knowledge of entrepreneurial approach to art and lack of knowledge in strategic management are the most common obstacles in entrepreneurial skills teaching at HEI.

### **SAUM**

The results of the survey made at SAUM a shown in the chart below.







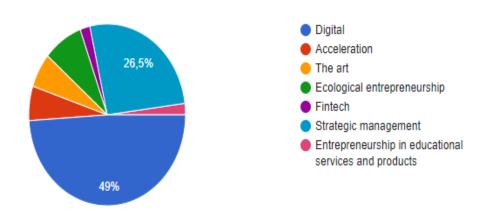
Conclusions: After the data was processed, it is clear that most of the responders 42% are interested to improve their digital skill and also the acceleration and green entrepreneurship is having an impact on developing the entrepreneurs activities.

### **USARB**

The 49 representatives of the academic staff from USARB, participants in the survey, 13 teachers (26.3%) mentioned Digital as a particular area of interest, and 24 teachers (49%) indicated Strategic management as a particular area of interest. These two areas of interest were a priority, the rest of the answers (about 24%) going to the fields of Acceleration, Art, Green entrepreneurship, Fintech (see in the chart below).

5. If you have an interest please specify in which particular area:

49 ответов



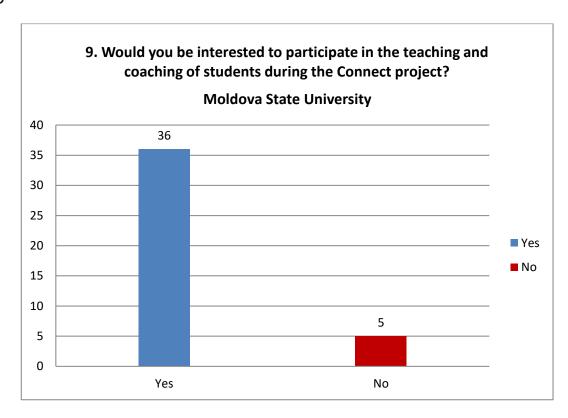




3. Would you be interested to participate in the teaching and coaching of students during the Connect project?

In the research conducted by the survey, we were interested in the degree of interest of partner universities academic staff on participation in the teaching of courses delivered within the CONNECT project. The results we present the following charts:

### MSU



The chart above shows the interest of the academic staff of Moldova State University to participate in the teaching and coaching of students during the Connect project.

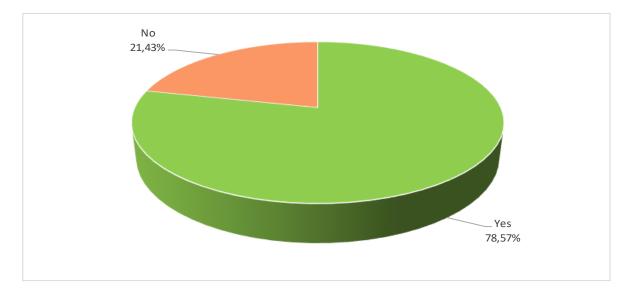
Conclusion: more than 90 % of respondents showed interest in participating in teaching within the Connect project.

### TUM

The interest of TUM's teachers to participate in the teaching and coaching of students during the Connect project is gratifying





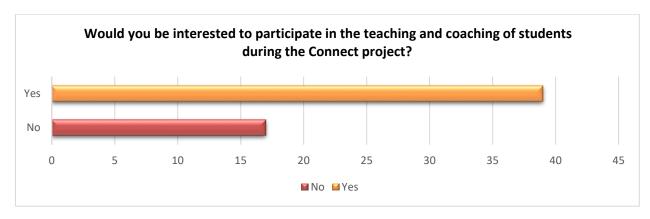


78.57% of the number of respondents represented by the Technical University of Moldova's teachers confirm that they are interested in participating in the teaching and coaching of students during the Connect project.

Conclusion: Professors from the Technical University of Moldova are open for involvement in the teaching and coaching of students during the Connect project.

### **AMTAP**

Asked if teachers from AMTAP would be interested to participate in the teaching and coaching of students during the Connect project, about 70% of respondents answered "yes".



Conclusion: The high rate of willing of teaching and coaching of students during the Connect project gas been identified.

### **SAUM**

The results of the SAUM's teachers questionnaire showed that all respondents are interested to participate in students teaching and couching during the CONNECT project implementation.







SAUM's staffs have a very positive attitude and are able to inspire students. They are confident in their teaching, being in fact leaders in themselves and do not necessarily expect leadership from administrative staff, however, they need to be open to new ideas and able to think sideways about topics and issues.

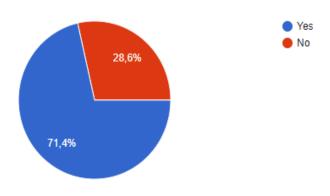
In conclusion, SAUM teachers must be trained in the field of entrepreneurship education, as well as in how to use the resources available in the local community, in order to subsequently pass on to the students the acquired knowledge.

### **USARB**

Out of the 49 representatives of the academic staff from USARB (100%), participants in the survey, the vast majority of teachers - 35 (71.4%) gave an affirmative answer and 14 teachers (28.6%) offered negative answers.

9. Would you be interested to participate in the teaching and coaching of students during the Connect project?

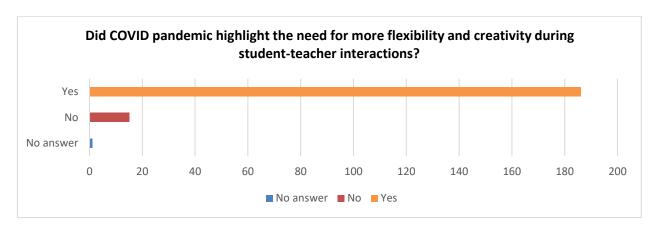
49 ответов







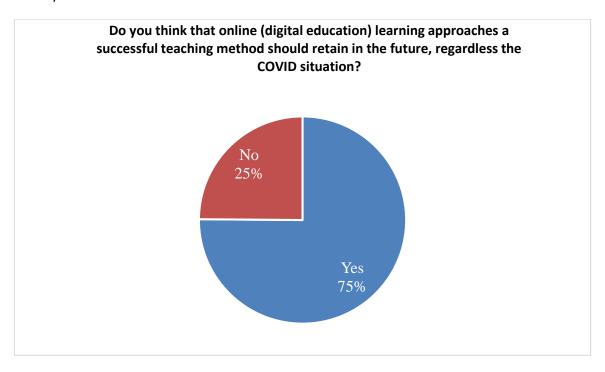
4. Did COVID pandemic highlight the need for more flexibility and creativity during student-teacher interactions?



The absolute majority of respondents confirmed that the COVID pandemic highelighted the need of more flexibility and creativity in student-teacher interraction. The answer "No" takes about 8% rate of the total answers.

5. Do you think that online (digital education) learning approaches a successful teaching method should retain in the future, regardless the COVID situation?

The analysis shows that 75% of the respondents consider that digital approaches should be applied to their teaching in the future regardless of the COVID situation. It implies that they realize the importance of digitalization of the teaching process, and that a blended approach would be the optimal solution to realize their pedagogical goals in the 21<sup>st</sup> century higher education context. Still 25% expressed their disagreement with the statement, believing that in-person teaching is the best teaching even in the 21<sup>st</sup> century context.





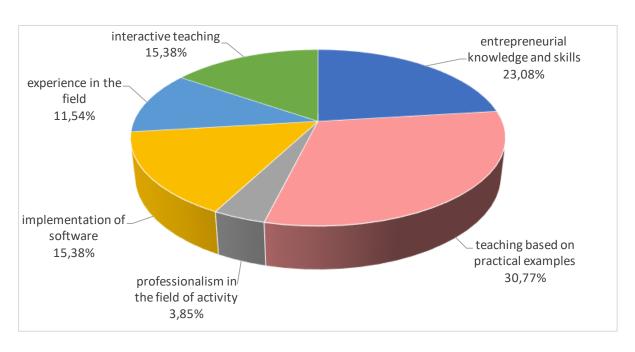


6. Please specify what would you see as a key teaching element (during entrepreneurial training) for yourself?

#### **MSU**

From point of view of the Moldova Sate University's staff the key teaching elements are the following: Practicalities/casuistry; New digital tools / skills; Smart structured lectures, strictly to the subject; Methods / tools used in online education; Quality; Real problems case studies, Awakening students to identify and solve a problem; Interactive communication in online activities; Entrepreneurship topics related to the modern global context; Student-teacher-teacher and-student interaction and feedback; Teaching and practical experience in the field; Recording of the trainings / lectures for offline learning; Time management; Group work; PBL; Creative and innovative approaches; Combination of theory and practice.

#### **TUM**



Please specify what would you see as a key teaching element (during entrepreneurial training) for vourself?

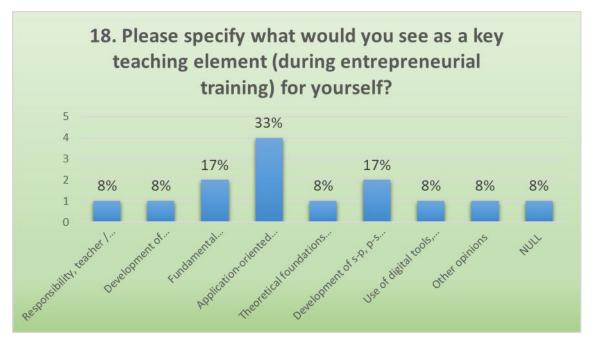
The most part of the Technical University of Moldova's teachers (30.77% of the respondents) confirm that they see the teaching based on practical examples as a key teaching element. The second position in this rating belongs to teachers who consider the entrepreneurial knowledge and skills as a key teaching element (23.08% of the respondents). The next two positions as a key teaching element (15.38% of the respondents) are interactive teaching and software implementation (15.38% of the respondents).

Conclusion: Professors from the Technical University of Moldova see as a key teaching element during entrepreneurial training especially teaching based on practical examples and entrepreneurial knowledge and skills.





#### **SAUM**



In the chart above we can see that the majority of respondents 33% answered that they want to see as a key element "Application-oriented teaching"

SAUM conclusions: It is known that universities pay more attention to students' theoretical knowledge and view the teaching process simply as a process of knowledge accumulation. In assessing students, they mainly master knowledge as the main measure of the standard, ignoring students' ability to innovate and training and stimulating application skills. As the reform of quality education deepens, application-oriented teaching must change traditional educational concepts and break the shackles of traditional educational habits. In order to achieve the long-term development of innovation and entrepreneurship education, a correct concept of education for innovation and entrepreneurship must be established. First, it should change "adaptive education" to "creative education".

## **AMPTAP**

The respondents gave a wide range of answers which could be systematized in a following way:

- To get up their competencies in teaching (to be adopted to work/contacts with audience, unexpected moments, to apply knowledge, to gain practical skills, to raise quality of teaching etc.) – 20 respondents;
- Digital skills development (online teaching, Zoom) 7 respondents;
- Entrepreneurial skills (start-ups, management, marketing) 10 respondents;
- English language learning 3;
- Other 10
- No answer 5.

Conclusion: The majority of respondents feel the lack of knowledge in teaching methods, digital tools application, entrepreneurial skills and foreign languages.



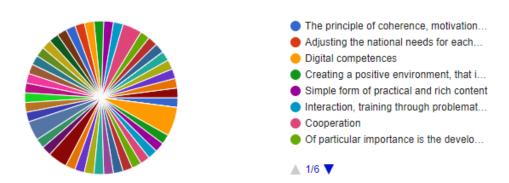


#### **USARB**

In the research conducted by the survey, we were interested in the opinion of Alecu Russo Balti State University academic staff about the key teaching element (during entrepreneurial training) for yourself. Thus, the 49 representatives of the academic staff from USARB (100%), participants in the survey, generated a multitude of answers, which have qualitative and quantitative value: generating innovative ideas, stress management, teamwork skills, applicability, interaction, problem-solving learning, cooperation, development of knowledge in the field of psychology, time management, algorithm to follow to launch an idea, interactivity, simple form of content practical and rich, increasing the beneficiary's interest, practical activities, case studies, modern methods for the higher education system, intercultural and interpersonal communication skills, authority, opinion, creating a positive environment, modern teaching methods, synergy between teacher and student, applicability, elaboration of teaching materials, exchange of knowledge, principle of consistency, motivation and cooperation, efficient management, accepted to any form of study, Be interesting and useful, to be able to integrate in the learning process extending the digital skills needed for distance learning, presenting specific examples illustrating theoretical material, Interaction with students, accumulation of special knowledge, tools, business, quality, inheritance law, creating a climate based on high expectations, with tasks to be fulfilled and trusted, business plan, adjusting national needs for each specialty, economic efficiency of various activities, especially educational, exchange of experience, structure, management, discussions case, "new-old ideas", collaboration/interpersonal communication, communication and exchange of experience, effective communication, digital skills, teaching students entrepreneurial skills, skills to adapt to unexpected events, digital education, practical elements (Fig.2.6)

18.Please specify what would you see as a key teaching element (during entrepreneurial training) for yourself?

49 ответов



## 2.3 Skills important for a entrepreneurial education

1. How essential are the following types of knowledge, skills, and competencies to you:

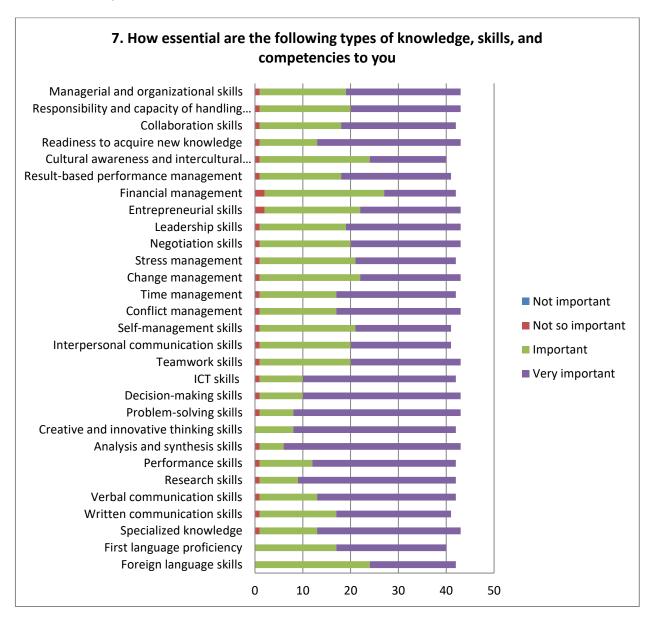
Another subject that we were interested in the survey is the opinion of partner universities academic staff about how essential are the types of knowledge, skills, and competencies proposed to them. In order to assess how essential are different types of knowledge, skills, and competencies to the teachers, there were proposed 3 variants of the answer: not important, important and very important.





#### MSU

In the chart below the essential knowledge, skills and competencies are rated according to the MSU's academic staff opinion.



As can be seen from the chart, the overwhelming majority of respondents have rated as important and very important all the mentioned knowledge / skills/ competences.

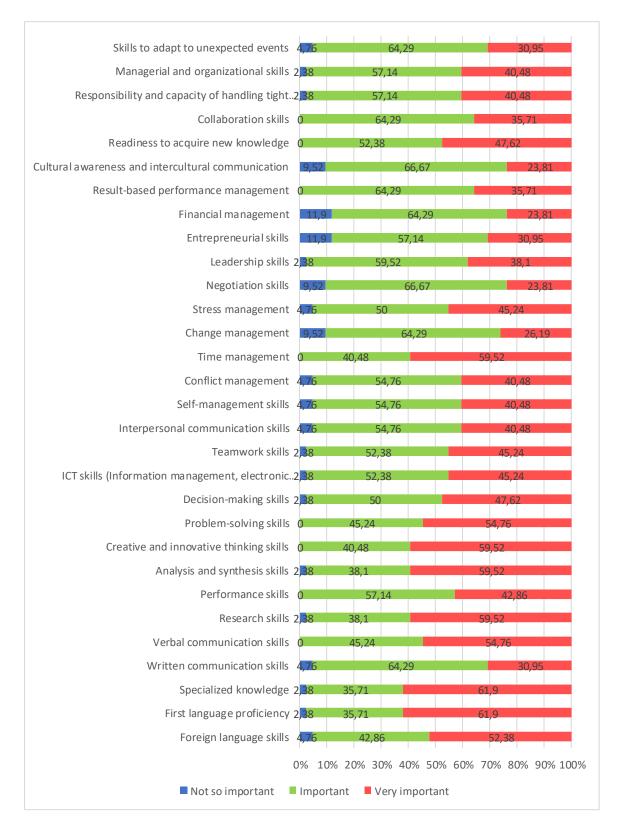
Conclusion: All mentioned in the question skills are important for a entrepreneurial education.

## TUM

The Technical University of Moldova's teachers appreciated most of the knowledge, skills, and competencies as important and very important. The teachers at UTM appreciated most of the knowledge, skills, and competencies as important and very important. The "not so important" answer has a weight from 0% to 11.9% to the assessment of proposed knowledge, skills, and competencies, thus from 89.1% to 100% belongs to the answers "important" and "very important".







Conclusion: The knowledge, skills, and competencies are very important in the entrepreneurial education.

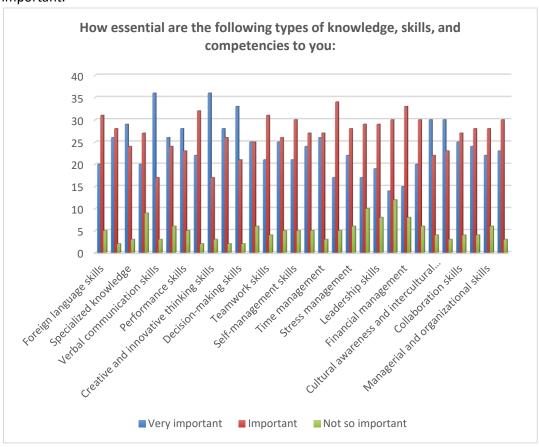
### **AMTAP**

The survey shows that the teachers from AMTAP rated subjects like "Verbal communication skills", "Creative and innovative thinking skills", "Problem-solving skills", "Cultural awareness and intercultural





communication", "Readiness to acquire new knowledge" take the leading positions as very important, while "Foreign language skills", "Analysis and synthesis skills", "Teamwork skills", "Self-management skills", "Change management", "Entrepreneurial skills", "Financial management" were identified as important.



Conclusion: business-oriented competencies and soft kills are important for AMTAP's teachers.

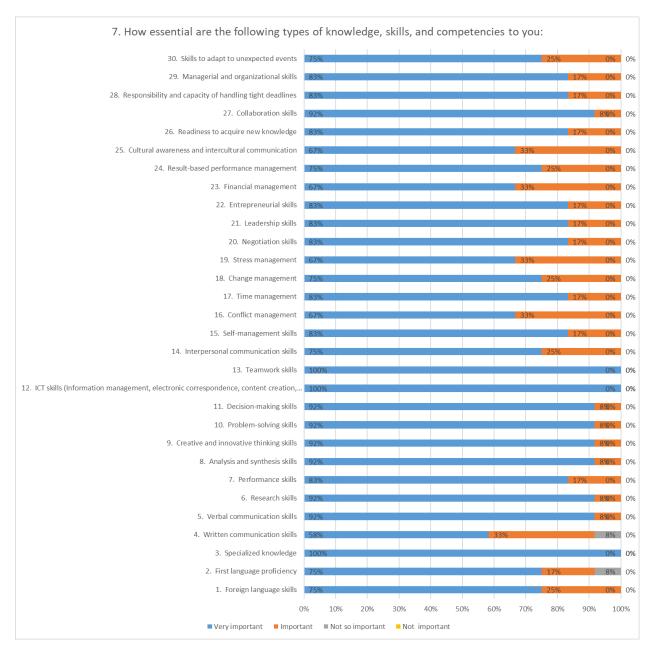
#### **SAUM**

For SAUM staff all the skills mentioned in the survey are very important. However, the most important skills (100 %) mentioned by respondents were: Specialized knowledge, team working skills.

Also, very important by over 93% of respondents were considered: research skills, verbal communication skills, and analysis and synthesis skills, creative and innovative thinking skills.







Conclusion: So, it is very important in the trainings that will be organized to introduce the courses: "Communication and Teamwork ","Creativity and problem-solving".

#### **USARB**

The vast majority of the academic staff from USARB, 55-60 % of the survey respondents, having multiple options, gave the highest importance to the following categories of knowledge, skills, and competencies: foreign language skills, first language proficiency, specialized knowledge, written communication skills, verbal communication skills, research skills, performance skills, analysis and synthesis skills, creative and innovative thinking skills, problem-solving skills, decision-making skills, ICT skills (Information management, electronic correspondence, content creation, information security), teamwork skills, interpersonal communication skills, self-management skills, conflict management, time management, change management, stress management, negotiation skills, leadership skills, entrepreneurial skills, financial management, result- based performance management, cultural awareness and intercultural communication, readiness to acquire new knowledge, collaboration skills, responsibility and ability of handling tight deadlines, managerial and organizational skills, skills to adapt to unexpected events.





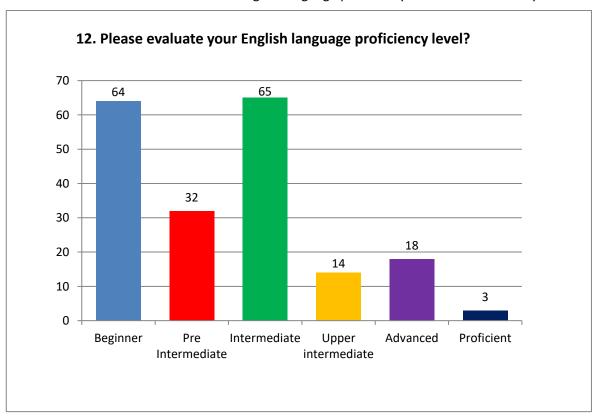
## 2. Would you like to improve your English language skills?

The academic staff of the universities of RM, partners in the Connect project, was asked if they would like to improve their English language skills. As it is shown in the chart below, the 95% of respondents expressed interest in improving their English language skills.



## 3. Please evaluate your English language proficiency level?

We continued with the assessment of the English language proficiency level of the university staff.





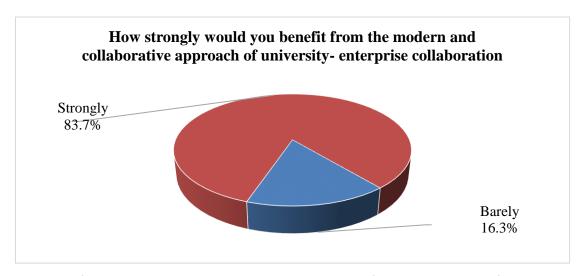


The chart above shows the result of the survey of 196 academic staffs from the universities in Moldova, partners in the Connect project, regarding their level of English language proficiency. Almost half of the respondents have the level lower than intermediate.

Conclusion: A large part of the academic staff of Moldovan universities does not have the required level of English.

4. How strongly would you benefit from the modern and collaborative approach of university-enterprise collaboration?

With regard to the opinion of the academic staff on the benefit from the modern and collaborative approach of university- enterprise collaboration, the survey shows that 83,7% of the respondents appreciate it as "strongly benefit".



This benefits are relay to: Recognizing the importance of having a strategic framework in which to formulate research and change; Collecting good practices and case studies of how research can provide information for education / training; Evaluating the dual role of teachers as researchers and teachers in order to understand better how they can be supported in both dimensions; Understanding the challenges, benefits and ways of involving the industry in research, as well as in the educational process (partnership); Better understanding of entrepreneurship and how it can be integrated into teaching and curriculum development.





# 3. Analyzing the startup's assessment of local needs results

All universities participating in the CONNECT project have taken on the responsibility of adapting their academic programs and educational services to the changing demands of the labor market and improving students' entrepreneurial skills, thus strengthening university-industrial (real) cooperation.

In order to unite the efforts of universities towards the continuous improvement of the quality of the studies offered by the higher education institutions, partner universities have included 159 students in the sample of respondents of this research, based of questionnaire.

In USARB there is the structure of student

In all the partner universities in the project there are student self-government structures with a vast experience of involving students in opinion polls, in university governance structures, in decision-making processes, etc. In the survey carried out within the framework of the CONNECT project, on the basis of questionnaires, students expressed their opinions on entrepreneurship education, skills, local needs, etc., which are very important to us, from the perspective of student vision and approach to student-based education and research.

The analysis of the results of the assessment of local needs of start-ups provides information to create clear and common visions regarding the updating of the curriculum from the perspective of competencies and skills of both teachers and students of HEIs, as well as to enhance its relevance for the labor market and society. Additionally, it provides insights into some of the content that will be developed for the Competitive Intelligence Program (CIP) for students and alumni, especially those who do not benefit directly from entrepreneurial education (EE) but need it, which gives a wider umbrella and support framework for collaboration and mutual learning within and beyond the multi-disciplinary hubs, as well as due to bottom-up approach with industry.

In this context, the HEIs' approach is focused on the development of entrepreneurial culture in the university, with the involvement of students in the permanent assessment of local needs and assessment of the expectation of the labor market.

## 3.1General data about the respondents

1. What specialization are you currently studying?

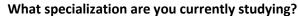
The proposed study investigated start-ups operating in the five areas listed below:

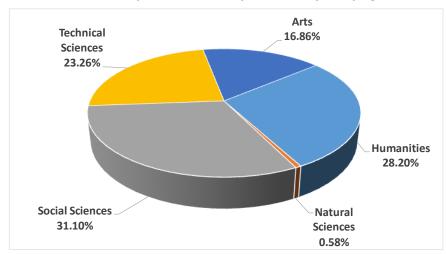
- 1. Humanities
- 2. Natural Sciences
- 3. Social Sciences
- 4. Technical Sciences
- 5. Arts

Following the examination of 344 respondents from the Republic of Moldova to the question "What specialization are you currently studying?" we obtained the following distribution:









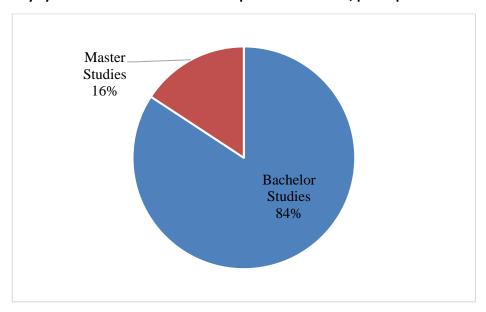
The largest share of 31,10% of the total respondents are students of *Social Sciences*, which is 107 people. The following are *Humanities* students - 97 people, with 28,20% of the total number of people surveyed. In third place are students studying *Technical Sciences* – 23,26%, which is 80 of the total respondents, *Arts* accounted for 16,86%, with 58 students surveyed and *Natural Sciences* answered only 2 respondents, which is 0,58% of the total respondents.

Conclusion: The sample of startups who participated in this survey is representative and includes participants from different specialization, the most part being from most are from the social and humanities sciences.

#### 2. You are enrolled in: -(show in % - bachelor to master students)

As it is shown in the chart below the majority of respondents (84%) are students in the first cycle of studies - Bachelors, and 16% of respondents are students in the second cycle - higher master's studies. This difference is also registered at the level of higher education system, where the number of undergraduate students is higher than the number of master's students.

The study cycle of the students from the Republic of Moldova, participants in the survey



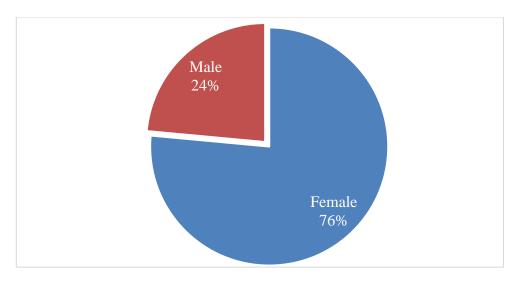




## 3. Your gender is:

The gender dimension of our respondents is represented by 3/4 female (76% of the respondents i) and 1/4 male (24% of the respondents). The majority presence of the female gender is explained by the fact that in some study programs girls dominate in very large proportions (for example, in the sciences of education).

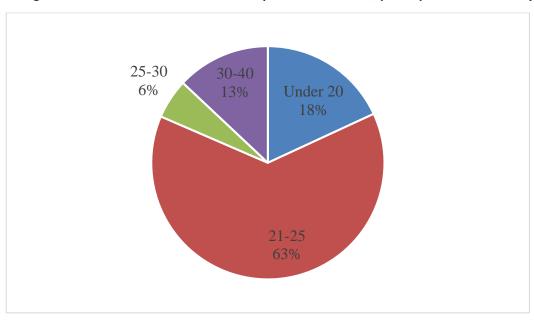
The gender dimension of students from the Republic of Moldova, participants in the survey



## 4. How old are you?

The group of respondents was heterogeneous in terms of age and ranged in age from 18 to 40 years.

The age dimension of students from the Republic of Moldova, participants in the survey



The most representative was the group aged 21-25 years (63% of respondents), which is characteristic, as a rule, to the first cycle of higher education, followed by respondents under the age of 20 (18%) . The





30-40 year old age range was represented by 13% of the respondents, and the lowest share belonged to the 25-30 year old respondents (6%).

## 5. Do you need to study English for your individual and professional development?

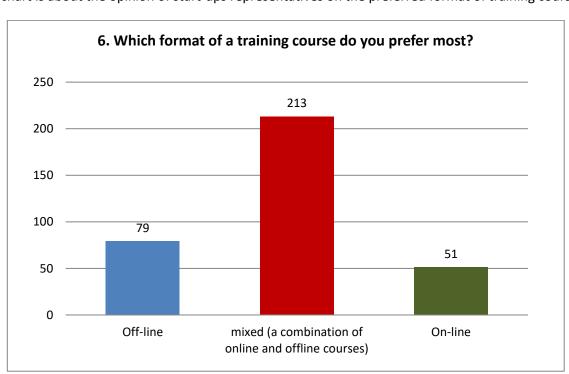
Asked if they needed to know English for their professional and individual development 90% of the 343 respondents gave a positive answer.



Conclusion: Thus, most of the interviewees consider the knowledge of English an important element both for their personal development and for the prosperity of their business.

## 6. Which format of a training course do you prefer most?

This chart is about the opinion of start-ups representatives on the preferred format of training courses.







As we can see almost two thirds of the students, working in the startups, think that the mixed format is the best channel of trainings.

Conclusion: Mixed format for the trainings is the most popular type of education within the students involved in startups.

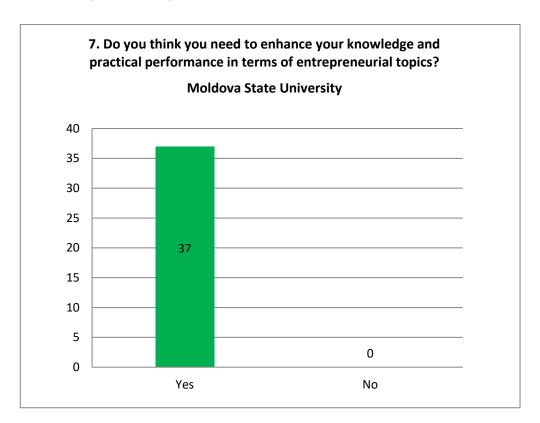
## 3.2 Needs for entrepreneurial education

1. Do you think you need to enhance your knowledge and practical performance in terms of entrepreneurial topics?

In this part, each university presented its own analysis of the results of the survey on this issue, conducted within the institution.

#### MSU

At the Moldova State University 37 students, working in startups, were interviewed. As shown in the chart below, all interviewed students confirmed the need to improve their own knowledge and practical performance on entrepreneurial topics.

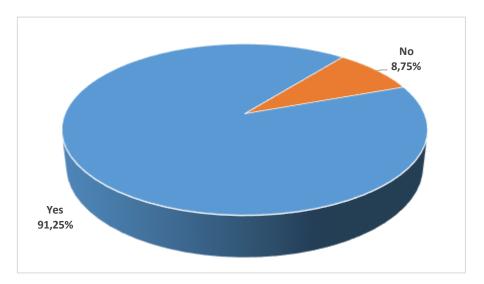


#### **TUM**

To the same question the students from the Technical University of Moldova answered as follows:







Do you think you need to enhance your knowledge and practical performance in terms of entrepreneurial topics?

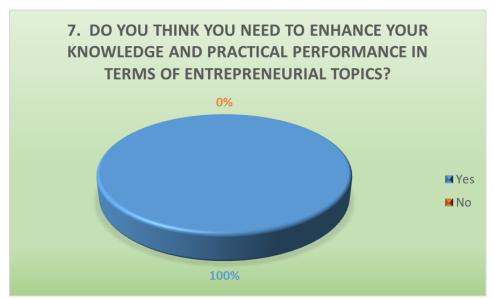
Out of the total respondents - 80 people, 73 students answered YES, which is 91,25%, and 8,75% of the total interviewed students answered - NO.

Conclusion: The most part of the students from the Technical University of Moldova think that they need to enhance their knowledge and practical performance in terms of entrepreneurial topics

#### **SAUM**

In the chart above it is shown the percentage of start-ups of the SAUM that need to enhance their knowledge and practical performance in terms of entrepreneurial topics.

SAUM Conclusion: 100 % of respondents confirm the necessity to enhance their knowledge and practical performance in terms of entrepreneurial topics.

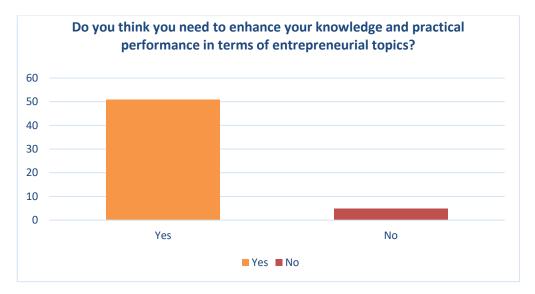


#### **AMTAP**

Asked if students need to enhance their knowledge and practical performance in terms of entrepreneurial topics, about 90% of respondents answered "Yes".



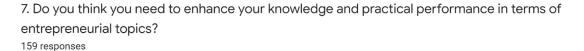


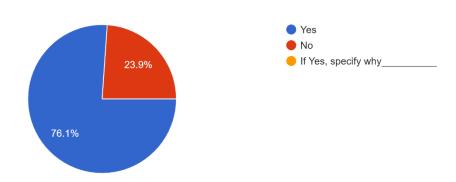


Conclusion: The entrepreneurship knowledge and practical skills are important in career development.

#### **USARB**

Alecu Russo Balti State University has included 159 students in the sample of respondents of this research, carried out with the support of the questionnaires. Regarding the need to enhance the knowledge and practical performance of students in terms of entrepreneurial topics, 121 students (76.1%) gave affirmative answers, and 38 students (23.9%) answered negative. We conclude that students, even if they study at non-economic faculties, prefer in the absolute majority to enhance the knowledge and practical performance of students in terms of entrepreneurial topics.



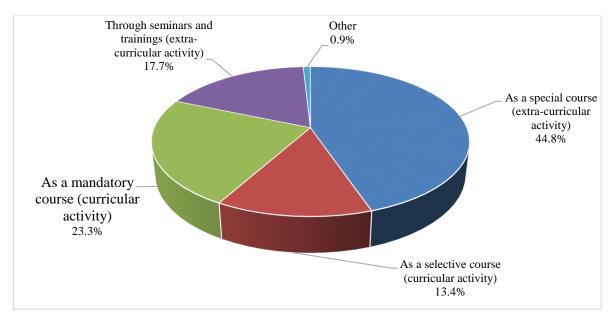


# 2. How do you think the entrepreneurial education should be implemented at higher education institutions?

The representatives of start-ups were asked about their vision on how the entrepreneurial education should be implemented at higher education institutions. As can be seen from the chart below the majority of respondents (44,8%) consider that entrepreneurial education should be implemented in the form of special course (extra-curricular activity).







Conclusion: In order to create conditions for the development entrepreneurial education, special infrastructure - the SMART CAFFE - was created within some partner universities. The SMART CAFFE activity meets the requirements of the labour market, focusing in particular on the economic field and the information technology. It is a kind of bridge between university and the private business sector, thus providing an informative and permanent flow of training, updated and with more and more dynamic requirements.

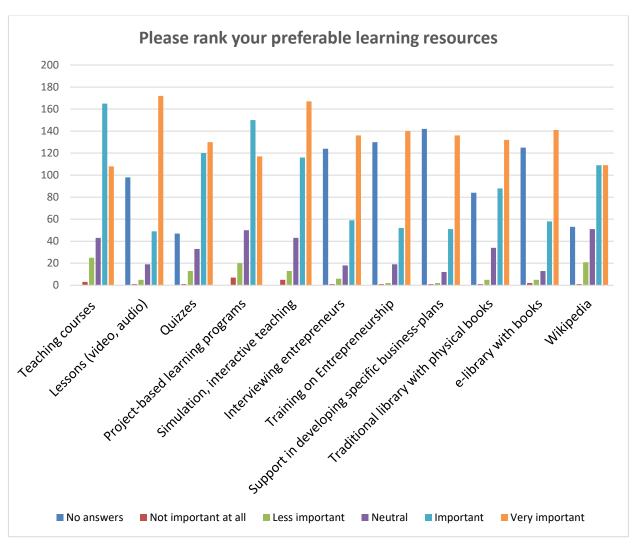
The courses offered at SMART CAFFE aim to develop the entrepreneurial skills of trainers, but the problem remains current due to the permanent change and challenges of the labour market. The implementation of the project results will be an added value for entrepreneurship education in IIS. Entrepreneurial skills and start-ups will be developed and supported by trainers within the CONNECT project, and the professional level of the beneficiaries will be improved.

## 3. Please rank your preferable learning resources:

Asked to rank start-up students' preferable learning resources around 80% of respondents indicated the importance of the following sources: "Lessons (video, audio)" "Project-based learning programs" "Training on Entrepreneurship" "e-library with books" "Support in developing specific business-plans" ("Very important", "Important"), while "Wikipedia" and "Physical books" are less important as learning resources: physical books have 62% in above mentioned categories, while Wikipedia took only 47% together with a high rate of neutral answers (30%).



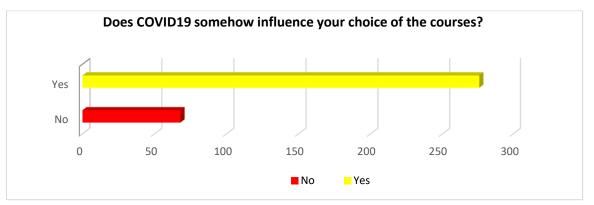




Conclusion: start-up students have experience in using online tools, using a wide range of sources.

## 4. Does COVID19 somehow influence your choice of the courses?

Asked if COVID19 somehow influenced the start-up students 'choice of the courses, 80% of respondents answered "Yes".



Conclusion: COVID19 substantially affected the study process and students' decisions concerning the courses choice.





## 3.3 Skills important for a entrepreneurial education

- 1. Assess the importance of the following skills developed during entrepreneurial education aiming for a successful career:
  - 1. Foreign language skills
  - 2. First language proficiency
  - 3. Specialized knowledge
  - 4. Written communication skills
  - 5. Verbal communication skills
  - 6. Research skills Performance skills
  - 7. Analysis and synthesis skills
  - 8. Creative and innovative thinking skills
  - 9. Problem-solving skills
  - 10. Decision-making skills
  - 11. ICT skills
  - 12. Teamwork skills
  - 13. Interpersonal communication skills
  - 14. Self-management skills
  - 15. Conflict management
  - 16. Time management
  - 17. Change management
  - 18. Stress management
  - 19. Negotiation skills
  - 20. Leadership skills
  - 21. Entrepreneurial skills
  - 22. Financial management
  - 23. Result-based performance management
  - 24. Cultural awareness and intercultural communication
  - 25. Readiness to acquire new knowledge
  - 26. Collaboration skills
  - 27. Responsibility and capacity of handling tight deadlines
  - 28. Managerial and organizational skills
  - 29. Skills to adapt to unexpected events

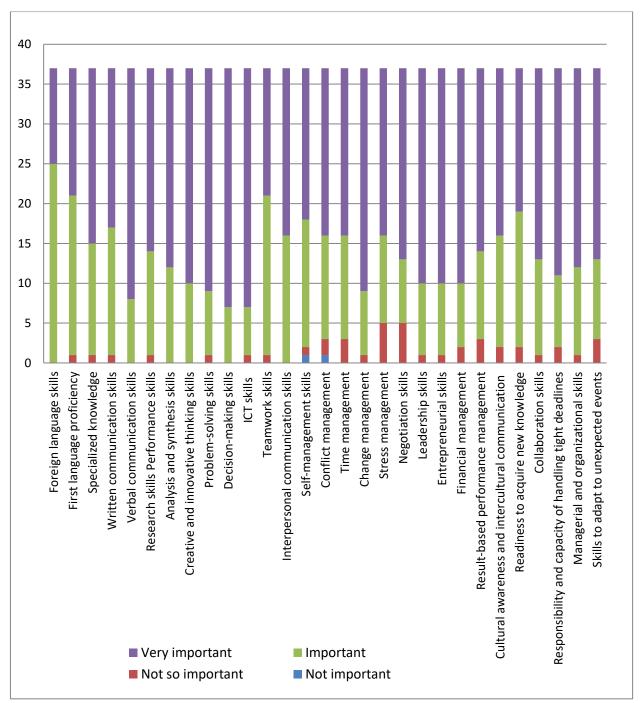
To find out their opinion the partner universities of RM asked the start-ups representatives to rate the mentioned skills, developed during entrepreneurial education, based on the importance for a successful career. The results of these surveys can be seen below.

## MSU

The results of the survey on this subject show that the majority of respondents from the Moldova State University appreciate all mentioned skills as "important" and "very important".







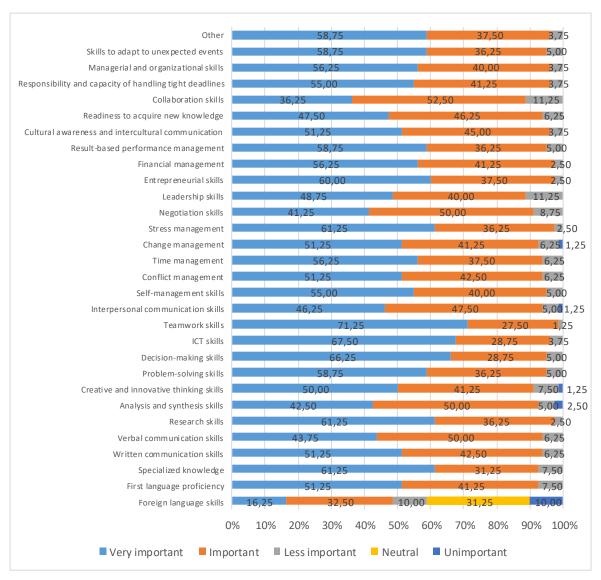
Moldova State University: The assessment of the importance of the following skills developed during entrepreneurial education aiming for a successful career.

## **TUM**

After examining 30 variants of skills to the question "Assess the importance of the following skills developed during entrepreneurial education aiming for a successful career".







Technical University of Moldova: The assessment of the importance of the following skills developed during entrepreneurial education aiming for a successful career.

Based on chart above the following findings may be made:

- In the first place we can highlight the *Teamwork skills*, which accumulated 57 "very important" answers, which is 71,25% and 22 "important" answers with 27,50%.
- In second place is the ability *ICT skills*, students ticking "very important" 54 times, which is 67,50%, and "important" 23 times 28,75%.
- The *Decision-making skills* was chosen on the third place, out of 80 respondents, 53 people chose "very important", ie 66,25%, and the "important" answer of 23 people, which constitutes 28,75%.
- At the other end we have the following abilities:
- The least important in the opinion of TUM students is the ability of Foreign language skills, which responded as follows: "very important" 16,25% (13 respondents), "important" 32,50% (26 respondents), "less important" 10,00% (8 respondents), "neutral" 31,25% (25 respondents) and "unimportant" 10,00% (8 respondents).
- Next is *Collaboration skills*, with 29 answers to "very important", which is 36,25%, "important" with 42 answers 52,50% and "less important" with 9 answers, which is 11, 25%.

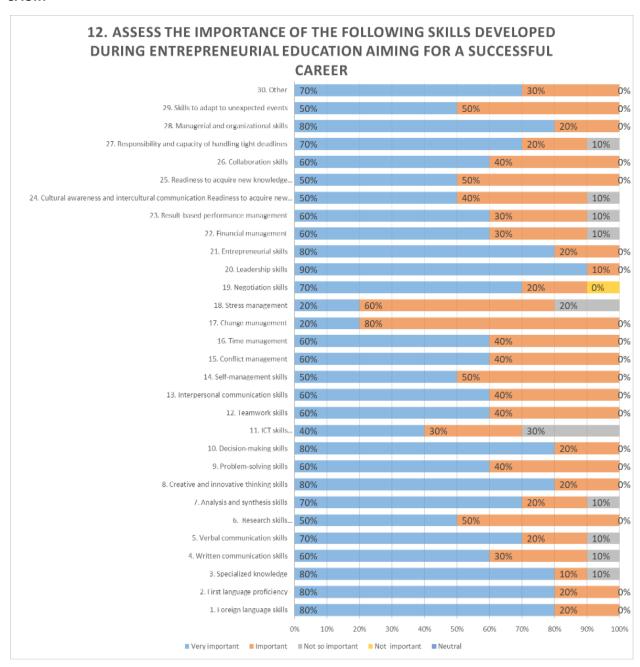




■ Next is the *Analysis and synthesis skills*, which accumulated 34 "very important" answers – 42,50%, 40 "important" answers – 50,00%, 4 "less important" answers – 5,00% and 2 answers "unimportant" – 2,50%.

*Conclusion*: Students from the Technical University of Moldova think that it is necessary to develop multiple kinds of skills during entrepreneurial education for a successful career.

## **SAUM**



State Agrarian University of Moldova: The assessment of the importance of the following skills developed during entrepreneurial education aiming for a successful career.

All the skills mentioned in the survey are important and very important during entrepreneurial education aiming for a successful career . However, the most important skills accessed by over 80% of respondents were:

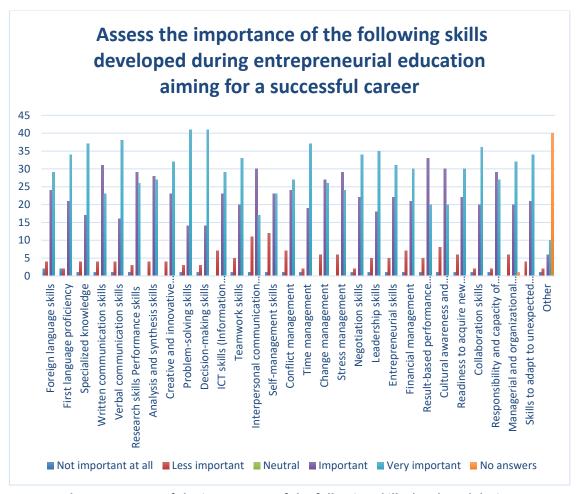




- 1. Foreign language skills
- 2. First language proficiency
- 3. Specialized knowledge
- 4. Creative and innovative thinking skills
- 5. Decision-making skills
- 6. Entrepreneurial skills
- 7. Managerial and organizational skills

Conclusions: According to the responses these skills are extremely important for local entrepreneurs as the graduates are facing problems while being employed.

#### **AMTAP**



AMTAP: The assessment of the importance of the following skills developed during entrepreneurial education aiming for a successful career.

Asked to assess the importance of the skills developed during entrepreneurial education aiming for a successful career, respondents answered that "Problem-solving skills", "Decision-making skills", "Specialized knowledge", "Leadership skills" and "Collaboration skills" are identified as "very important", while "Written communication skills", and "Result-based performance management, are identified as "important".

Conclusion: the managerial skills together with soft skills are essential for start-up students' career development.

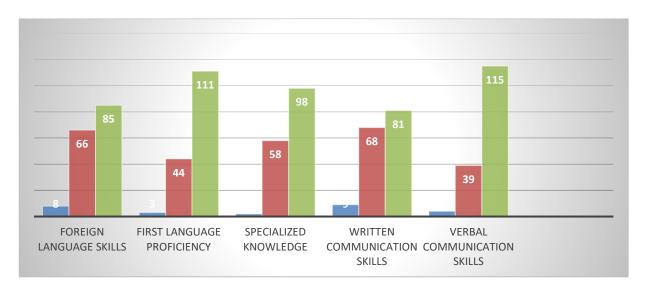


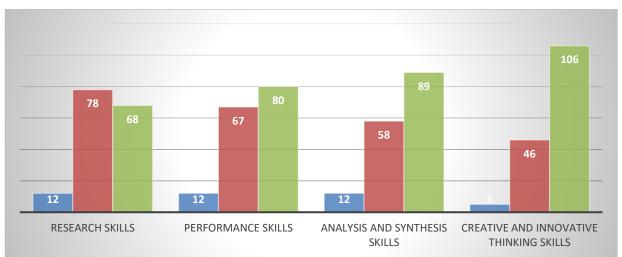


#### **USARB**

Regarding the assessment of the importance of the skills developed during entrepreneurial education aiming for a successful career, the 159 students from Alecu Russo Balti State University, who answered the questionnaire, appreciated with an important and very important qualification an impressive set of competencies. After the frequency of the answers on the first 5 places, the following skills were indicated (see the three charts below):

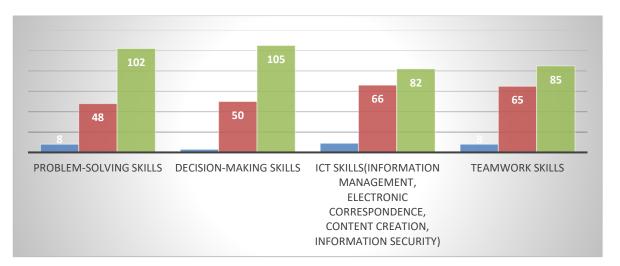
- Verbal communication skills 115 answers;
- First language proficiency 111 answers;
- Creative and innovative thinking skills 106 answers;
- Decision-making skills 105 answers;
- Problem-solving skills 102 answers.







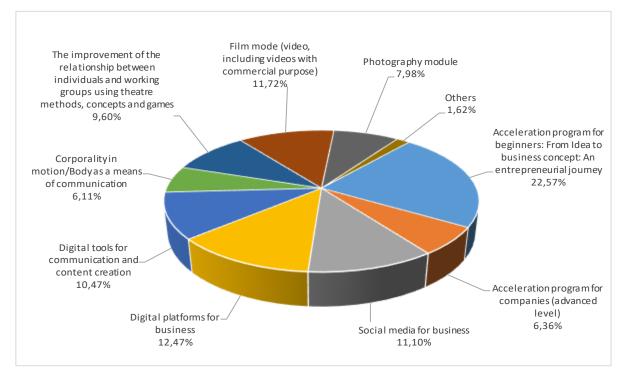




Alecu Russo Balti State University: The assessment of the importance of the following skills developed during entrepreneurial education aiming for a successful career.

2. Which training courses do you prefer most for your individual and professional development?

Examining the answers of the 344 respondents to the question "Which training courses do you prefer most for your individual and professional development?", where several options could be chosen, we have the results shown in the next chart:



For courses related to Acceleration program for beginners: From Idea to business concept: An entrepreneurial journey, 181 students opted, which is 22,57%.

For Digital platforms for business, 100 respondents were exposed, which is 12,47%.

In third place was chosen the course *Film mode* (video, including videos with commercial purpose), by 94 students, ie 11,72% of the total respondents.

Next is Social media for business related courses, with 89 requests, which is 11,10% of the total.



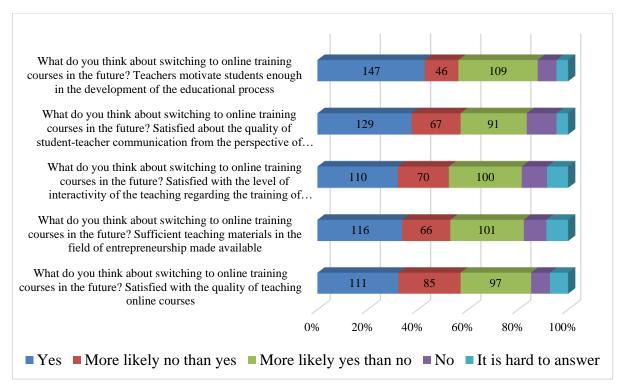


Also, the barrier of 10,00% was overcome by the courses in the field of *Digital tools for communication* and content creation, chosen by 84 interviewees – 10,47% of the total.

Conclusion: Most of the 344 de respondents prefer training courses for individual and professional development based on the acceleration program for beginners: from idea to business concept.

## 3. Please choose the barriers to launching a startup business:

Most of respondents (147) regarding switching to online training courses in the future have noted that Teachers motivate students enough in the development of the educational process.



Conclusion: Due to the Pandemic COVID-19, which began in 2020, the online and blended learning have become strategic in higher education institutions, as students study online and will remain online until the pandemic ends. But a lot of barriers appeared in connexion with entrepreneurship education, as this is a discipline that requires students to acquire theoretical knowledge, but also practical skills in any fields of study. In order to make this transition as smooth as possible and to ensure that the teaching and learning objectives are met, the emphasis is on the use of interactive technologies and the use of social networks. Training courses should promote interactive teaching technologies and methods.





# 4. Analyzing the incorporated companies' (Students with experience) assessment of local needs results

In section we present the results of the assessment of the relevant incorporated companies. Unfortunately, a small number of responses were collected from the incorporated companies (experienced students) during the investigation. It should be noted that this category of students is relevant for higher education institutions.

The lack of knowledge in entrepreneurship is one of the main reasons why the rate of students who initiate their own businesses is quite low: the HEIs' graduate students prefer to be employed at state entities or private companies.

As an institutional approach, the HEIs aim to create a database of incorporated companies' (students with experience) to track their involvement in university events focused on entrepreneurship education.

We found that there exists a gap in this subject and incorporated companies' (students with experience) are not well known enough in the university environment, although they are an indispensable element of the entrepreneurial ecosystem.

## 4.1 General data about the respondents

1. What specialization are you currently studying: (please sort the students in this 5 field areas given below)

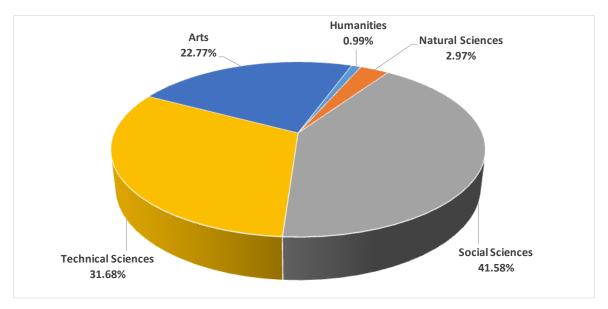
The incorporated companies represented by the students with experience are classified into five areas of activity:

- Humanities
- Natural Sciences
- Social Sciences
- Technical Sciences
- Arts

Following the examination of 101 respondents represented by the students with experience from the Republic of Moldova's higher education institutions to the question "What specialization are you currently studying?" it was obtained the following distribution.







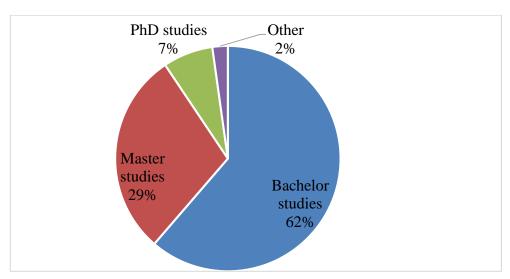
What specialization are you currently studying?

The largest share of 41,58% of the total respondents are students with experience of Social Sciences, which is 42 people. The following are students with experience in Technical Sciences - 32 people, with 31,68% of the total respondents. On third place are students with experience learning Arts - 22,77%, which is 23 of the total respondents. Natural Sciences accounted for 2,97%, with 3 students with experience surveyed. And Humanities answered only one respondent, which is 0,99% of the total respondents.

Conclusion: The sample of incorporated companies who participated in this survey is representative, including participants from different specialization, the most part being from most are from the social and technical sciences.

## 2. You are enrolled in: -(show in % - bachelor to master students)

The study cycle of the incorporated companies' (students with experience) from the Republic of Moldova, participants in the survey



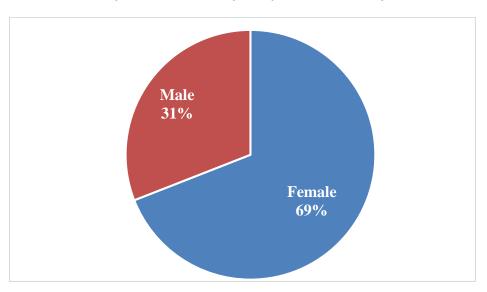




The respondents of the group "Incorporated companies" represent in the majority (62%) the first cycle, bachelors studies, followed by the representatives of the second cycle, master's higher studies (29%), 7% - the third cycle - doctoral studies and an insignificant number (2%) represents other categories.

## 3. Your gender is:

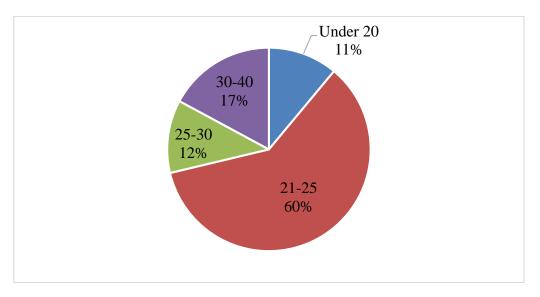
The gender dimension of the incorporated companies' (students with experience) from the Republic of Moldova, participants in the survey



The gender dimension of the respondents of the group "Incorporated companies" is represented in the majority (69%) by female and 31% - male. The explanation for the gender divergence is found in the predominance of girls in some specialties (field of education, for example).

# 4. How old are you?

The age dimension of the incorporated companies' (students with experience) from the Republic of Moldova, participants in the survey



The age range of the respondents of the group "Incorporated companies" is in 18-40 years. It is an age range specific, as a rule, for students of HEIs in Moldova. The majority (60%) of respondents are

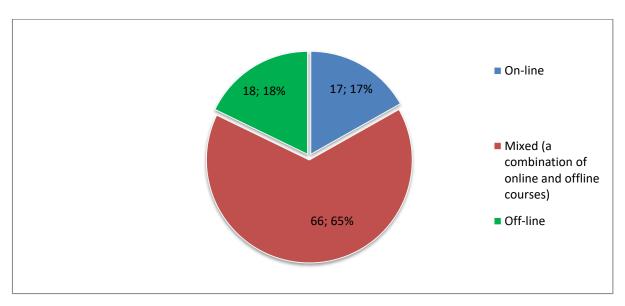




between 21-25 years old, followed by the contingent of respondents aged 30-40 years (17%). Respondents aged 25-30 years (12%) and those older than 20 years (11%) were represented in similar research positions in similar quantitative positions.

## 5. Which format of a training course do you prefer most

The representatives of the incorporated companies were asked which format of training courses they prefer.



As we can see in the chart above more than two thirds of the experienced students (66,65%) prefer the mixed format of training courses and almost the same number of respondents vote for the on-line (17,17%) and off-line (18,18%) formats.

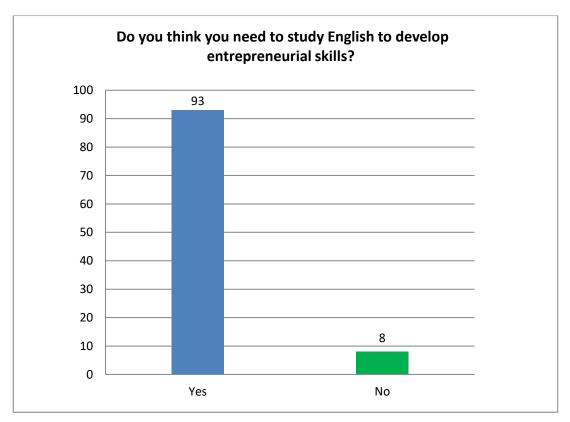
Conclusion: Mixed format for the trainings is the most popular type of education within the working youth.

## 6. Do you think you need to study English to develop entrepreneurial skills?

In the bar chart below it is shown the number of experienced students of HEIs that think they need to study English to develop entrepreneurial skills.







Conclusion: The overwhelming majority of experienced students, 93 from 101 interviewed, feel they need to study English to develop entrepreneurial skills.

## 4.2 Needs for entrepreneurial education

1. Do you think you need to enhance your knowledge and practical performance in terms of entrepreneurial topics?

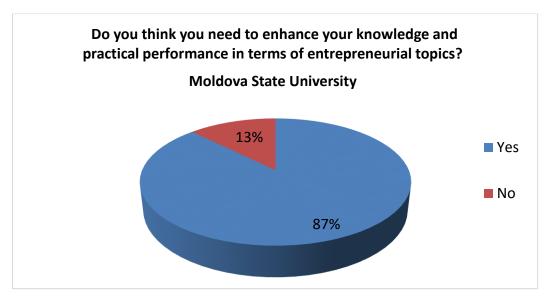
Since one of the goals of the Connect project is to develop courses for entrepreneurship education, one of the questions asked to experienced students was whether they felt they needed to enhance your knowledge and practical performance in terms of entrepreneurial topics.

The analysis results to this question are presented by each partner university from RM.

### MSU







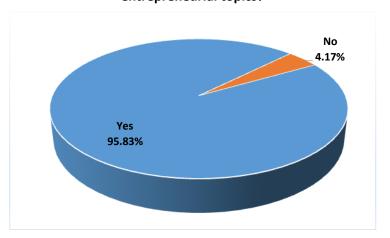
As we can see 87% of the experienced students of MSU consider that they need to enhance their knowledge and practical performance in terms of entrepreneurial topics.

Conclusion: enhancing knowledge and practical performance in terms of entrepreneurial topics is of high importance for students.

### **TUM**

To the question "Do you think you need to enhance your knowledge and practical performance in terms of entrepreneurial topics?", students with experience from the HEIs of Moldova answered as follows:

Do you think you need to enhance your knowledge and practical performance in terms of entrepreneurial topics?

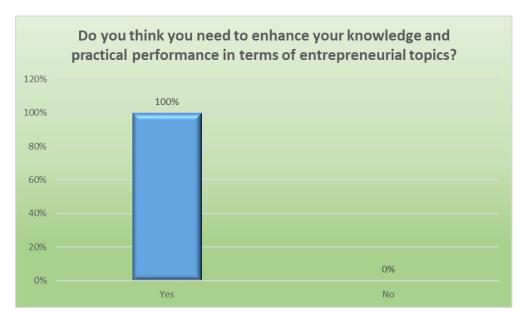


Out of the total respondents - 24 people, 23 students with experience answered YES, which is 95,83%, and 4,17% of the total students with experience interviewed answered - NO.

Conclusion: The most part of the interviewed incorporated companies' representatives think that they need to enhance their knowledge and practical performance in terms of entrepreneurial topics.







All respondents (100%) think that they need to enhance their knowledge and practical performance in terms of entrepreneurial topics.

SAUM conclusion is that the topics taught related to the accumulation of knowledge and the formation of entrepreneurial skills must be component parts of the curricula and starting points for the initiation of start-ups and business development.

#### **AMTAP**



Asked if students with experience need to enhance their knowledge and practical performance in terms of entrepreneurial topics, all respondents answered "Yes".

Conclusion: students with experience understand clearly the importance of entrepreneurial agenda for their professional and personal development.

#### **USARB**

During the research by questionnaire, Alecu Russo Balti State University had a collected opinion from incorporated companies '(students with experience) about the need to enhance your knowledge and practical performance in terms of entrepreneurial topics.

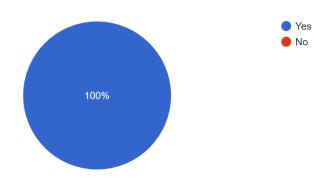




The incorporated companies' (students with experience) answered in the affirmative unanimously (100%) – see the figure below.

7. Do you think you need to enhance your knowledge and practical performance in terms of entrepreneurial topics?

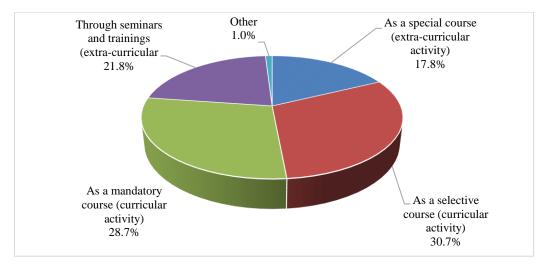




We conclude that students with experience in entrepreneurship capitalize on lifelong learning, understand the value of knowledge and skills to enhance the knowledge and practical performance in terms of entrepreneurial topics. Incorporated companies confirm that it is necessary to develop multiple kinds of skills during entrepreneurial education for a successful career.

2. How do you think the entrepreneurial education should be implemented at higher education institutions?

The opinion of incorporated companies regarding how the entrepreneurial education should be implemented at HEIs is shown in the chart below.



Most of respondents (30,7%) have chosen that entrepreneurial education to be implemented at higher education as selective course. At the same time, a comparable number of interviewees (28,7%) voted for mandatory course (curricular activity) and education through seminars and trainings (extracurricular).

Conclusion: This results (30,7% votes for selective course) is based on that fact that curricula for selective courses is more flexible to be change more often according to the actual market demands. The

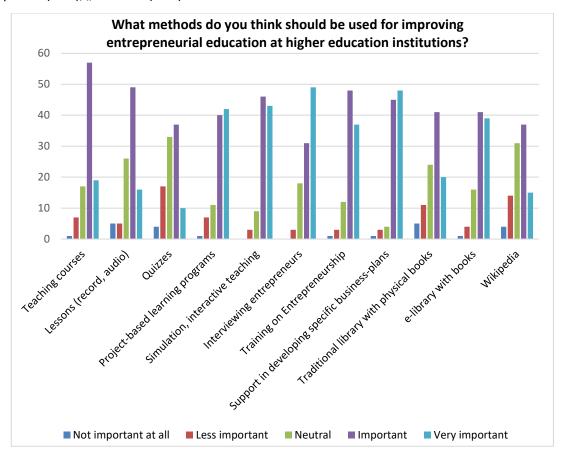




trainings which will be offered within the project must contain the relevant topics to meet the criteria included in the curricula of selective courses.

3. What methods do you think should be used for improving entrepreneurial education at higher education institutions?

Asked to identify methods on students' opinion should be used for improving entrepreneurial education at higher education institutions, the highest rate demonstrate "Simulation", "Interactive teaching" (98%), "Training on Entrepreneurship" (93%), "Support in developing specific business-plans" (91%), "Project-based learning programs" (90%). Meanwhile other tools demonstrate the lowest rate: "Wikipedia" (57%), "Quizzes" (51%).



Conclusion: the incorporated students' choice confirms the choice of the most innovative tools.

#### 4.3 Skills important for a entrepreneurial education

1. Assess the importance of the following skills developed during entrepreneurial education aiming for a successful career

The analysis results to this question are presented by each university from RM partner in the project.

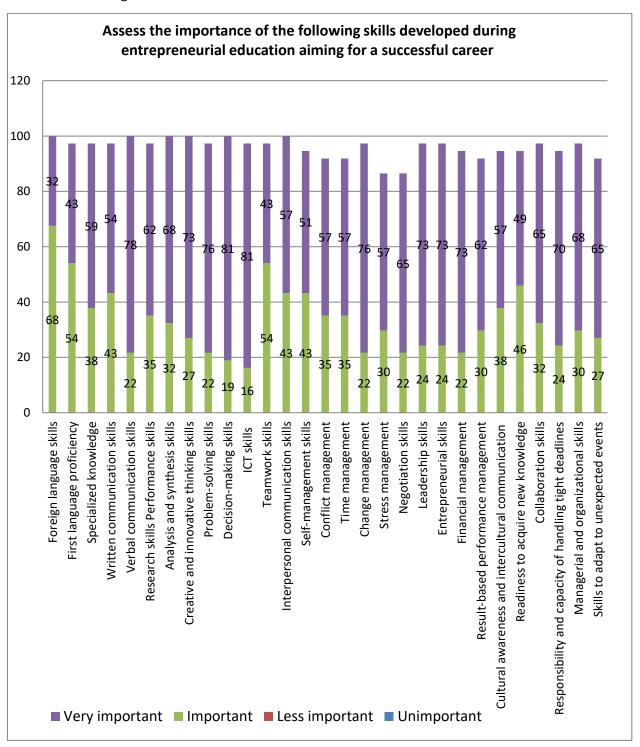
#### MSU

Analyzing the responses of 30 interviewees from the MSU, it was concluded that all respondents rated all the proposed topics as "important" or "very important".





Thus, the most appreciated topics, for which 81-73% of the respondents voted, are: ICT skills, Decision-making skills, Verbal communication skills, Change management, Leadership skills, Entrepreneurial skills and Financial management.

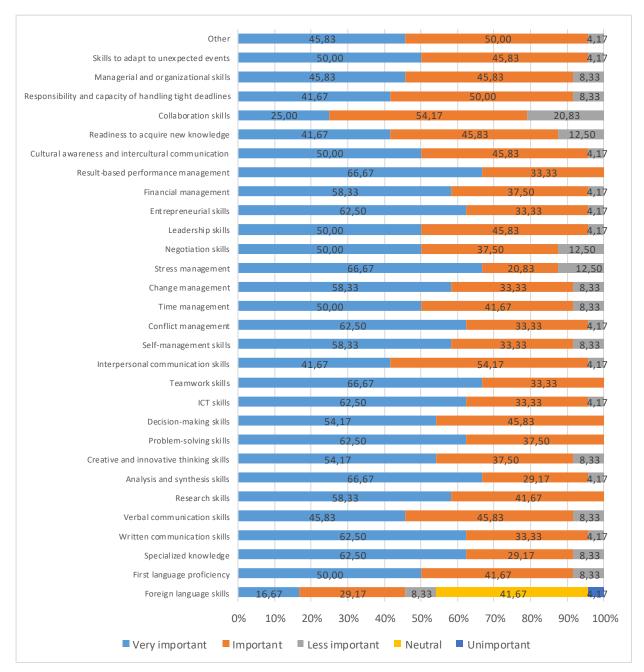


### TUM

After examining 30 variants of skills to the question "Assess the importance of the following skills developed during entrepreneurial education aiming for a successful career", we reached the following conclusions:







Assess the importance of the following skills developed during entrepreneurial education aiming for a successful career.

The first place is occupied by *Teamwork skills* and *Result-based performance management* which accumulated 16 "very important" answers, which constitute 66,67% and 8 "important" answers with 33,33%.

In second place is the ability *Analysis and synthesis skills*, students with experience ticking "very important" 16 times, which is 66,67%, "important" 7 times - 29,17% and "less important" once -4,17%. On the third place was chosen the *Problem-solving skills*, out of 24 respondents chose "very important" 15 people, ie 62,50%, and "important" -9 people, which is -37,50%.

At the other end we have the following abilities:

The least important in the opinion of students with experience within TUM is the ability *Foreign language skills*, which responded as follows: "very important" – 16,67% (4 respondents), "important" –





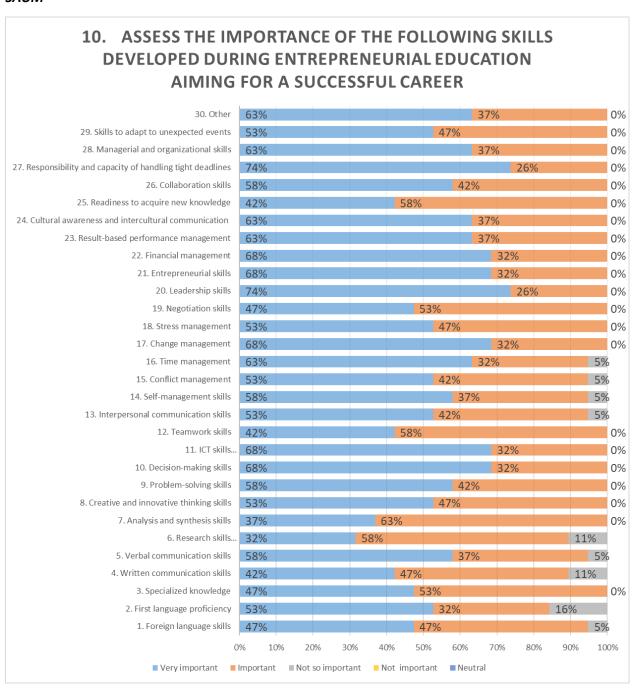
29,17% (7 respondents ), "Less important" – 8,33% (2 respondents), "neutral" – 41,67% (10 respondents) and "unimportant" – 4,17% (1 respondent).

Next is *Collaboration skills*, with 6 answers "very important", which is 25,00%, "important" - with 13 answers – 54,17% and "less important" with 5 answers, which is 20,83%.

Next is the *Readiness to acquire new knowledge ability*, which accumulated 10 "very important" answers – 41,67%, 11 "important" answers – 45,83% and 3 "less important" answers – 12,50%.

*Conclusion*: Incorporated companies interviewed by the Technical University of Moldova think that it is necessary to develop multiple kinds of skills during entrepreneurial education for a successful career.

#### **SAUM**



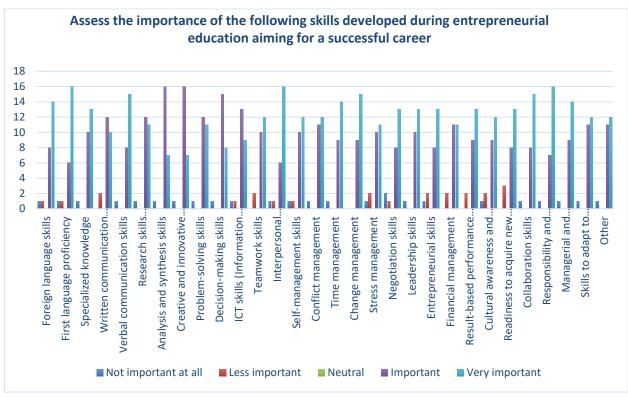




Respondents from SAUM have noticed that majority of skills are very important for entrepreneurial education. All the indexes included in the question have an important influence on developing the entrepreneurial skills.

Conclusion: This knowledge will improve the professional potential of the employers in agricultural field.

#### **AMTAP**



Asked students with experience to assess the importance of the skills developed during entrepreneurial education aiming for a successful career, respondents indicated as very important "Foreign language skills", "First language proficiency", "Verbal communication skills", "Interpersonal communication skills", "Change management", "Collaboration skills", "Responsibility and capacity of handling tight deadlines" and as important "Analysis and synthesis skills", "Creative and innovative thinking skills".

Conclusion: students with experience understand that soft skills as well as a creativity lead to a successful career.

#### **USARB**

During the research by questionnaire, Alecu Russo Balti State University had a collected opinion from incorporated companies '(students with experience) about needs to assess the importance of the skills developed during entrepreneurial education aiming for a successful career.

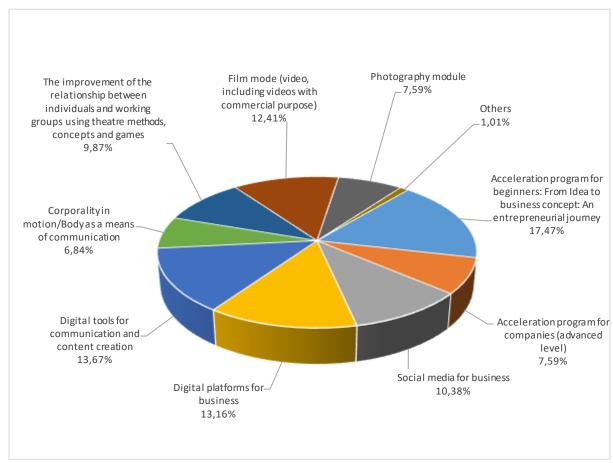
The incorporated companies' (students with experience) were in a limited number. The answers highlight the fact that the respondents unanimously (100%) opted for the following skills developed during entrepreneurial education aiming for a successful career: foreign language skills, specialized knowledge, verbal communication skills, research skills, performance skills, creative and innovative thinking skills, decision-making skills, self-management skills, time management, negotiation skills, leadership skills, entrepreneurial skills, collaboration skills, managerial and organizational skills.





2. Which training courses do you prefer most for your individual and professional development?

Examining the answers of the 101 respondents to the question "Which training courses do you prefer most for your individual and professional development?", where several options could be chosen, we have the following results presented in the chart below:



### Which training courses do you prefer most for your individual and professional development?

For courses related to *Acceleration program for beginners: From Idea to business concept: An entrepreneurial journey,* 69 experienced students opted, which is 17,47%.

For *Digital tools for communication and content creation,* 54 respondents were exposed, which is 13,67%.

The *Digital platforms for business* course was chosen on the third place, by 52 experienced students, ie 13,16% of the total respondents.

The following is courses related to *Film mode* (video, including videos with commercial purpose), with 49 requests, which is 12,41% of the total.

Requests for courses in the field of *Social media for business* were checked by 41 respondents – 10,38%. The courses that have accumulated a weight of less than 10,00% are:

The improvement of the relationship between individuals and working groups using theater methods, concepts and games – 9,87% (39 respondents), Acceleration program for companies (advanced level) and Photography module of 7,59% (30 respondents) each and Corporality in motion / Body as a means of communication – 6,84% (27 respondents).

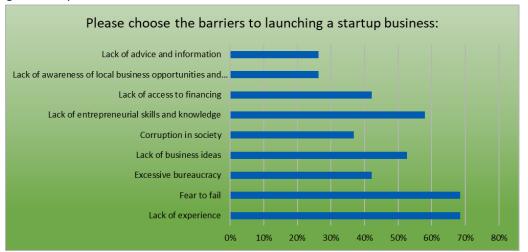
Conclusion: Incorporated companies confirm that it is necessary to develop multiple kinds of skills during entrepreneurial education for a successful career.





### 3. Please choose the barriers to launching a startup business.

The analysis of answers to this question shows (see the chart below) that the most of respondents (68%) from incorporated companies responded that **Lack** of experience and **Fear to fail** are the barriers to launching a start-up business.



58% of respondents noticed that Lack of entrepreneurial skills and knowledge is the main barrier to launching a start-up business

Few of respondents (26%) have chosen the Lack of awareness of local business opportunities and threats and Lack of advice and information as a barrier to launching a start-up business.

Conclusions: The study programs that are offered to develop the entrepreneurial skills must be reviewed and improved according to the market demands and their challenges. The students trained at these programs must be in permanent contact with the novelties and new approaches of business challenges. The internal and external commercial demands must be monitored by those interested in offering new start-up ideas which have to be included in the study process..





### **Conclusion**

The research of the opinions of the 4 categories of respondents allowed, from the perspective of the local needs, to identify the strengths (the tendency of companies to work together, the desire to learn new things by teaching staff and students, the interest in consolidating the entrepreneurial ecosystem), the weaknesses (lack of skills, knowledge, discord between local offers and needs), challenges and opportunities. We highlight some identified problems and possible solutions:

Nº	Problem	Solution
2.	The most part of the companies mentioned that their criteria for hiring young candidates is the professional work experience.  Company representatives confirmed that the main of the challenges that they faced in running (founding) their business is the insufficient financial	All internships carried out during university studies at economic units should be considered as a work experience.  Ensuring the availability of funding sources by reducing their costs at the country level.  Informing the business environment about active funding sources, focusing on new ones.
3.	resources and assets.  A good part of the teachers experiences the gap between existing and preferred entrepreneurial knowledge.	Offering different trainings in order to increase skills and develop entrepreneurial knowledge.
4.	The teachers feel the gap between existing and preferred entrepreneurial knowledge in terms of the best practical examples, modern teaching methods and the digital skills of the teaching staff.	To provide teachers with training opportunities in the field of the best practical examples, modern teaching methods and the digital skills of the teaching staff.
5.	The students need to enhance their knowledge and practical performance in terms of entrepreneurial topics.	To foster the infrastructure of co-creative hubs which support students who generate, develop, market their own innovative ideas through entrepreneurship.
6.	Students and the students with experience need the acceleration	To improve students 'entrepreneurial behaviors, skills, mindsets of future start-ups





	program for beginners: From Idea to	and support recently incorporated companies
	business concept: An entrepreneurial	at university settings.
	journey.	
7.	Students with experience need to	To improve involvement of students who do not
	enhance their knowledge and practical	automatically come into contact with
	performance in terms of	entrepreneurial studies and enhance problem-
	entrepreneurial topics.	based learning, entrepreneurial skills,
		behaviors, mindsets through the
		interdisciplinary approach by revising of
		curricula and dissemination events.







### **CONNECT 2021-2024**

Connecting universities-industry through smart entrepreneurial cooperation and competitive intelligence of students in Moldova, Georgia and Armenia

Project Acronym:	CONNECT
Project Title:	Connecting universities-industry through smart entrepreneurial cooperation and competitive intelligence of students in Moldova, Georgia and Armenia
Project No:	617393-EPP-1-2020-1-MD-EPPKA2-CBHE-JP
Funding Scheme:	ERASMUS+
Coordinator:	Moldova State University (MSU)
Project Duration:	3 years (starting January 2021)

### [Assessment of local needs for trainings and services]

Work Package:	WP 2 Creation of the theoretical-practical support
Lead Beneficiary:	UNACT
Submission Date:	22/12/2021
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### **Executive summary**

The aim of the research was to find out the current needs and necessary skills for entrepreneurial education in two universities of Georgia - Shota Rustaveli Theater and Film State University of Georgia (TAFU) and Ilia State University (ISU). Also to acquire information on existing work experiences in this field and ascert the experiences and requirements of organizations.

For achieving the unmentioned result, four type of respondents were surveyed through an online survey during the period of Spring-Summer 2021. The first cohort comprised companies/organizations mainly those that had affiliation with TAFU or ISU, teaching staff at both universities, students divided in two set of groups — those with entrepreneurial experience and those without. Hence, the survey made it possible to understand perspectives from three key stakeholders — the companies/potential employers, the teaching faculty and the students themselves.

The survey has found an elevated need to enhance entrepreneurial and managerial skills among all type of respondents. Specific type of needs for obtaining trainings varies and depends on the type of respondent cohort, ranging from acceleration and start-up programs to modern teaching methods in entrepreneurship education.

One of the key takeaways of the survey is interest and willingness of industry-university collaboration from the side of company representatives on a variety of topics, among others: development and revision of academic programs, organization and Implementation of joint projects aimed to improve entrepreneurial involvement, participation in educational fairs.

Teachers from both higher education institutions are also interested in acquiring entrepreneurial knowledge and skills and are ready to teach within the project. They have positive expectations, believe that new knowledge will help develop new skills and more actively introduce modern teaching methods, and more.





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### Introduction

The aim of this report is to present the results of research related to entrepreneurship education in Georgian higher education institutions. The research was conducted before the project development stage in two higher education institutions of the country - Shota Rustaveli Theater and Film State University of Georgia (TAFU) and Ilia State University (ISU).

The aim of the research was to find out the current needs and necessary skills for entrepreneurial education in these two universities of Georgia. Also to acquire information on existing work experiences in this field and ascert the experiences and requirements of organizations.

The report presents the results of a survey conducted from May 24 to June 11, 2021, organized by Shota Rustaveli Theater and Film State University of Georgia and Ilia State University.

The target groups were formed according to the stakeholders involved in the implementation of the project, in order to present the vision of current issues from different angles. Respondents comprised: individuals directly involved in the teaching-learning process, namely the teaching staff and students of the universities, as well as the employers from the organizations that are connected to the mentioned universities according to the existing expertise fields. It is noteworthy that one of these two universities - TAFU - has a narrow specialization. It combines Arts and Art related fields.

The report is based on the results obtained through four questionnaires. These are: the results of surveys of organizations, university teaching staff and two groups of students - students with business experience and students with no experience. Teacher and student questions are designed to assess their assessment of knowledge and skills such as digital skills, artistic skills, communication skills (including English, written, etc.), new teaching methods, etc.

The questions were formulated in such a way as to present, on the one hand, the respondents' views on the current situation and, on the other hand, to identify the direction in which they would like to gain knowledge and experience.

The questionnaire for the organizations is focused on clarifying their requirements, obstacles in the way of activity and the needs of entrepreneurial education and the qualification requirements of the employees.

Overall, the questionnaires showed local requirements that provide a vision for higher education stakeholders. To clarify their perspective on the requirements.





# 1. Analyzing the company's assessment of local needs results (Georgia, Armenia and Moldova)

22 organizations participated in the survey. The questions formulated for them are aimed at obtaining data in three main directions:

A) the vision of the organizations, what obstacles may be encountered at the beginning of the startup;

- B) needs for entrepreneurial education;
- C) Skills needed for a successful career.

### 1.1 General data about the respondents

The surveyed organizations are mainly the employers affiliated with both TAFU and ISU. These are 10 organizations from Tafu and 12 organizations from ISU. This was a predetermined, sufficient number enough to summarize the data and draw conclusions.

2. Which of the following fields does your organization specialize in?

The areas of activity of the surveyed companies are diverse, but can be grouped as follows:

42% are arts and cultural organizations: theaters, dance and song ensembles, National Center for Cinematography, Museums, Exhibitions;

10% - Communications and Media (publishing and television);

48% are in the fields of business and management, as well as engineering and design (Machine learning and artificial intelligence, Development, E-Commerce and the Internet Market, Engineering Supervision and Design, Management consulting, Auditing, etc.) <u>more detailed on chart #1.</u>





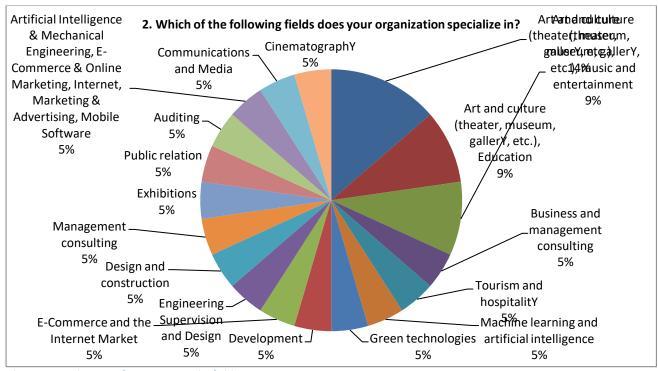


Chart 1 Specialization of Organizations by fields

### 1.2 Obstacles for taking up entrepreneurship

10. What are your criteria for hiring young candidates?

When it comes to criteria for hiring young candidates, a larger percentage of company representatives prefer results of the probation period - 18% and professional work experience - 23%. While only 5% - 5% give preference to the reputation or qualification and competence of the university.

Organizations mostly focus on a few factors when hiring a young candidate, firstly, professional work experience and the results of the probationary period, combined with factors such as the reputation of the university where the candidate received education, or the academic attendance of the graduate





- 9% and 5% respectively, as well as skills required for professional work experience - 5% (chart #2).

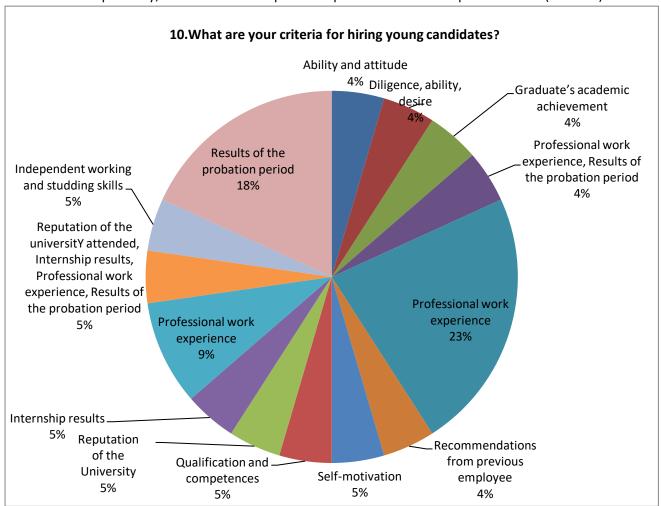


Chart 2 Criteria for Hiring Young Candidates

14. Which were some of the challenges that you faced in running (founding) your business?

When it comes to stating challenges faced in running or starting a business activity, the most common answer was - insufficient financial resources and assets 36%. Interestingly, the majority of respondents name several factors, and the majority of such compounded respondents cite a lack of special knowledge – 18%. This challenge - lack of knowledge is combined with other factors (lack of customers, heterogeneous competition, lack of time).

Lack of specialization knowledge, lack of potential customers and financial resources - 5%; lack of specialization knowledge and lack of potential customers - 5% and more (chart #3).





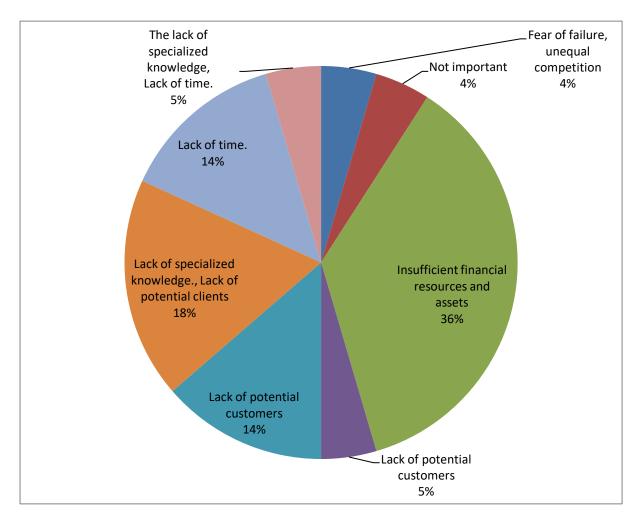


Chart 3 Challenges in Running or Starting Business Activity

### 1.3 Needs for entrepreneurial education

12. Are introduction of trainings for newly hired university students and graduates ever a necessity at your organization?

Orientation training in the organization is conducted among the surveyed organizations: always - 45%, sometimes - 50%, never - 5%.





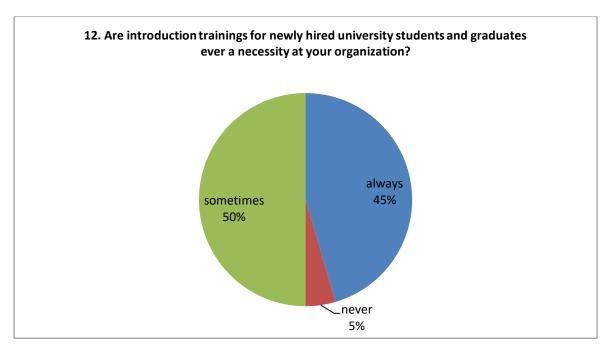


Chart 4 Necessity of Introduction Trainings

16. Were you able to organize your work remotely during the COVID-19 pandemic?

Could you organize your work remotely in a Covid-19 pandemic?

The majority answered with affirmation - 73%, no - 14%, partially - 13%

20. Will you be interested to have trainings for your employees on the courses of the CONNECT project free of charge (courses on hard and soft skills: acceleration programme, digital skills, theater and dance).

Are you interested in your employees taking the free courses offered by the project "CONNECT": The highest percentage of demand was found in the trainings "Digital Platforms for Business" and "Digital Media for Communication and Content Creation" - 64% -64%, the highest demand was also for the trainings "Social Media for Business" - 55%.

Art modules - "Improving the relationship between individuals and working groups using theatrical methods, concepts and games", "Film module / course (video, video shooting for commercial purposes)" and "Photography module" interest levels were 50% -50%. There is a demand for other modules as well: "Acceleration program for beginners: Entrepreneurial journey from idea to business concept "- 45% and" Acceleration program for legal entities (companies) (high level) "- 36%.

### 23.Do you find the society-education system tie to be indispensable?

The need for a connection between higher education and the community is considered important by 100% of respondents.





26. How in your opinion must entrepreneurial education be implemented in HEIs? (Not more than 2 choices)

How should entrepreneurship education be conducted in HEIs? There are several options for answers, with minor variations that are grouped based on content like this: Specialized course - 24%, as a specialized course in the form of seminars and practical trainings - 24%, as an elective course - 28%, as a compulsory course - 14%, I have no answer - 5%

Overall, most companies believe that entrepreneurial courses in a higher education institution should have the form of a specialized course and be offered either electively or in the form of special seminars and practical training.

27.Please, suggest topics related to entrepreneurship that you find more pertinent for university courses/seminars.

No significant advantage was found for entrepreneurship-related topics for university courses/seminars, and the percentage was evenly distributed (5% -5%) on the following topics: Project Planning and Budgeting, Market Research and Analysis, Management, Publishing, Assessment of Market Research Analysis, Marketing, Market and Market Structure, Environmental Impact on Business, Micro and Macro Business Environment, Risk Essences and Types, Business Place and Role in Economy, Business idea and its selection methods, licenses, permits and certificates, business realization. Among them, 14% of respondents did not answer the question (Chart 5).





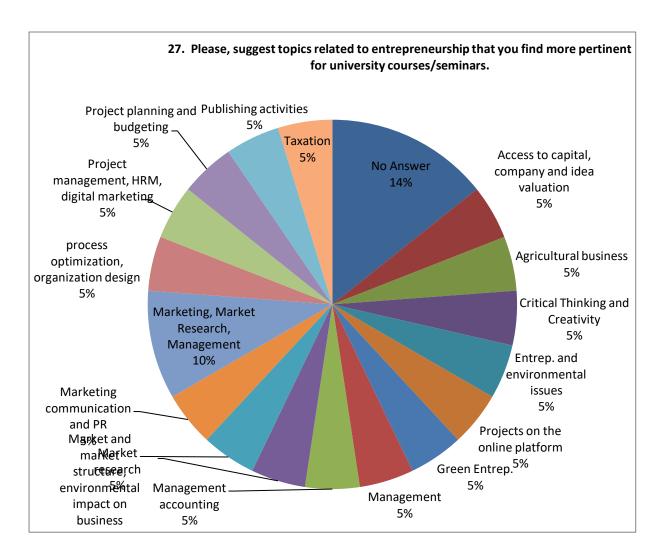


Chart 5 Topics for Entrepreneurship for University courses

### 29. What specializations do you think the labor market lacks now?

The responses of the surveyed organizations showed that the lack of named specialists was evenly distributed (lighting, professional team management specialist, scientific-researcher, museum architect, exposition specialist, curator, proper commercial culture manager, book designer, sound director, producer, narrow specialization, Sound director, wardrobe, etc.). As a percentage, each received 5% -5% (Chart 6).





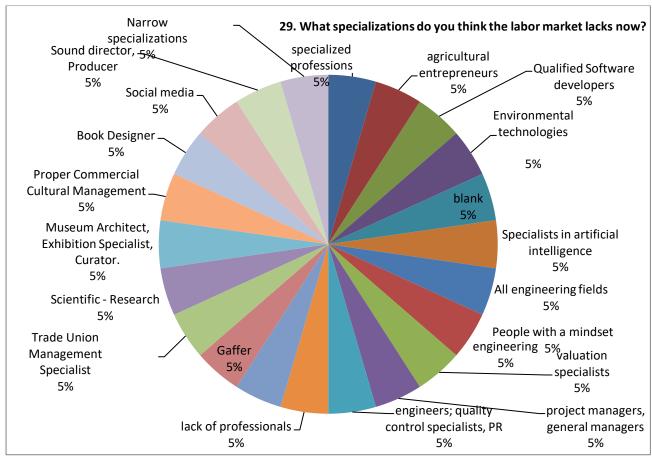


Chart 6 Needs for Specialists on the market

### 1.4 Skills important for a successful career

15. How important are the following types of knowledge, skills and competences when hiring students and graduates?

The highest in the list on percentage of skills and competencies required for a successful career is Specialized knowledge - 64% Very important, 27% Important; First language proficiency – 41% Very important, 45% Important; Written communication skills - 50% Very important, 23% Important. Detailed table is given below (Table 1).

15. How important are the following types of knowledge, skills, and competencies when hiring students and graduates?									
	Very important	Important	Less important	Not so important	Not important				
Foreign language skills	36%	41%	18%	5%	0				
First language proficiency	41%	45%	5%	5%	5%				





Specialized knowledge	64%	27%	0	5%	5%
Written communication skills	50%	23%	5%	9%	14%
Verbal communication skills	41%	50%	5%	0	5%
Research skills	18%	41%	5%	23%	14%
Performance skills	68%	27%	0	0	5%
Analysis and synthesis skills	55%	27%	9%	0	9%
Creative and innovative thinking skills	45%	41%	0	9%	5%
Problem-solving skills	59%	32%	5%	0	5%
Decision-making skills	41%	41%	5%	0	14%
ICT skills (Information management, electronic correspondence, content					
creation, information security)	41%	41%	5%	0	14%
Teamwork skills	64%	27%	0	0	9%
Interpersonal communication skills	50%	36%	0	5%	9%
Self-management skills	41%	50%	0	5%	5%
Conflict management	14%	59%	9%	14%	5%
Time management	36%	55%	0	5%	5%
Change management	14%	50%	5%	23%	9%
Stress management	23%	41%	9%	23%	5%
Negotiation skills	18%	36%	14%	23%	9%
Leadership skills	14%	45%	18%	18%	5%
Entrepreneurial skills	0	23%	32%	36%	9%
Financial management	18%	0	27%	32%	23%
Result-based performance			_		
management	14%	55%	18%	9%	5%
Cultural awareness and intercultural			+		
communication	36%	45%	0	9%	9%
<b>.</b>					





Collaboration skills	50%	36%	0	9%	5%
Responsibility and capacity of handling tight deadlines	64%	32%	0	0	5%
Managerial and organizational skills	9%	50%	9%	23%	9%
Skills to adapt to unexpected events	27%	55%	5%	5%	9%

Table 1 Importance of skills when hiring a student/graduate for a job

21.Please mention the topics/themes of the courses/trainings that will increase the efficiency and productivity of your employees.

The topics of the courses / trainings selected by the organizations were naturally grouped according to the profile of the organization in order to increase the efficiency and productivity of the employees. Art organizations focus on topics related to the development of professional skills related to the field (theatrical masterclasses, creative and artistic skills, various directions in contemporary choreography, cultural-educational workshops, exhibition activities, museum concept development) although they also showed interest in such fields as - Financial Analysis, Publishing Management, Time management, Leadership/development, sales technique, digital platforms, Project management; fundraising, Preparation of project proposals, Mastering multimedia technologies, Creativity and public relations, etc. It is noteworthy that all the named topics received an equal percentage (5% -5%). See Diagram # 7 for details.





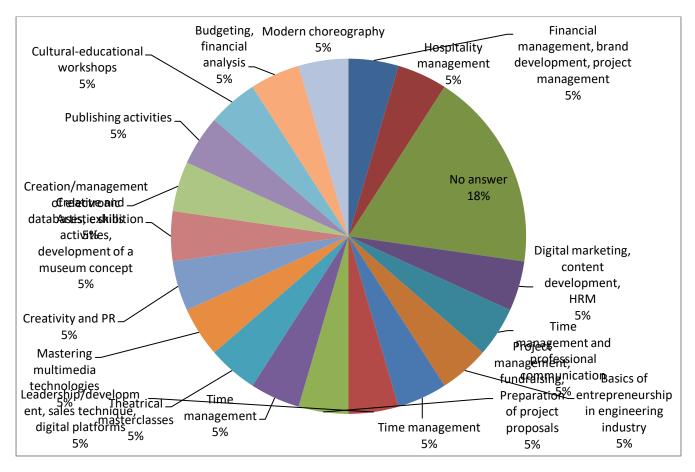


Chart 7 Courses that would increase productivity of employees.

### 22. Are you willing to cooperate with Higher Education Institutions in the framework of any of the following activities.

There is a high rate of willingness on the part of organizations to collaborate with higher education institutions on a variety of topics. 18 positive answers were given to the following topics: Development and revision of academic programs, Organization and Implementation of joint projects aimed to improve entrepreneurial involvement. And 17 positive responses to the topic - Participation in educational fairs (for instance, Career and Information Days). 15-14 positive answers - Organization of non-mandatory internships/practica, support for promoting startups (mentoring, coaching), Organization of seminars/training courses. As for startup funding, 10 organizations gave positive answers, 6 - negative and 6 were not sure (chart #8).





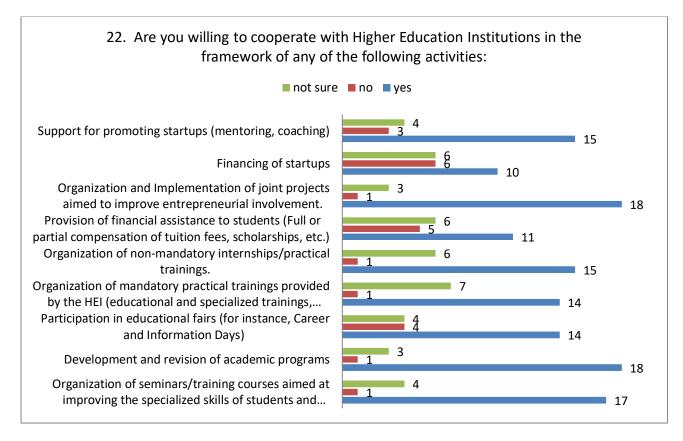


Chart 8 Willingness to cooperate with HEI

24. How important do you think is the specialized knowledge of the following fields for entrepreneurship?

The importance of the skills acquired in entrepreneurial studies for the entrepreneurship activities is shown in Chart # 9 below.





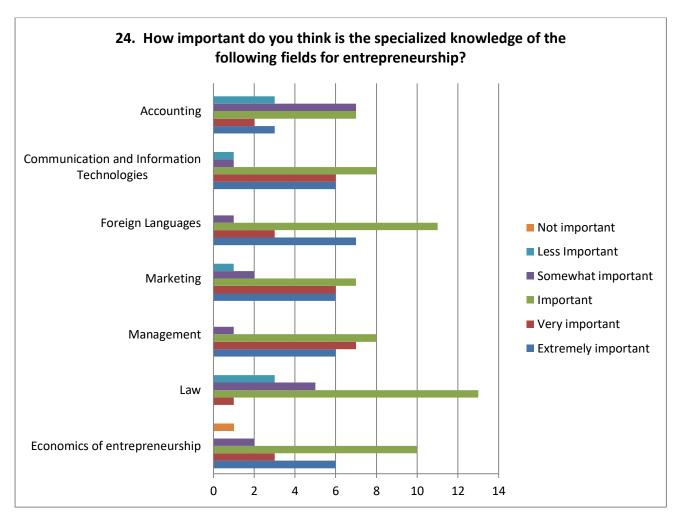


Chart 9 Importance of specific knowledge in promoting entrepreneurship

25. How important are the following skills for establishing a business? The answers are distributed as follows:

	Extremely important	Very important	Important	Somewhat important	Less Important	Not important
Financial planning	27%	18%	45%	5%	5%	C
Market analysis and research	41%	23%	36%	0	0	C
Taking initiative	23%	27%	45%	5%	0	C
Setting goals and achieving them	41%	23%	36%	0	0	C
Creative thinking	32%	27%	32%	9%	0	C
Sense of responsibility	36%	32%	32%	0	0	C
Ability to listen	32%	27%	32%	9%	0	C
Ability to convince	23%	23%	45%	9%	0	C





Building ties	32%	23%	45%	0	0	0
Time management	36%	23%	41%	0	0	0

Table 2 Importance of Specific Skills in Business Development

Added by respondents: computer technologies, program knowledge, investor relations, Creative thinking, Ability to maneuver in crisis situations.

### 28. Please, specify the kind of specialists or specializations that you currently require. (Provide the exact specialization name)

Among the specialists that companies will need in the future, they have named all the offered specialties. The demand rate was evenly distributed between them. See chart # 10

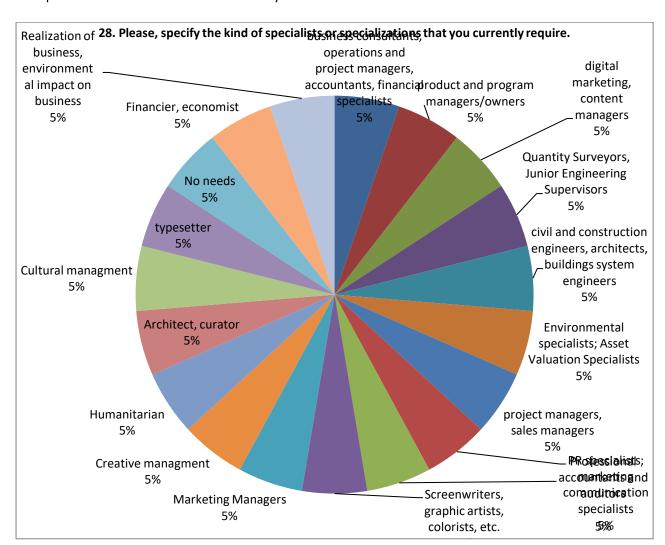


Chart 10 Specialist that you currently require





### 2. Analyzing the teacher's assessment of local needs results

42 lecturers from TAFU and ISU (21 + 21) took part in the survey. Their field of academic activity is related to the fields available in universities. From TAFU side there are the following: Directing, Film Studies, Theater Studies, Art Studies, Choreology, Cultural Tourism, Art Management, Media, Animation, Audio-Visual Arts. While from the ISU side we have: Business Administration, Management, Economics, Education Sciences and more. Below is a grouping of these fields into larger areas.

### 2.1 General data about the respondents – approach per country

The academic activities of the interviewed teachers of the two Georgian universities were distributed as follows:

- Humanities 24%
- Natural Sciences 0%
- Social Sciences 57%
- Technical Sciences 5%
- Arts -14%

#### 2.2 Needs for entrepreneurial education

- 1. Do you experience the gap between existing and preferred entrepreneurial knowledge?
- 1. Both universities showed great interest and a high rate of acquiring and deepening entrepreneurial knowledge. To the question do you need to deepen your knowledge in the entrepreneurial direction, 86% of respondents at TAFU give a positive answer, while 14% a negative answer. Interestingly, the same percentage is found in ISU surveys: 86% say yes and 14% say no.

## 1.1 In which particular area do you experience the gap between existing and preferred entrepreneurial knowledge?

	TAFU	ISU
Modern teaching methods	48%	-
Best practice examples	21%	11%
Digital skills of teaching staff	16%	-
Modern teaching methods, Teaching materials, Best practice examples, Communication with students and self-expression, Digital skills of teaching staff	5%	33%





Modern teaching methods, Best practice examples	5%	5%
Communication with students and salf avaragion	F0/	
Communication with students and self-expression	5%	-
Modern teaching methods, Teaching materials, Best practice		11%
examples		
Modern teaching methods, Teaching materials		11%
Modern teaching methods, Best practice examples ,		11%
Communication with students and self-expression		11/0
Teaching materials, Digital skills of teaching staff		6%
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Madara tasahing mathada Tasahing matariala		C0/
Modern teaching methods, Teaching materials,		6%
Best practice examples , Communication with students and		
self-expression,		
Digital skills of teaching staff, Best practices in		
entrepreneurship and skills development		
Modern teaching methods, Communication		6%
-		
with students and self-expression, Digital skills of teaching		
staff		

Table 3 Proffered knowledge to be gained in entrepreneurship.

### 5. If you have an interest please specify in which particular area:

Both universities of Georgia have shown interest in the proposed topics, although the direction of interests is somewhat different. TAFU teachers have shown highest percentage of specific interest in Arts - 71%, followed by digital - 14%, strategic management - 10%, acceleration and management of cultural organizations - 5%.

In terms of the specific interest named by the ISU teachers we have a combination of topics, i.e. several are named together. Green entrepreneurship has the highest percentage of 10%, however it is named several times with different interests, in total Green entrepreneurship - 35%, Digital - 5%, with 11 times named with different interests, in total Digital skill demand can be defined by 60%, Fintech - 5%, with other interests repeated 5 times. In total we get 30%.

Strategic management - named among other interests, in several combinations, for a total of 25%





Acceleration - named in conjunction with other interests, up to 25% in total. According to the interests of ISU pedagogues, art received a total of 5%.

## 9. Would you be interested to participate in the teaching and coaching of students during the Connect project?

The desire to teach students and tutoring was expressed by a large proportion of teachers surveyed within connect. Tafu -95%, ISU - 86%.

### 13. Did COVID pandemic highlight the need for more flexibility and creativity during student-teacher interactions?

93% agree with the need for more flexibility identified during the Covid 19 pandemic, 7% disagree

## 15. Do you think that online (digital education) learning approaches a successful teaching method should retain in the future, regardless of the COVID situation?

Regardless of the Covid 19 pandemic, a fairly large number of teachers consider maintaining digital/online education to be acceptable: yes - 79%, no - 21%.

## 18. Please specify what would you see as a key teaching element (during entrepreneurial training) for yourself?

The interviewed teachers named various topics as the main element of entrepreneurial teaching.

45% of ISU teachers left the question unanswered. Other answers are as follows:

theory in practice; practical elements, what is perfection is clear the question is to form the effective route to reach the perfection; new teaching methods; Practical homework, discussions, study materials and resources; Practical homework, discussions, study materials and resources; The main element is to bring the training as close as possible to the real entrepreneurial activity; Practical examples and technical background; Implement ideas and managing resources; Field novelty; Study materials; International experience; Innovative process management component in the context of entrepreneurship training (based on the experience of successful economies US, Europe and Asia).

10% of <u>Tafu teachers</u> left a question unanswered, and 90% answered as follows: Theoretical and practical knowledge; PracticeThe role of cultural industries in the development of the cultural field. The self-employment potential of the artist; practical elements, what is perfection is clear the question is to form the effective route to reach the perfection; Creating a full-fledged film and TV product according to world standards; Communication with students; Development of new skills and more active introduction of modern teaching methods; Development of technical skills, development of creative, original thinking skills; Acquire practical knowledge and develop appropriate skills; A key element of teaching is the acquisition of innovative and creative approaches; Entrepreneurial activity in art; Innovative Methodology; Develop practical skills in business;

#### 2.3 Skills important for a entrepreneurial education

#### 7. How essential are the following types of knowledge, skills, and competencies to you:





In both Georgian universities, the answers from the competencies listed were mainly distributed between the very important and the important.

Most competencies are rated as very important or significant. A less significant assessment was received by a small percentage of competencies. Detailed information on TAFU and ISU data is given in tables 4 and 5.

	T		I	
TAFU 7. How essential are the following types of knowledge, skills, and competencies to you:	Very Important	Important	Not So Important	Not Important
Foreign language skills	57%	38%	5%	0
First language proficiency	76%	24%	0	0
Specialized knowledge	95%	5%	0	0
Written communication skills	81%	19%	0	0
Verbal communication skills	86%	14%	0	0
Research skills	33%	67%	0	0
Performance skills	62%	29%	5%	5%
Analysis and synthesis skills	67%	33%	0	0
Creative and innovative thinking skills	81%	19%	0	0
Problem-solving skills	76%	24%	0	0
Decision-making skills	81%	19%	0	0
ICT skills (Information management, electronic				
correspondence, content creation, information security)	48%	48%	5%	0
Teamwork skills	48%	43%	10%	0
Interpersonal communication skills	52%	48%	0%	0
Self-management skills	33%	62%	0	5%
Conflict management	33%	57%	10%	0
Time management	48%	43%	10%	0
Change management	24%	71%	5%	0





Stress management	24%	57%	19%	0
Negotiation skills	57%	38%	5%	0
Leadership skills	62%	29%	10%	0
Entrepreneurial skills	43%	43%	14%	0
Financial management	19%	57%	24%	0
Result-based performance management	52%	43%	5%	0
Cultural awareness and intercultural communication	71%	29%	0	0
Readiness to acquire new knowledge	76%	24%	0	0
Collaboration skills	67%	33%	0	0
Responsibility and capacity of handling tight deadlines	76%	24%	0	0
Managerial and organizational skills	62%	38%	0	0
Skills to adapt to unexpected events	52%	43%	5%	0

Table 4 Essential skills and type of knowledge to be gained by TAFU

ISU 7. How essential are the following types of knowledge, skills, and competencies to you:	Very Important	Important	Not So Important	Not Important
Foreign language skills	81%	19%	0	0
First language proficiency	71%	24%	0	5%
Specialized knowledge	90%	10%	0	0
Written communication skills	81%	14%	0	5%
Verbal communication skills	76%	19%	0	5%
Research skills	76%	24%	0	0
Performance skills	81%	14%	0	5%
Analysis and synthesis skills	76%	19%	0	5%
Creative and innovative thinking skills	67%	24%	10%	0
Problem-solving skills	81%	14%	5%	0





Decision-making skills	76%	19%	5%	0
ICT skills (Information management, electronic correspondence, content creation, information security)	62%	38%	0	0
Teamwork skills	71%	24%	5%	0
Interpersonal communication skills	67%	29%	5%	0
Self-management skills	71%	24%	5%	0
Conflict management	67%	29%	5%	0
Time management	81%	14%	5%	0
Change management	52%	43%	5%	0
Stress management	62%	29%	10%	0
Negotiation skills	71%	24%	5%	0
Leadership skills	52%	33%	10%	0
Entrepreneurial skills	48%	38%	10%	0
Financial management	24%	57%	14%	0
Result-based performance management	62%	29%	5%	0
Cultural awareness and intercultural communication	62%	29%	10%	0
Readiness to acquire new knowledge	76%	19%	5%	0
Collaboration skills	67%	24%	10%	0
Responsibility and capacity of handling tight deadlines	81%	10%	10%	0
Managerial and organizational skills	71%	29%	0	0
Skills to adapt to unexpected events	67%	29%	5%	0

Table 5 Essential skills and type of knowledge to be gained by ISU

### 11. Would you like to improve your English language skills?

The majority of the surveyed teachers want to improve their English language skills - 83%, only 17% would not like it.

### 12. Please evaluate your English language proficiency level?

More than half (64%) of teachers in both Georgian universities rated their English language proficiency as high: Advanced (+ Proficient) - 38%; Upper intermediate - 26% while the rest are average and below average:

Intermediate - 15%





Lower Intermediate -7% Beginner – 14%

## 16. How strongly would you benefit from the modern and collaborative approach of university- enterprise collaboration?

The usefulness of the cooperation between the university and the enterprise was assessed at a very high level: 93% - strongly, 7% - less.

#### **Conclusion:**

Thus, the results of the lecturers' survey showed that the vast majority of teachers in the two universities of Georgia (TAFU and ISU) are interested in acquiring entrepreneurial knowledge and skills and are ready to teach within the project. They have positive expectations, believe that new knowledge will help develop new skills and more actively introduce modern teaching methods, and more.

The survey allowed us to draw important conclusions in another direction as well. In particular: a survey of teachers found that 83% of them have an interest in improving their English language skills especially in TAFU (Here it is 100%, and 72% assess their English knowledge from beginner to intermediate level), which gives grounds for planing actions to improve this situation in the future.

### 3. Analyzing the startup's assessment of local needs results

Within the framework of "Connecting universities industry through smart entrepreneurial cooperation and competitive intelligence of students in Moldova, Georgia and Armenia" project co-funded by the Erasmus + Programme of the European Union the survey was conducted among the students of The Universities in Tbilisi Georgia namely within the students of Ilia State University (ISU) and also Shota Rustaveli Theatre and Film University (TAFU) to better understand students needs, thoughts and expectations regarding the gap of entrepreneurial knowledge, skills and mindset what they think they are lacking for successful future perspectives in the field.

The questionnaires were distributed via google forms by the end of May, 2021 to more than 1000 potential interviewers. Good number of forms were collected considering the length complexity and time required to fill out the suggested questionnaires. Total of 109 responses were collected in approximately 2 weeks time. These pool of students were chosen by only one main criteria that they should not have any working or entrepreneurial experience.

Please note that the questions discussed in this report are also underlined in above given sections.

### 3.1 General data about the respondents





By generally categorizing the specializations of the given respondents (total of 109 students of ISU and TAFU) we can group the answers in 3 main categories:

	Number of respondents	Share in %
Humanities	14	12.8%
Social Sciences	54	49.5%
Arts	41	37.6%

More than 98 % of the student respondents from the given poll were bachelor students and only approximately 2% Master degree students. From which we can also outline that the majority also were female students. A total of 81 were female students out of 109. And only 28 students were male representatives.

In the questionnaires itself the age groups were classified in 4 different age groups and in the received results we have the representatives of 2 main age groups explicitly students under 20 years, represented 33% of the respondents and the age group from 21-to 25 years represented the majority of respondents of approximately 66%.

When asked if they need to study English for individual and professional development the 104 respondents answered yes and only 5 respondents answered no to this question. That means that absolute majority of the respondents 95% answered positively to the given question. To the question which training format do they prefer the most? from the 3 available answers Online, offline and mix (a combination of online and offline). Only 5 out of 109 respondents answered online, 46 – offline and 58 respondents prefer combination of online and offline courses. Meaning that, majority of students still prefers mix of online and offline courses.

### 3.2 Needs for entrepreneurial education

We have discovered very positive approach to the question: - <u>Do you think you need to enhance your knowledge and practical performance in terms of entrepreneurial topics?</u> This was an open-ended question having the possibility to clearly provide the reasons why do they need it. The answers to this question were analyzed by institution. From Georgia there are 2 institutions involved TAFU and ISU. All responses from the students of ISU were positive to this give question. In case of the second institution in Georgia TAFU the majority of the respondent answered positively to this question and only approximately 23 % responses were negative (43 times yes and 17 times no).

The main reasons indicated from the TAFU students were the following, quoting: "Entrepreneurial business is a "diversion" that we will encounter in all professions because it will help effectively manage the activities I will start in the near future." "I think it will be good for my development." "For skills development, for innovation, for self-realization", "To start own business", It is necessary to





improve practical skills in the entrepreneurial direction, because otherwise it is difficult to establish oneself in this field.

Clearly for the vast majority of the students it is important to build up the knowledge and practical performance regarding entrepreneurial topics. From the perspective of ISU students, it is essential if they would like to establish their own business sometime in the future or also it is good for overall knowledge and development.

For the question <u>- How do you think the entrepreneurial education should be implemented at higher education institutions?</u> To the question were provided 4 different answers (plus one extra open-ended answer if the respondent was willing to express himself/herself). Also, please pay attention that it was possible to select more than one answer, but maximum 2 out of given answers.

Available choices :	Number of
	responses
As a special course (extra-curricular activity)	
	37
As a selective course (curricular activity)	
	54
As a mandatory course (curricular activity)	
	20
Through seminars and trainings (extra-curricular activity)	
	61

The result to the next question: -. Please <u>rank your preferable learning resources?</u> Given survey results evidently demonstrates that the among preferable learning recourses students top three favorite are: Teachers courses, Entrepreneurship training and Support in developing concrete business plans. Collected data makes obvious that except Wikipedia approximately 70% find the listed learning recourses are just important or very important.

For more details, there is the exact distribution of the answers. Please see the table below:

	Not important at all	Less important	Indifferent	Important	Very important
Teachers courses	12	2	9	49	37
Lessons (record, audio)	12	6	15	44	32
Quizzes	12	4	24	48	21
Project-based learning projects	12	4	13	49	31
Simulation, interactive teaching	11	5	11	51	31
Interviewing entrepreneurs	11	15	6	53	24





Entrepreneurship training	12	3	8	51	35
Support in developing concrete bus. plans	8	7	9	49	36
Classic library with hard copy books	12	8	16	52	21
e-library with books	10	4	13	62	20
Wikipedia	16	13	26	40	14

### what extant did COVID19 influenced students choices of taking the courses?

This was a yes/ no question and responses were divided in half. The main trigger for the respondents who answered positively to this question were mainly the following: (we had this additional question: If your answer was positive in Question N 15 please specify what kind of influence does Covid-19 has on your decision?) students refrained to take practical courses due to the pandemic as they require group work or practical work that needs the physical presence and active interaction. At the same time, for theater experts it is essential to see the plays clearly, as well as to go to libraries and theater archives which was not possible during pandemic. As for the simple yes/ no distribution in the rest of the answers we have 55- no and 53- yes.

### 3.3 Skills important for a entrepreneurial education

The students were also asked to <u>assess the importance of the skills developed during entrepreneurial education aiming for a successful career.</u> In this case for both institutions ISU or TAFU picture did not change and the overall view is similar in both cases.

The skills are given in the table below. In 80-90 % of the respondents think the given skills are very important or just important. Only less than 10% of the students think the skills named below are somehow not important for the successful career (Data indicates the number of respondents, e.g. how many students answered in favor of the given skill from total 109 respondents).

Assess importance of the following skills aiming for a successful career	Not important	Not so important	Important	Very important
Foreign language skills	12	1	25	71
First language proficiency	12	1	30	66
Specialized knowledge	12	1	27	69
Written communication skills	10	6	47	46
Verbal communication skills	12	3	32	62
Research skills	9	8	40	51





Performance skills	10	7	27	65
Analysis and synthesis skills	14	2	32	61
Creative and innovative thinking	13	0	24	72
Problem-solving skills	11	1	21	76
Decision-making skills	10	2	21	76
ICT skills	11	6	36	56
Teamwork skills	11	2	35	61
Interpersonal communication skills	11	7	23	68
Self-management skills	11	2	33	63
Conflict management	10	5	30	64
Time management	10	3	28	68
Change management	11	5	35	58
Stress management	9	6	36	58
Negotiation skills	11	1	22	75
Leadership skills	11	3	31	64
Entrepreneurial skills	11	4	27	67
Financial management	12	4	32	61
Result-based performance management	12	2	32	63
Cultural awareness and intercultural com.	11	7	34	57
Readiness to acquire new knowledge	11	4	28	66
Collaboration skills	12	2	29	65
Responsibility and capacity of handling tight deadlines	12	0	27	70
Managerial and organizational skills	11	2	31	65
Skills to adapt to unexpected events	11	4	35	59

One of the other questions we would like to highlight here is: Which training courses do you prefer most for your individual and professional development? And 9 variation of courses were suggested for selection, from where the clear priority was given to 4 main areas: 1) Social media for business;





2) Acceleration program for very beginners and an entrepreneurial journey; 3) Digital platforms for business; 4) Digital tools for communication and content creation

Exact answer distribution in numbers is given in the table below:

Assess the importance of the following skills developed during entrepreneurial educate aiming for a successful career:	tion
Acceleration Program for very beginners: From Idea to Business Concept: An entrepreneurial Journey	28
Acceleration Program for incorporated companies (advanced level).	1
Social media for business	31
Digital platforms for business	28
Digital tools for communication and content creation	24
Corporality in motion/Body as a means of communication	11
The improvement of the relationship between individuals and working groups using theatre methods, concepts and games	5
Film module (Video, including videos with a commercial purpose)	18
Photography module	15

The last question to this section applies to <u>select the core barriers students think are vital in launching a startup business.</u> The answers were distributed in the following way:

Please choose the barriers to launching a startup business. (N)				
Lack on entrepreneurial skills and knowledge	13			
Lack of experience	77			
Fear to failure	20			
Excessive bureaucracy	33			
Lack of business idea	34			
Corruption in society	30			
The ignorance of local business opportunities and threats	13			
Lack of advice and information	35			
Lack of successful examples	19			
Lack on access to financing	29			





This answer distribution shows that the most expected barrier they recognize is lack of experience and only after that the respondents recognize barriers such as lack of advice and information, lack of business idea and excessive bureaucracy.

# 4. Analyzing the incorporated companies' (Students with experience) assessment of local needs results

Within the framework of "Connecting universities industry through smart entrepreneurial cooperation and competitive intelligence of students in Moldova, Georgia and Armenia" project the 4th survey was conducted among the students of same two Universities in Tbilisi Georgia: Ilia State University (ISU) and Shota Rustaveli Theatre and Film University (TAFU) to understand needs and thoughts of students with some kind of professional experience entrepreneurial or any other work experience.

The questionnaires were distributed via google forms by the end of May, 2021 to more than 100 potential interviewers after the preliminary phone call to make sure we are communicating the target group of experienced students. Only 26 responses were received in total, in approx. 2 weeks' time. However, it was a very good feedback considering the length and the complexity of the questionnaire itself.

In the sections below, we will focus and summarize students' general data who have participated in the given survey, their entrepreneurial needs toward education and challenges they could think of in the field of entrepreneurship.

## 4.1 General data about the respondents

By generally categorizing the specializations of the given respondents (total of 26 students of ISU and TAFU institutions) we can group the answers in 3 main field areas given below:

*	Humanities (2 students)	7.7%
*	Social Sciences (22 st)	84.6%
*	Arts (2 st)	7.7%

Out of 26 students, 22 were bachelor students, 3 master and only 1 Ph.D. student from both institutions.





As for gender distribution, here as well the majority are female respondents.

Gender Distribution (in numbers):				
4	male			
22	female			

Here as well as in the first students' questionnaire discussed in section 3 the respondents age was classified in 4 different age groups. In contrary to the other student's pool given in section 3 we have the majority of the representatives in 21-25 years age group, complying more than 73 %.

The age distribution of the respondents in numbers:				
under 20	2			
21-25y	19			
25-30y	4			
30-40y	1			

To the question - Which format of a training course do you prefer most, the respondents answered they would prefer the mixed structure combining both offline and online courses. This is approximately the same distribution as it was in the inexperienced group of students.

Which format of a training course do you prefer most:					
online	1	4%			
offline	7	27%			
mix	18	69%			

Analyzing the answers to the question - Do you think you need to study English to develop entrepreneurial skills? The result clearly demonstrates that all of the respondents think that they need to study English in order to develop entrepreneurial skills. Consequently all 26 together answered positive to this question.





#### 4.2 Needs for entrepreneurial education

In order to understand experienced students' needs for entrepreneurial education three main questions will be discussed in this section. First student respondents were asked if they think they would need to enhance their knowledge and practical performance in terms of entrepreneurial topics? (quoting: Do you think you need to improve your knowledge and practical performance on entrepreneurial topics as such?). they needed to choose from 3 available responses in particular – 1.yes, 2.no and 3. Please specify the reason you need it.

We have looked separately by the university but student of both institutions answered positively to this question. And there were 26 yeses for this question above. As the reason only three respondents specifically explained why they needed it (so they have ticked the 3rd option and specified the reason) and the answers were the following, quoting: 1) Understanding the documentation at an early stage is the biggest challenge for a start-up entrepreneur. 2) I would like to gain more practical and theoretical knowledge in this area. 3) I have a training center and I want to manage it productively.

The next question we would like to focus on summarizes the overall approach of respondents from both universities: for the question asked -<u>How do you think the entrepreneurial education should be implemented at higher education institutions?</u> Responses were distributed in the following way. Please see the table:

How do you think entrepreneurial education should be implemented at higher education institutions?			
As a special course (extra-curricular activity)	7		
As a selective course (curricular activity)	6		
As a mandatory course (curricular activity)	1		
Through seminars and trainings (extra-curricular activity)	12		

The answers to the question what methods do you think should be used for improving entrepreneurial education at higher education institutions? The responses clearly demonstrated that the among preferable education methods top three favorite are: Lessons, Entrepreneurial training and Support in developing concrete business plans (This one was also one of the most favorite methods for the bigger poll of inexperienced students discussed in above section, the less favorite methods we can underline from the answers are methods of quizzes and Wikipedia (same as in section 3).

In the table below, there is the exact distribution of the answers of 26 students with work experience:





What methods do you think should be used for improving entrepreneurial education at higher education institutions?	Not at all important	Less important	Indifferent	Important	Very important
Teachers courses	2	5	3	11	5
Lessons (record, audio)	2	1	7	16	0
Quizzes	2	6	11	7	0
Project-based learning projects	2	1	0	14	9
Simulation, interactive teaching	2	0	3	10	11
Interviewing entrepreneurs	3	0	4	14	5
Entrepreneurship training	2	0	1	16	7
Support developing concrete. Business plans	2	0	2	15	7
Classic library with hard copy books	2	5	11	8	0
e-library with books	1	2	8	12	3
Wikipedia	6	7	10	3	0

Only one respondent has left the comment in the section - Other, quoting – "Sharing experience would be important".

## 4.3 Skills important for a entrepreneurial education

Given pool of students were also asked to <u>assess the importance of the following skills developed</u> <u>during entrepreneurial education aiming for a successful career</u>. Students views in both institutions ISU or TAFU are analyzed in a below given table. Picture did not change and the country view was unified, showing that all skills are more or less important. Here as well similar to the section 3.3 skills given in the table are mostly very important or just important. Only less than 8% think the skills named below are somehow not important for the successful career.

As a summery we can group responses and indicate most important skill for both universities together, which are:





- Performance skills;
- Problem solving skills;
- Decision making skills;
- Self-management skills;
- Time management skills;
- Creative and innovative thinking skills;
- Negotiation skills;
- Readiness to acquire new knowledge.

(please also see the Appendix A for more details given by each university)

Assess the importance of the following skills developed during entrepreneurial education aiming for a successful career	Not important/	Not so important/	Important	Very important
Total (ISU and TAFU)	important	important		
Foreign language skills	2	0	9	15
First language proficiency	2	2	9	13
Specialized knowledge	2	1	15	8
Written communication skills	2	1	15	8
Verbal communication skills	2	1	9	14
Research skills	3	0	11	12
Performance skills	2	0	6	18
Analysis and synthesis skills	2	0	9	15
Creative and innovate. thinking skills	2	0	8	16
Problem-solving skills	2	0	7	17
Decision-making skills	2	0	7	17
ICT skills (Inform. management, electronic correspondence, etc.)	2	0	10	14
Teamwork skills	2	1	13	10
Interpersonal communication skills	2	1	10	13
Self-management skills	2	0	8	16
Conflict management	2	0	12	12
Time management	2	0	8	16





Change management	3	0	11	12
Stress management	2	0	11	13
Negotiation skills	2	0	8	16
Leadership skills	2	1	10	13
Entrepreneurial skills	2	1	13	10
Financial management	2	3	12	9
Result-based performance management	2	0	13	11
Cultural awareness and intercultural communication	2	2	13	9
Readiness to acquire new knowledge	2	0	7	17
Collaboration skills	2	1	9	14
Responsibility and capacity of handling tight deadlines	2	0	10	14
Managerial and organizational skills	2	1	11	12
Skills to adapt to unexpected events	2	0	9	15
Other (please specify)				

One of the questions we would like to discuss here is: Which training courses do you prefer most for your individual and professional development? Here similar to the section 3.3, 9 variation of courses were suggested for selection. From the responses we derived overall from both universities that the clear priority had given to the:

- Social media for business,
- ❖ Acceleration program for very beginners and an entrepreneurial journey,
- Digital platforms for business,
- Digital tools for communication and content creation.

This is exactly the same distribution of priorities that was with the bigger poll of students with no working experience. Exact answer distribution in numbers are given in the table below:





Which training courses do you prefer most for your individual and professiona	al developn	nent?
Acceleration Program for very beginners: From Idea to Business Concept: An entrepreneurial Journey	14	19%
Acceleration Program for incorporated companies (advanced level).	3	4%
Social media for business	15	20%
Digital platforms for business	14	19%
Digital tools for communication and content creation	14	19%
Corporality in motion/Body as a means of communication	3	4%
The improvement of the relationship between individuals and working groups using theatre methods, concepts and games	3	4%
Film module (Video, including videos with a commercial purpose)	4	5%
Photography module	4	5%

At last we are discussing here as well the question that applies to <u>select the core barriers students</u> think are vital in launching a startup business. Results clearly show that the most expected barrier the students in this survey recognize are: 1) lack of experience, 2) fear of failure and 3) lack on access to financing.

Please see the table below for exact answer distribution:

Please mention barriers for starting a startup business:	
Lack on entrepreneurial skills and knowledge	6
Lack of experience	16
Fear to failure	17
Excessive bureaucracy	6
Lack of business idea	2
Corruption in society	5
The ignorance of local business opportunities and threats	7
Lack of advice and information	8





Lack of successful examples	2
Lack on access to financing	14
Other, please mention	

## **Conclusion**

The conclusion section should be provided to resemble the key findings in all four cohort of respondents surveyed as part of the research.

## Company's Assessment of local needs

When describing and analyzing the current stance of starting and running a business or managerial activity, the respondents named insufficient financial resources and assets as their key constraint. In combination with several factors, the company representatives believe that lack of specific field knowledge is an issue. Moreover, most companies state that entrepreneurial courses in a higher education institution should have a form of a specialized course be either as an elective or in a form of practical training. From their personal viewpoint, the most relevant courses for them at the surveying point was related to digital platforms and digital media communication, as well as social media development for a business. The actuality of these particular topics can be related with an increased need for digitalization in the conditions of the ongoing pandemic.

The company representatives, as potential employers were asked regarding their perception of the key skills and competencies that they are seeking in a potential employee. The need of specialized knowledge, language proficiency and communication skills came out as the most important skills for future employees. The companies could not specifically name the type of human resource that they are lacking, there was not a distinguished tendency regarding the type of professional workforce that they require, answers were equally distributed among a wide range of professionals.

There is a high rate of willingness on the part of organizations to collaborate with higher education institutions on a variety of topics, among others: development and revision of academic programs, organization and Implementation of joint projects aimed to improve entrepreneurial involvement, participation in educational fairs (for instance, Career and Information Days).

## Teacher's Assessment of local needs

Teaching staff at both universities showed great interest and willingness to acquire and deepen their entrepreneurial knowledge. When specifically asked to name the direction of gaining additional knowledge the most common answer was modern teaching methods that combine theory and practice.

When it comes to engaging in trainings of particular fields, both universities of Georgia have shown interest in the proposed topics, although the direction of interests is somewhat different. TAFU





teachers have shown highest percentage of specific interest in Arts and digital technologies, followed by strategic management and acceleration courses. In terms of the specific interest named by the ISU teachers we have a combination of topics, while the largest number of respondents have named green entrepreneurship as a topic of interest.

Key teaching element during the entrepreneurial training refers to combining theory with practice, bringing specific practical knowledge and examples in the training sessions. In addition, majority of the surveyed teachers want to improve their English language skills.

Thus, the results of the teachers' survey are interested in acquiring entrepreneurial knowledge and skills and are ready to teach within the project. They have positive expectations, believe that new knowledge will help develop new skills and more actively introduce modern teaching methods, and more.

## Students' local needs results

Analysis of the answers provided by the cohort of students with no prior experience in entrepreneurship shows that the key barrier they recognize hampering their entrepreneurial interest is lack of experience, paired with the lack of advice and information, as well as inability to shape business ideas.

These cohort of students is interested in enhancing their skills and knowledge in the direction of learning more about the social media for business; acceleration programs for beginners and the path that an entrepreneur goes from idea generation to launching a venture. Digital transformation and tools for communication was also named as a preferable course to attend.

When analyzing the students with prior entrepreneurial experience, they have named a different set of preferred courses that are related to self-development and enhancement of business and management skills, such as performance and problem-solving skills, self-management and time management skills, creative and innovative thinking, negotiation and decision-making skills. This cohort of respondents name lack of enough experience, fear of failure and lack of financial access as the most outstanding barriers hampering them to launch a startup of their own.





# Appendix A

ISU	Not important/ Not at all important	Not so important/ Less important	Important	Very important
Foreign language skills	2	0	5	10
First language proficiency	2	2	4	9
Specialized knowledge	2	1	9	5
Written communication skills	2	1	9	5
Verbal communication skills	2	1	4	10
Research skills	3	0	7	7
Performance skills	2	0	2	13
Analysis and synthesis skills	2	0	3	12
Creative and innovate. thinking skills	2	0	4	11
Problem-solving skills	2	0	2	13
Decision-making skills	2	0	1	14
ICT skills (Inform. Man, etc.)	2	0	5	10





Teamwork skills	2	0	7	8
Interpersonal	2	1	6	8
communication skills				
Self-management skills	2	0	4	11
Conflict management	2	0	6	9
Time management	2	0	2	13
Change management	3	0	5	9
Stress management	2	0	5	10
Negotiation skills	2	0	4	11
Leadership skills	2	0	5	10
Entrepreneurial skills	2	1	6	8
Financial management	2	2	7	6
Result-based performance	2	0	8	7
management				
Cultural awareness and	2	2	7	6
intercultural communication				4.4
Readiness to acquire new knowledge	2	0	4	11
Collaboration skills	2	1	4	10
Responsibility and capacity	2	0	4	11
of handling tight deadlines			•	
Managerial and	2	1	6	8
organizational skills				
organizational skills Skills to adapt to events	2	0	4	11
	Not	Not so	4 Important	Very
Skills to adapt to events	Not important/	Not so important/		
Skills to adapt to events	Not important/	Not so		Very
Skills to adapt to events	Not important/	Not so important/		Very
Skills to adapt to events  TAFU  Foreign language skills	Not important/ Not at all important	Not so important/ Less important	Important	Very important
Skills to adapt to events  TAFU  Foreign language skills  First language proficiency	Not important/ Not at all important	Not so important/ Less important	Important 5	Very important
Skills to adapt to events  TAFU  Foreign language skills  First language proficiency  Specialized knowledge	Not important/ Not at all important  0	Not so important/ Less important  0	Important  5 5	Very important  4
Skills to adapt to events  TAFU  Foreign language skills  First language proficiency  Specialized knowledge  Written communication skills	Not important/ Not at all important  0 0	Not so important/ Less important  0 0 0	5 5 6	Very important  4 4 3
Skills to adapt to events  TAFU  Foreign language skills  First language proficiency  Specialized knowledge  Written communication skills  Verbal communication skills	Not important/ Not at all important  0  0  0  0	Not so important/Less important  0 0 0 0 0	5 5 6 6 5	Very important  4 4 3 3 4
Skills to adapt to events  TAFU  Foreign language skills  First language proficiency  Specialized knowledge  Written communication skills  Verbal communication skills  Research skills	Not important/ Not at all important  0 0 0	Not so important/ Less important  0 0 0	5 5 6	Very important  4 4 3 3 4 5
Skills to adapt to events  TAFU  Foreign language skills  First language proficiency  Specialized knowledge  Written communication skills  Verbal communication skills  Research skills  Performance skills	Not important/ Not at all important  0 0 0 0 0 0 0	Not so important/Less important  0 0 0 0 0 0 0 0	5 5 6 6 5 4	Very important  4 4 3 3 4 5 5
Skills to adapt to events  TAFU  Foreign language skills  First language proficiency  Specialized knowledge  Written communication skills  Verbal communication skills  Research skills  Performance skills  Analysis and synthesis skills	Not important/ Not at all important  0 0 0 0 0 0 0 0	Not so important/Less important  0 0 0 0 0 0 0 0 0 0	5 5 6 6 5 4 4	Very important  4 4 3 3 4 5 5 3
Skills to adapt to events  TAFU  Foreign language skills  First language proficiency  Specialized knowledge  Written communication skills  Verbal communication skills  Research skills  Performance skills	Not important/ Not at all important  0 0 0 0 0 0 0	Not so important/Less important  0 0 0 0 0 0 0 0	5 5 6 6 5 4	Very important  4 4 3 3 4 5 5
Skills to adapt to events  TAFU  Foreign language skills  First language proficiency  Specialized knowledge  Written communication skills  Verbal communication skills  Research skills  Performance skills  Analysis and synthesis skills  Creative and innovate.	Not important/ Not at all important  0 0 0 0 0 0 0 0	Not so important/Less important  0 0 0 0 0 0 0 0 0 0	5 5 6 6 5 4 4	Very important  4 4 3 3 4 5 5 3
Skills to adapt to events  TAFU  Foreign language skills  First language proficiency  Specialized knowledge  Written communication skills  Verbal communication skills  Research skills  Performance skills  Analysis and synthesis skills  Creative and innovate.  thinking skills	Not important/ Not at all important  0 0 0 0 0 0 0 0 0 0	Not so important/Less important  0 0 0 0 0 0 0 0 0 0 0	5 5 6 6 6 5 4 4 4	Very important  4 4 3 3 4 5 5 5 3
Skills to adapt to events  TAFU  Foreign language skills  First language proficiency  Specialized knowledge  Written communication skills  Verbal communication skills  Research skills  Performance skills  Analysis and synthesis skills  Creative and innovate. thinking skills  Problem-solving skills	Not important/ Not at all important  0 0 0 0 0 0 0 0 0 0 0 0 0	Not so important/Less important  0 0 0 0 0 0 0 0 0 0 0 0 0 0	5 5 6 6 5 4 4 4 5	Very important  4 4 4 3 3 4 5 5 5 4
Skills to adapt to events  TAFU  Foreign language skills  First language proficiency  Specialized knowledge  Written communication skills  Verbal communication skills  Research skills  Performance skills  Analysis and synthesis skills  Creative and innovate. thinking skills  Problem-solving skills  Decision-making skills	Not important/ Not at all important  0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Not so important/Less important  0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	5 5 6 6 5 4 4 6 4 5 6	Very important  4 4 3 3 4 5 5 5 4 3
Skills to adapt to events  TAFU  Foreign language skills  First language proficiency  Specialized knowledge  Written communication skills  Verbal communication skills  Research skills  Performance skills  Analysis and synthesis skills  Creative and innovate. thinking skills  Problem-solving skills  Decision-making skills  ICT skills (Inform. Mana etc.)	Not important/ Not at all important  0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Not so important/Less important  0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	5 5 6 6 5 4 4 6 4 5 6 5	Very important  4 4 4 3 3 3 4 5 5 5 4 3 4





Self-management skills	0	0	4	5
Conflict management	0	0	6	3
Time management	0	0	6	3
Change management	0	0	6	3
Stress management	0	0	6	3
Negotiation skills	0	0	4	5
Leadership skills	0	1	5	3
Entrepreneurial skills	0	0	7	2
Financial management	0	1	5	3
Result-based performance management	0	0	5	4
Cultural awareness and intercultural communication	0	0	6	3
Readiness to acquire new knowledge	0	0	3	6
Collaboration skills	0	0	5	4
Responsibility and capacity of handling tight deadlines	0	0	6	3
Managerial and organizational skills	0	0	5	4
Skills to adapt to unexpected events	0	0	5	4







# **CONNECT 2021-2024**

Connecting Universities-Industry through Smart Entrepreneurial Cooperation and Competitive Intelligence of Students in Moldova, Georgia and Armenia

Project Acronym:	CONNECT
Project Title:	Connecting Universities-Industry through Smart Entrepreneurial Cooperation and Competitive Intelligence of Students in Moldova, Georgia and Armenia
Project No:	617393-EPP-1-2020-1-MD-EPPKA2-CBHE-JP
Funding Scheme:	ERASMUS+
Coordinator:	Moldova State University (MSU)
Project Duration:	3 years (starting January 2021)

## [Assessment of Local Needs for Trainings and Services]

Work Package:	XXXXX
Lead Beneficiary:	XXXXX
Submission Date:	DD/MM/YY
Dissemination Level:	Public / Confidential

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## **Executive summary**

**The given report** attempts to reveal the need for entrepreneurial capacities of Armenian HEIs, more specifically, those of Brusov State University and Vanadzor State University after H. Tumanyan.

Overall analysis of the questions directed to the four target groups have proven the significance of skills needed for successful career of future specialists mastering not only in business related fields but also in other specializations.

Accordingly, the main findings of the report carried out by the two Armenian HEIs are as follows:

- The main obstacles for taking up entrepreneurship for companies are conditioned with the lack of potential customers, insufficient financial resources, specialized knowledge, insufficient knowledge of law, fear of failure and other factors. This comes to prove the fact that many companies themselves feel the need for elevating their entrepreneurial capacities. Additionally, companies essentialize constant enhancement of their employees' entrepreneurial skills, particularly in the fields of acceleration and digitalization. Surprisingly, the majority of companies do not pay much attention to develop their employees' interpersonal skills or raise their social awareness, yet finding the society-education tie to be indispensable. Consequently, many companies expressed their willingness to cooperate with universities by offering them trainings and seminars considering that top three fields for entrepreneurial education were Law, Management and Marketing. Some of the companies would be eager to assist universities in the development and revision of academic programs and offer new selective courses related to the enhancement of entrepreneurial skills.
- To overcome the new challenges of Covid-19, both companies and universities paid great
  attention to suggest distance/online trainings and creative solutions for the studentteacher/employee-employer dialogue. Nevertheless, despite the fact that great importance is
  attached to the enhancement of digital skills after the pandemic, the overwhelming majority of
  the respondents would prefer courses and trainings in an offline format.
- As regards the skills significant for the students to become competent and well-rounded in the market, all the target groups have prioritized substantially verbal communication, specialized knowledge, first language, foreign language, and IT skills. Other important soft skills include but are not limited to team work, inter-personal communication, creative-innovative thinking, problem-solving, time and risk management skills. Interestingly, some companies attach less importance to their employees' financial management or result-based performance management skills as well as to the cultural awareness and intercultural communication abilities.
- The significance of English language enhancement was greatly valued by all the respondents.
  Moreover, elevation of English skills was prioritized even by the teachers and students already
  having good knowledge of English. Overwhelming majority of the respondents states that the
  enhancement of their English proficiency level would foster their professional development
  and open up new opportunities in their career.

To conclude, the results of the surveys have testified the current need for the enhancement of entrepreneurial education at the Armenian universities by stressing the importance of obtaining practical knowledge notwithstanding the students' field of study.





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## Introduction

This report aims at evaluating the current entrepreneurial environment for students in the countries involved and universities participating in the Program. Targeting students engaged in not only business-related fields but also a broad range of not business-oriented academic spheres (including Humanities, Social Sciences, Arts), this report strives to bring all the evaluations by students themselves, lecturers, companies functioning in the field together with the desired outcome of finalizing what the current problems are, what needs to be improved and what the key skills are yet to be shaped by the students to succeed in their target market and establish a business or a startup. More importantly, the student spectrum is observed from two perspectives: experienced students and those who plan to build some relevant experience in the entrepreneurial world to make sure that students themselves share their insights on the key issues and matters with the inexperienced students who are on their journey to boost their own entrepreneurial thinking.

**This report will propose** key answers to a number of focus questions (specified in the relevant subsections) found in 4 respective sections, covering issues such as:

- What are the obstacles to taking up entrepreneurship?
- What are the needs for entrepreneurial education?
- How does the students' specialized knowledge relate to entrepreneurship?
- What skills are significant for the students to become competent and well-rounded in the market?

Respectively, this report will put forward solutions to the problems identified in the sphere (detailed in the Conclusion) in an effort to suggest possible way outs to the conclusive problems resulted by the extensive survey held among the participating stakeholders.

In this report we draw on the survey outcomes held among 4 key stakeholders: incorporated companies, students and lecturers of 2 Armenian universities: Brusov State University and Vanadzor State University after H. Tumanyan, as well as representatives of the Armenian job market. The conclusive points of the report are based on the extensive research discovering the key issues to be highlighted when dealing with entrepreneurial education and training.





# 1. Analyzing the Company's Assessment of Local Needs Results (Georgia, Armenia and Moldova)

This section is devoted to the investigation of the feedback given by the international and local companies located in Armenia to reveal the needs related mainly to the skills of their employees or required specialists, as well as their interest in cooperating with universities and enhancing the entrepreneurial capacities of the university students and staff.

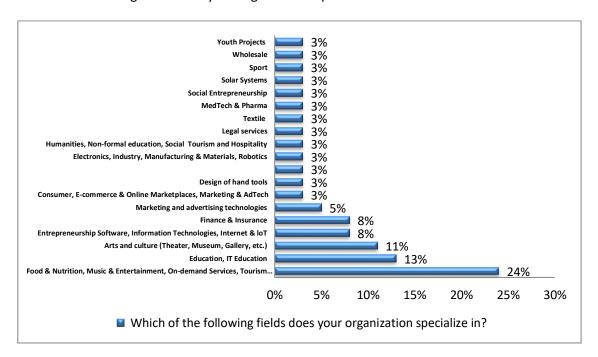
The main objective of the survey is also to have a better understanding about the willingness of companies to adapt their academic programs and educational services to the shifting demands of the labor market and to improve the entrepreneurial skills of their potential employees, thereby strengthening the university-industry cooperation.

To this end the questions directed to the companies are predominantly aimed at identifying the following aspects:

- What are your criteria for hiring young candidates?
- Will you be interested to have trainings for your employees on the courses on hard and soft skills?
- ➤ How in your opinion must entrepreneurial education be implemented in HEIs?
- ➤ How important are the following types of knowledge, skills and competences when hiring students and graduates?
- Which were some of the challenges that you faced with in running your business before and after the pandemic?

## 1.1 General data about the respondents

2. Which of the following fields does your organization specialize in?



The overall number of the Armenian companies that participated in the survey was 41. The majority (24%) of them were companies delivering different services in the field of Food & Nutrition, Music &

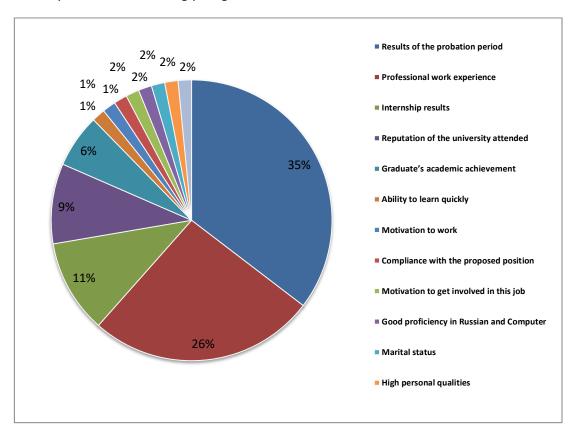




Entertainment, On-demand Services, as well as Tourism & Hospitality. Other responding companies belong mainly to the field of Education, IT Education (13%), Arts and Culture (11%). 8% of respondent companies are Enterprises of Software, Information Technologies, Internet & IoT. The same is true with the companies from the field of Finance &Insurance. Few respondent companies belong to the field of Marketing & Advertising technologies (5%). Among other respondents are pharmaceutical, sport, social entrepreneurship and other companies.

#### 1.2 Obstacles for taking up entrepreneurship

10. What are your criteria for hiring young candidates?

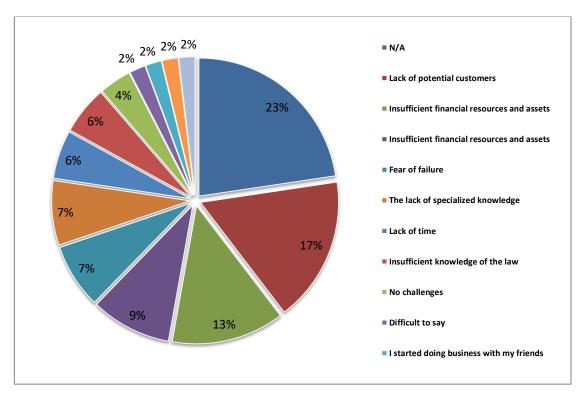


For the majority of the respondents the results of the probation period (35%) and professional work experience (26%) are the most important criteria for hiring young candidates. Fewer companies pay attention to the internship results (11%) and the reputation of the university attended (9%). As it is seen from the diagram, the companies do not consider other criteria so important for hiring their employees.

14. Which were some of the challenges that you faced in running (founding) your business?



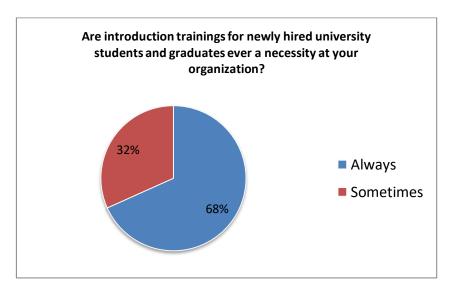




Almost one fourth of the all the companies did not reveal any challenges in running their business. 17% of the companies mentioned that the challenges were conditioned with the lack of potential customers. For 13% of all the respondents the challenges were insufficient financial resources and assets. Other challenges revolved around the fear of failure (7%), lack of specialized knowledge (7%), lack of time (7%), and insufficient knowledge of the law (7%), etc.

### 1.3 Needs for entrepreneurial education

12. Are introduction trainings for newly hired university students and graduates ever a necessity at your organization?

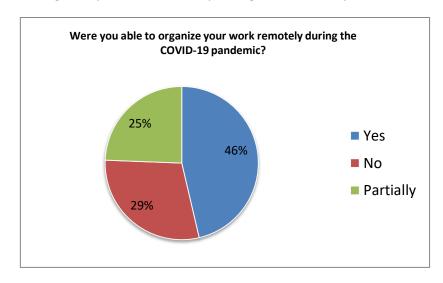


More than two thirds of the companies always organize trainings for newly hired students and graduates.



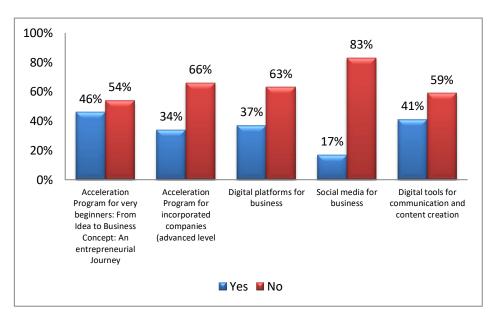


16. Were you able to organize your work remotely during the COVID-19 pandemic?



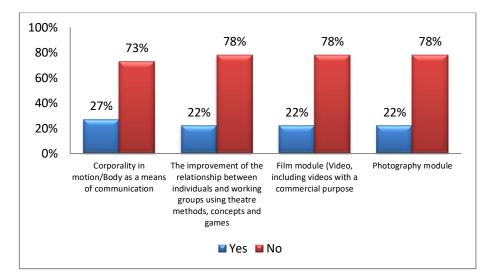
Almost half of the companies could successfully continue their work remotely. For about 30% of respondents it was not possible to work remotely and one fourth of the companies could partially organize the work remotely.

20. Will you be interested to have trainings for your employees on the courses of the CONNECT project free of charge (courses on hard and soft skills: acceleration programme, digital skills, theater and dance)?





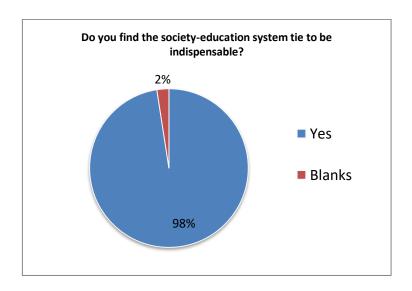




Apparently, Armenian companies wish to organize trainings mainly in the field of acceleration (36%) and digital tools (41%). The wish to train their employees' inter-personal or social abilities is not so strong (22%) compared to developing their digital and entrepreneurial skills.

On the whole, the majority (78%) of the companies is not so willing to organize trainings that could foster their employees' inter-personal skills or raise their social awareness. Only less than one fourth of the companies are interested in boosting the media skills of their employees.

23. Do you find the society-education system tie to be indispensable?

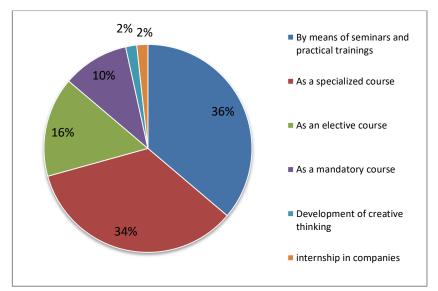


Almost all the respondents find the society-education system tie to be indispensable.

26. How in your opinion must entrepreneurial education be implemented in HEIs? (Not more than 2 choices)

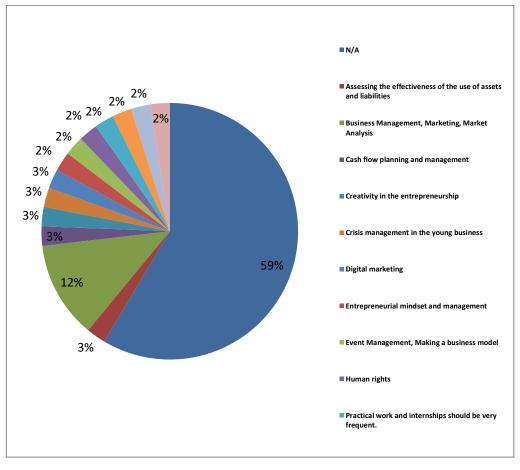






36% of the companies think that entrepreneurial education should be implemented in HEIs by means of seminars or practical trainings. Almost the same number of the respondents thinks instead that it should be implemented through specialized courses (34%). 16% of companies find that entrepreneurial education should be embedded in the curriculum as elective courses and one tenth of the respondents think that they should be mandatory in the curriculum.

27. Please, suggest topics related to entrepreneurship that you find more pertinent for university courses/seminars.

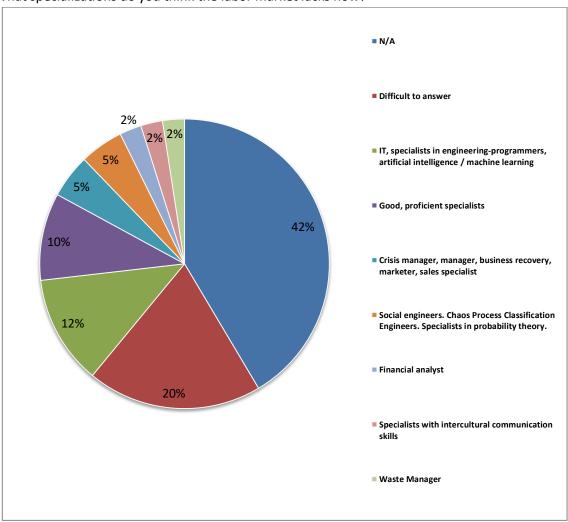






Companies suggest including courses related to Business and Finance, Marketing or Market Analysis (13%). Few respondents offer to include the following courses: Assessing the effectiveness of the use of assets and liabilities (3%), Cashflow planning and management (3%), Creativity in the entrepreneurship (3%), Crisis management in the young business (3%), Digital marketing (3%), Entrepreneurial mindset and management (2%), etc. Anyway, for the majority of the respondents (about 60%) it was difficult to answer that question. Thus, it is significant to underline that the main courses are aimed at developing entrepreneurial and digital skills.

## 29. What specializations do you think the labor market lacks now?



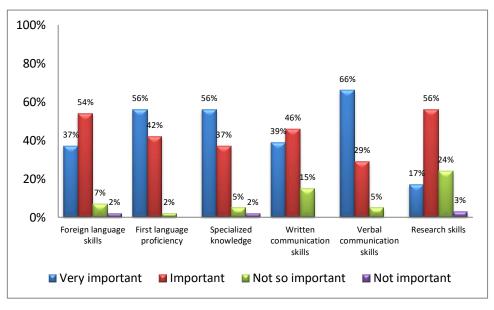
More than 60% of the respondent companies did not answer the question what specializations the labor market lacks. 12% of the companies consider that the labor market needs IT specialists, programmers and AI specialists. 10% of companies emphasize that they lack proficient specialists of their respective fields, specialists who would have good creative writing skills, and intercultural communication skills. Some companies also mentioned that the labor market needs crisis managers, marketers, sales specialists, waste managers, designers, financial analysts, engineers, specialists in probability theory, and social entrepreneurs.

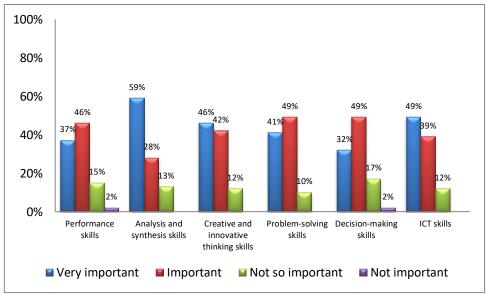
## 1.4 Skills important for a successful career





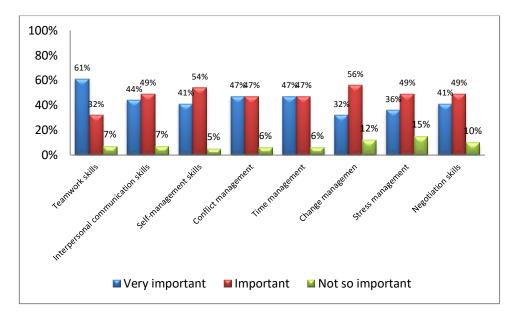
15. How important are the following types of knowledge, skills and competences when hiring students and graduates?

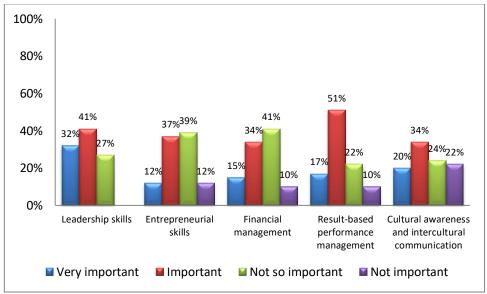


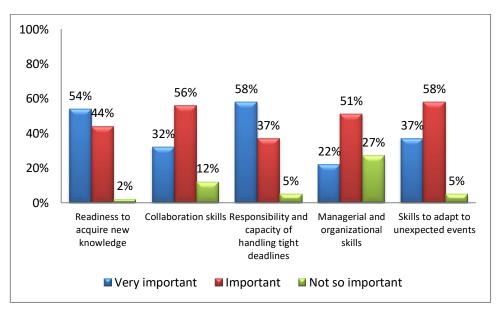










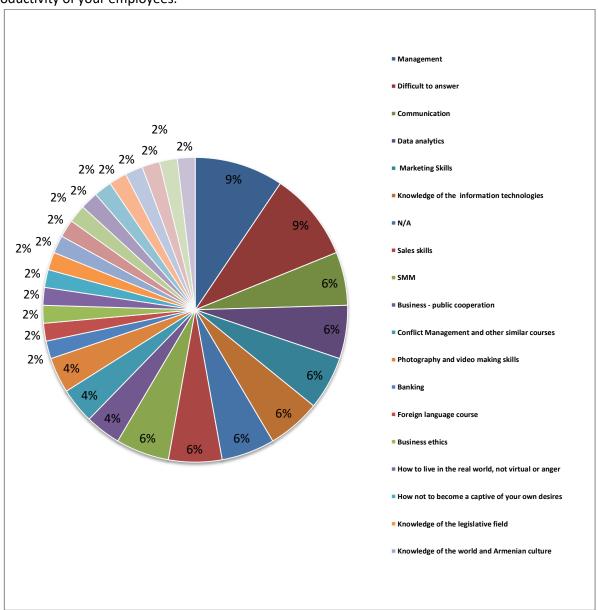






The analysis of the skills has shown that companies pay special attention to all the mentioned skills. The most important skills are especially Verbal communication skills (66%- very important, 29%- important), Teamwork skills (61% -very important and 32%- important). For over 50% of respondents highly value foreign language, first language skills and specialized knowledge, as well as research, analytical and synthetic thinking skills, readiness to acquire new knowledge and responsibility. For nearly half of the respondents written, performance skills, creative thinking, ICT skills, conflict or time management skills are very important. Less important are financial management (10%- not important, 41%- not so important) and management skills (27%- not so important). Although more than the half of companies considers research skills highly important (56%), for nearly one fourth of them these skills are not so important (24%).

21. Please mention the topics/themes of the courses/trainings that will increase the efficiency and productivity of your employees.



15% of companies had difficulty to answer or didn't answer the question related to the topics of the trainings that would increase the efficiency and productivity of their employees. For about one tenth of

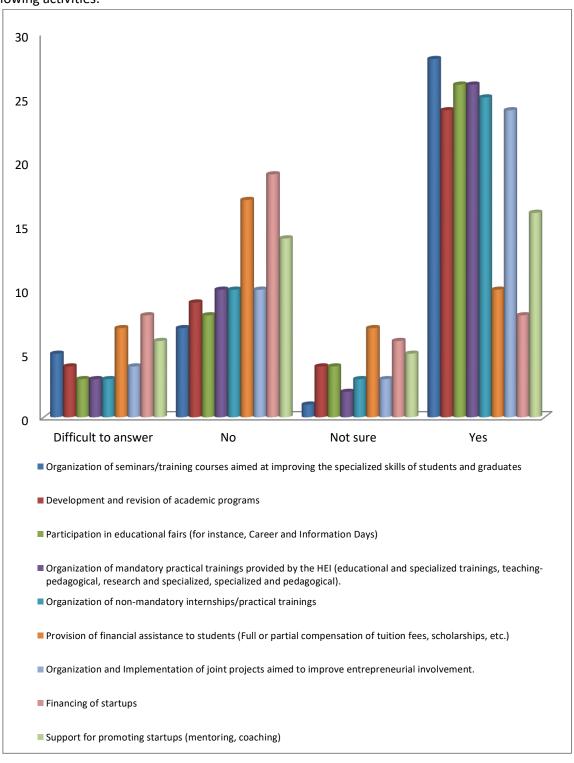




companies the course of management was recommended (9%), 6% of companies consider courses related to communication, data analytics, marketing skills, IT, sales skills, SMM, business-public cooperation, conflict management, video making and photography and some other courses.

As it seen also from other questions above, the companies mainly emphasize the importance of developing managerial, marketing and digital skills.

22. Are you willing to cooperate with Higher Education Institutions in the framework of any of the following activities:

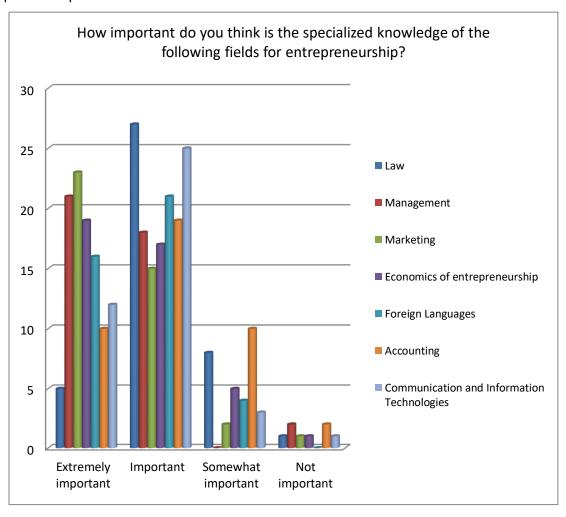






The majority of the companies are willing to cooperate with HEIs in the framework of organizing seminars/trainings, development and revision of academic programs, participation in educational fairs or organization of mandatory trainings. Not willingness is mainly expressed in financing startups or provision of financial assistance to students. Instead, companies would be willing to provide mentorship to the startup companies.

24. How important do you think is the specialized knowledge of the following fields for entrepreneurship?

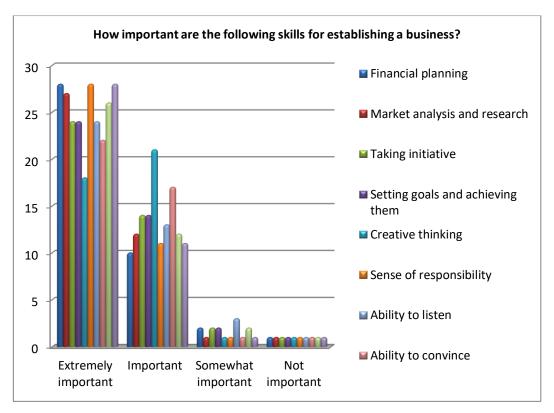


For the majority of companies, the knowledge of Law, Management, Marketing, Economics of Entrepreneurship, Foreign languages, Accounting, Communication and Information Technologies are very important. Extremely important is the knowledge of Marketing, Management and Economics of Entrepreneurship. For only less than 3% of respondents the mentioned skills are not important.

25. How important are the following skills for establishing a business?

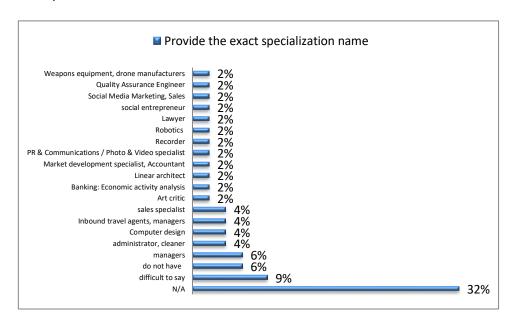






As it is seen from the diagram, the most important skills for establishing a business are financial planning, market analysis and research, taking initiative, setting goals and achieving them, creative thinking, sense of responsibility and ability to listen. Interestingly, while in question 15 more than the half of companies did not consider financial management skills so important, anyway, they highly appreciate financial management skills for establishing a business.

28. Please, specify the kind of specialists or specializations that you currently require. (Provide the exact specialization name)







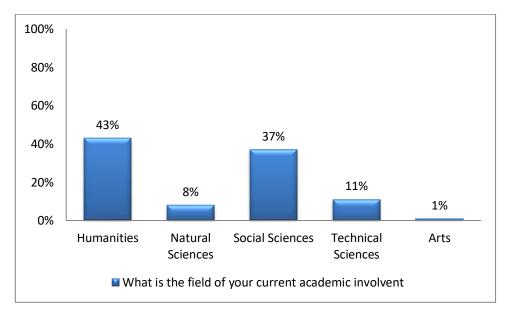
To the last question relating the required specialists or specializations 40% of companies could not give an answer. Nevertheless, some companies mentioned the following specializations: manager, administrator, computer design, software engineer, inbound travel agent, sales specialist, etc.

## 2. Analyzing the Teacher's Assessment of Local Needs Results

In this section we attempt to identify key entrepreneurial needs and have a better understanding of the relevant environment according to the assessment of the lecturers of Brusov State University and Vanadzor State University after H. Tumanyan. The answers to the questions listed below support us in our search of final outcomes:

- What are the areas in which the lecturers experience the gap between existing and preferred entrepreneurial knowledge?
- What skills are important for entrepreneurial education?
- What is the role of English in terms of getting entrepreneurial education?
- Do you think that online (digital education) learning approaches and successful teaching methods should retain in the future, regardless the COVID situation?

#### 2.1 General data about the respondents – approach per country.



The majority of the surveyed academic staff (43%) is involved in Humanities, with Social Sciences as the next widely studied (37%) field by the respondents. Lecturers from the sphere of Natural Sciences have also participated in the survey. All in all, it is noteworthy that lecturers from all the above-mentioned fields have shared their opinions on the following questions.

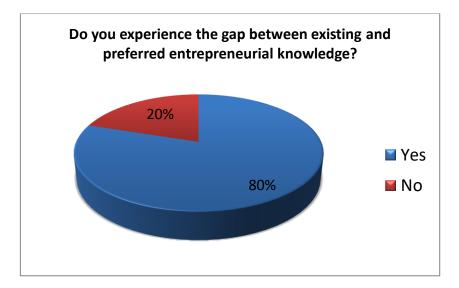
## 2.2 Needs for entrepreneurial education

1. Do you experience the gap between existing and preferred entrepreneurial knowledge?

**Brusov State University** 







More than 60% of the BSU lecturers believe that there is a gap between existing and preferred entrepreneurial knowledge. This is a problem considering the fact that those lecturers themselves are delivering entrepreneurial courses to the students.

## Vanadzor State University



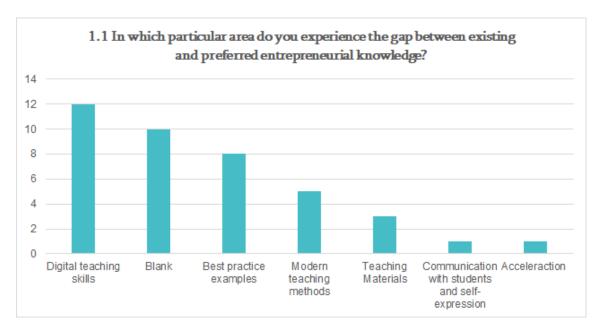
80% of VSU teaching staff has experienced the gap between existing and preferred entrepreneurial knowledge. Only 20% of them don't feel any need for gaining entrepreneurial knowledge as they are either specialized in that field or do not believe in the importance of the respective knowledge and skills.

1.1 In which particular area do you experience the gap between existing and preferred entrepreneurial knowledge?

**Brusov State University** 

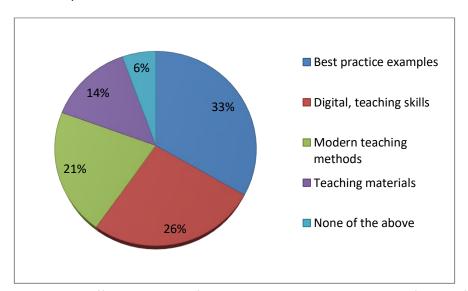






While answering the question on the area in which the particular conflict between their existing and preferred entrepreneurial knowledge emerges, the lecturers of BSU predominantly underline the field of "digital teaching skills", which testifies to their lack of digital competences. A large number of respondents has not replied to this question leaving us to believe that they do not hold a holistic understanding of their existing and preferred entrepreneurial knowledge. "Best practice examples" and "modern teaching methods" are the next mostly selected options with simply "teaching materials", "communication with students and self-expression" and "acceleration" as least selected ones.

## Vanadzor State University



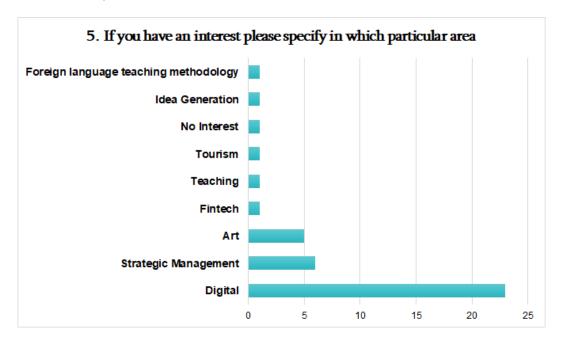
For 33% of teaching VSU staff there is lack of best practice examples. Over one fourth of respondents feel necessary to improve their digital and teaching skills. Over one fifth of teachers feel the need to improve their modern teaching methods. For 14% of VSU teaching staff there is need for teaching materials. Finally, for only 6% of the respondents it was difficult to specify the areas for gaining entrepreneurial knowledge.

5. If you have an interest please specify in which particular area:



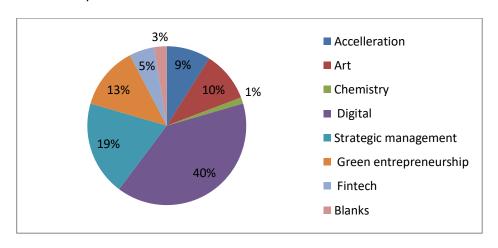


#### **Brusov State University**



The vast majority of teachers has great interest in the "digital" area and this is well-grounded judging by the answers to the previous question (In which particular area do you experience the gap between existing and preferred entrepreneurial knowledge?). Together with "arts", "strategic management" is yet another sphere that enjoys popularity among the lecturers. This is explained by the fact that strategic management and creative approach to classes result in higher efficiency. Interestingly enough "Fintech", "Teaching", "Tourism", "Idea Generation" and "Foreign Language Teaching Methodology" share the lecturers' further interest in the survey.

#### Vanadzor State University



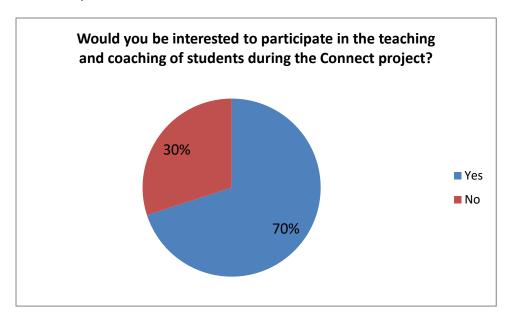
To the question which area of entrepreneurial education teachers are interested in, 40% of VSU respondents have prioritized "Digitalization". Other more preferred fields of interest are "Strategic Management" and "Green Entrepreneurship". For one tenth of respondents the field of "Art" is of much interest. Almost so many teachers would prefer to gain knowledge in the field of "Acceleration", and there is interest in the field of "Fintech".





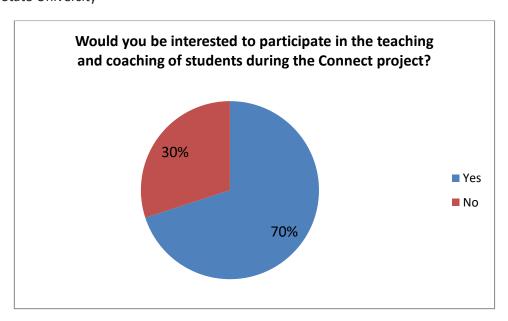
9. Would you be interested to participate in the teaching and coaching of students during the Connect project?

#### **Brusov State University**



The overwhelming majority of the BSU respondents would like to be engaged in CONNECT as project trainers and coaches which shows their huge enthusiasm in the project itself.

# Vanadzor State University

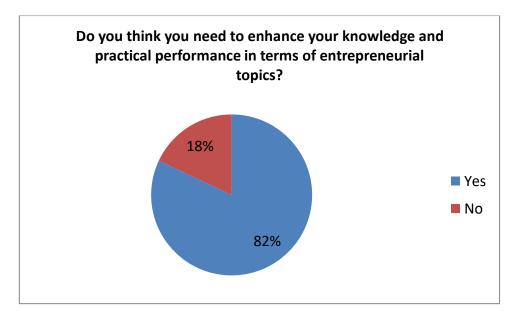


Vast majority of VSU academic staff would be interested in participating in the teaching and coaching of students during the Connect project.

13. Did COVID pandemic highlight the need for more flexibility and creativity during student-teacher interactions?



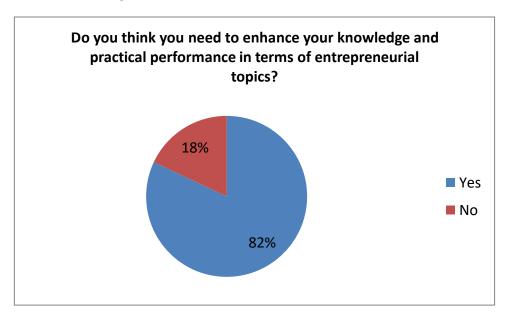




Given the COVID pandemic context, the vast majority of the respondents (79 out of 84) insist on the increased significance of developing flexibility and creativity for more productive student-teacher communication during the relevant period. However, a small number of lecturers (4%) believe that COVID pandemic did not underline the need for the mentioned features within the framework of student-teacher interactions.

To conclude, 96% of the survey participants consider the situation conditioned by the pandemic as a trigger for more flexible and creative approach to the student-teacher dialogue.

15. Do you think that online (digital education) learning approaches and successful teaching methods should retain in the future, regardless the COVID situation?



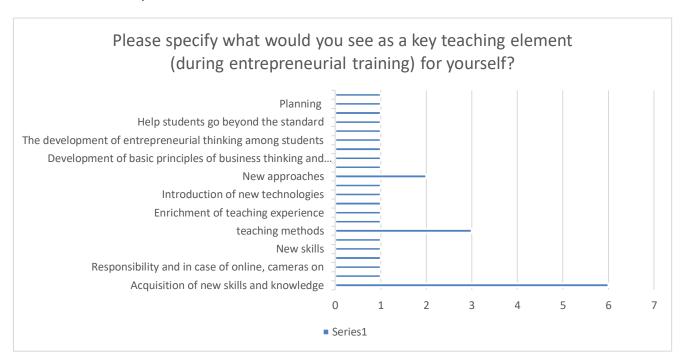
Although 13% of the respondents argue the above-mentioned statement, the predominant majority of the lecturers - 87% (68 out of 84), believe that it is preferable to retain the attained approaches to digital education and successful teaching methods in the future, too. This speaks to the participants' desire to shape a more stabilized and systematized environment for online learning irrespective of the fact whether the COVID situation is going to continue or not.





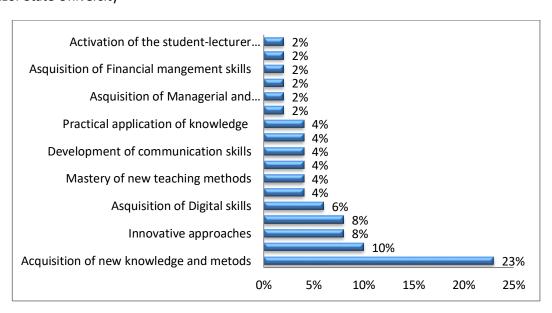
18. Please specify what would you see as a key teaching element (during entrepreneurial training) for yourself?

#### **Busov State University**



As depicted in the diagram above, the BSU teaching staff highlights the following key element in the context of entrepreneurial education: acquiring new skills and knowledge, new teaching methods and approaches. The rest of the key teaching components share equal importance (however less important than the first 3).

#### Vanadzor State University



The key teaching element during entrepreneurial training for VSU teaching staff would be the acquisition of new knowledge and methods (23%), acquisition of new skills (especially digital skills (16%),



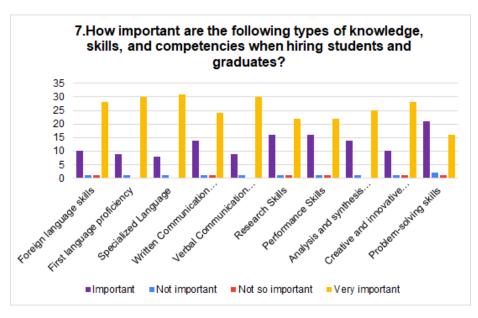


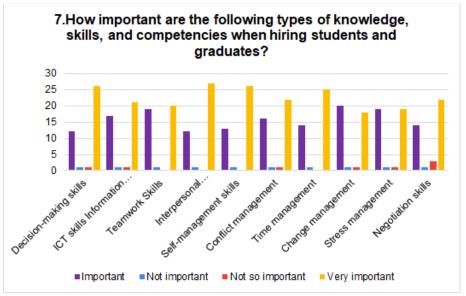
and understanding innovative approaches (8%). Gaining experience in the field, specialized knowledge of languages and other skills such as mastery of new teaching methods, exchange of international experience, development of communication skills, business skills, practical application of knowledge, and acquisition of other skills are also mentioned but not so much prioritized.

# 2.3 Skills important for an entrepreneurial education

7. How essential are the following types of knowledge, skills, and competencies to you:

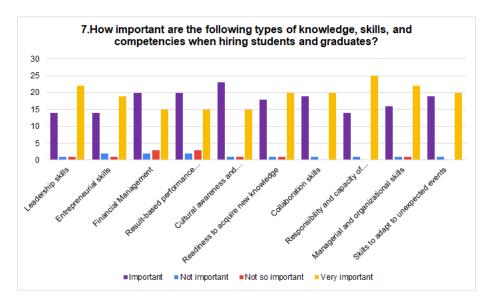
Brusov State University











While evaluating the students' knowledge, competences, soft and hard skills from the employers' perspective, the lecturers almost *unanimously* highlighted the importance of both "specialized" and "first language proficiency" together with "verbal communication skills" as the *top competences* when being hired.

Next, it is mostly **soft skills** rated as **highly important** for a student or graduate to be offered a job: "creative and innovative thinking skills", "decision making skills", "interpersonal communication skills" and "self-management skills".

"Time management", "responsibility and capacity of handling tight deadlines" are another set of **soft competences to be of crucial importance** while dealing with employers.

"Written communication", "analysis and synthesis skills", "teamwork", "conflict management", "leadership skills", "managerial and organization skills" and "financial management" are no less important in this context.

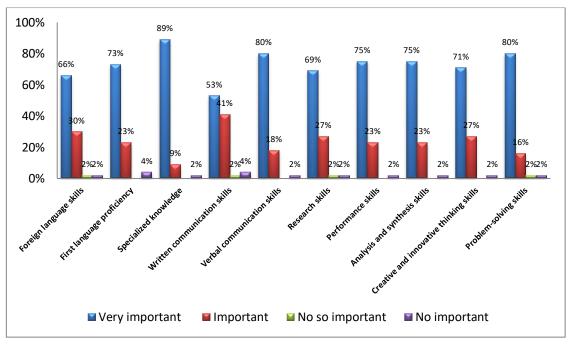
It is noteworthy that *skills that help to manage one's emotions* while dealing with change and/or unexpected turn of events are also highlighted by many lecturers, skills like "change management", "adaptation to unexpected events" and "stress management".

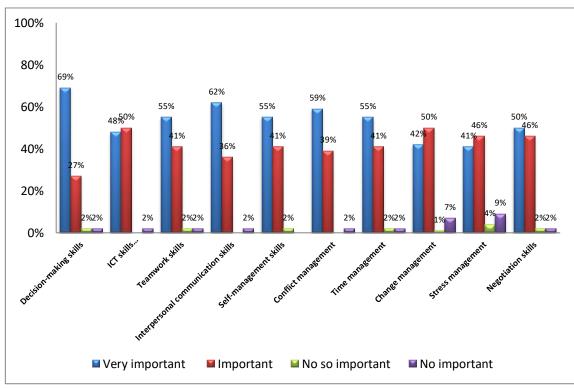
Thus, the results come to prove that **soft skills** are not inferior to hard skills, moreover, they are **equally prioritized** by the lecturers in the context of being significant in the process of being hired.

Vanadzor State University



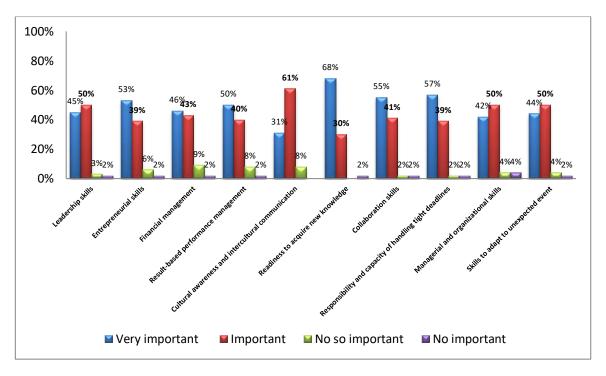




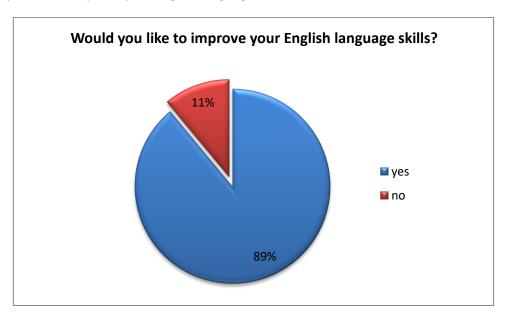








## 11. Would you like to improve your English language skills?



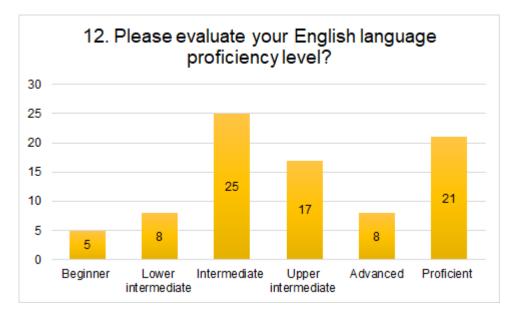
While answering the question whether they would like to level up their English language skills, the overwhelming majority of the surveyed teachers replied "yes" in contrast to almost 11% of the respondents who are quite satisfied with their current language competences. This huge difference testifies to the fact that the majority of teachers are highly motivated to develop their English for organizing better classes and navigating more effective communication with students. Additionally, this result is explained by the fact that a better level of English opens up new prospects for teachers while generating lesson plans and syllabi.

Thus, 89% of the teachers participating in the survey would like to improve their English language skills.

12. Please evaluate your English language proficiency level?



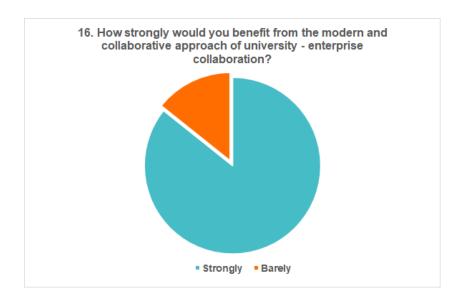




Generally, the overall picture of the foreign language proficiency among the lecturers participating in the survey is quite satisfactory. In particular, while evaluating their English language skills, 25 lecturers estimated their language capacities as intermediate with 21 as proficient in English. Gradually, 17 teachers evaluated their relevant capacities as upper intermediate, 8 as advanced and the rest as intermediate and lower intermediate.

In conclusion, given the answers to the previous question, the results of language proficiency evaluation are not surprising, since only 21% of the teachers participating in the survey master the English language (at the proficient and upper intermediate levels). Therefore, it is rather understandable why 91% of the respondents would like to improve their English language skills.

16. How strongly would you benefit from the modern and collaborative approach of university-enterprise collaboration?



The results of the survey confirm the highest significance of modern approaches to university—enterprise collaboration as viewed by the respondents. Almost 90% of the lecturers participating in the





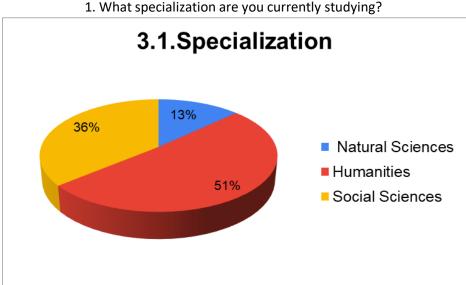
survey state that they will strongly benefit from modern and interactive partnership between the educational institution and enterprises. In the contrary, the rest of the respondents insist on their barely benefiting from the mentioned collaboration.

# 3. Analyzing the Startup's Assessment of Local Needs Results

Section 3 aims at clarifying key entrepreneurial needs identifying the overall picture of the relevant environment according to the assessment of the startup students of Brusov State University and Vanadzor State University after H. Tumanyan. The answers to the questions listed below support us in our search of final outcomes:

- What are the obstacles to taking up entrepreneurship?
- What are the needs for entrepreneurial education?
- How does the students' specialized knowledge relate to entrepreneurship?
- What skills are significant for the students to become competent and well-rounded in the market?

#### 3.1. General data about the respondents



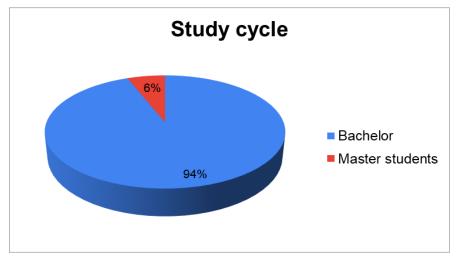
1. What specialization are you currently studying?

The results of the survey held among students testify that the exact half of the respondents are currently involved in Humanities, with Social Sciences as the next widely studied field. It is noteworthy, that future specialists of Technical Sciences and Arts have not been surveyed.

#### 2. You are enrolled in:

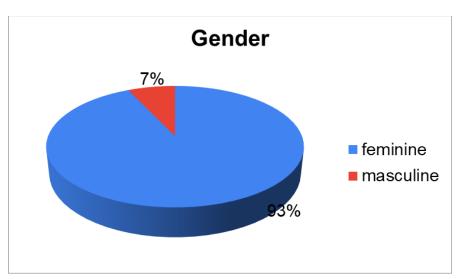






As shown, the absolute majority of the surveyed participants are BA students. This is quite effective since it is common for young startuppers to generate divergent ideas still being undergraduate students.

# 3. Your gender is:

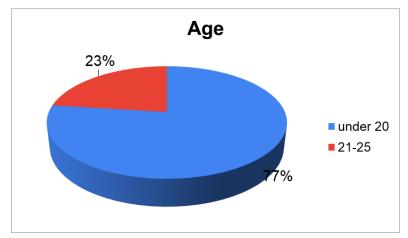


Given the fact that half of the respondents are involved in Humanities, as well as the tendency that mostly women prefer to be engaged in Humanities in Armenia, the fact that the absolute majority of the survey participants are female is not well grounded.

# 4. How old are you?

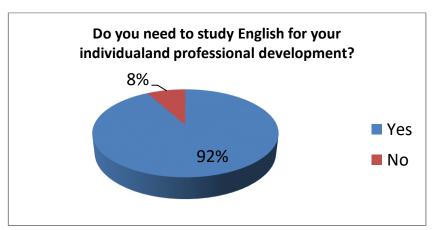






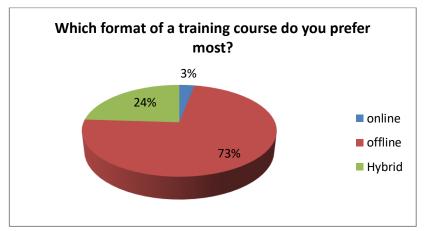
77% of the participants is under 20, which is basically conditioned by their being undergraduate students.

5. Do you need to study English for your individual and professional development?



Students predominantly prioritize English when it comes to their professional development. This speaks to the fact that almost everyone attaches value to English in terms of grabbing new opportunities and elevating their professional skills individually.

6. Which format of a training course do you prefer most?



73% of the surveyed students prefers face to face training format to the online model, and only 24% believes that a mixture of both formats would work best for them.

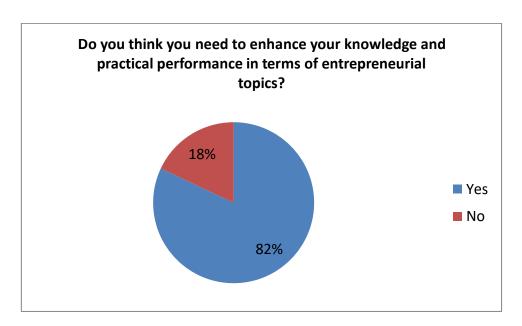




# 3.2 Needs for entrepreneurial education

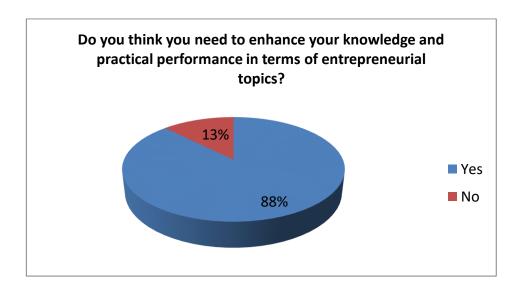
1. Do you think you need to enhance your knowledge and practical performance in terms of entrepreneurial topics?

**Brusov State University** 



The pie chart suggests that most of the students attach significance to leveling up their entrepreneurial skills and knowledge.

Vanadzor State University

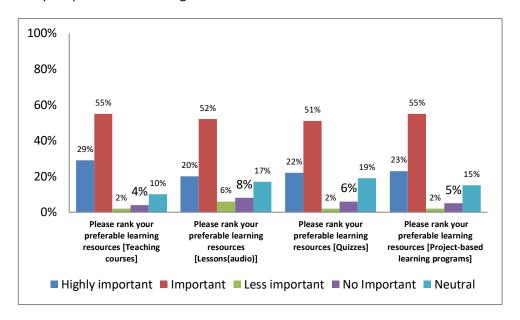


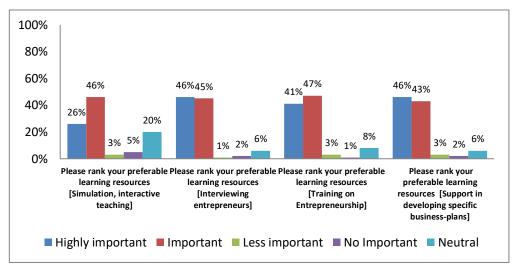
Vast majority of VSU students feels the need to enhance their knowledge and practical performance in terms of entrepreneurial topics.

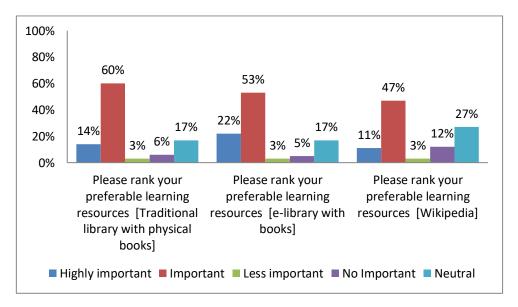




# 11. Please rank your preferable learning resources:









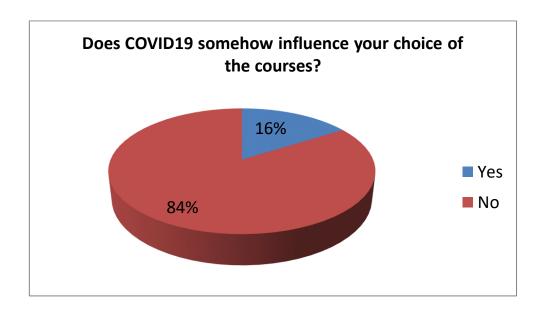


While ranking their preferable resources in terms of getting key information and knowledge on entrepreneurial topics, the vast majority of students have prioritized books as a learning resource - both print (60%) and e-books (53%).

Teaching courses (55%), project-based learning programs (55%) and quizzes (51%) are also highlighted as useful and preferable ways of learning.

Moreover, being in constant touch with entrepreneurial world is another preferable source to get educated, which is testified by the resources of "interviewing entrepreneurs" (46%) and "training on entrepreneurship" (47%) getting most of the clicks.

# 15. Does COVID19 somehow influence your choice of the courses?



The responses to the question on whether COVID19 may have any impact on their choice of courses, 84% of the students insisted that it does not interfere with their course preference. It is noteworthy though that 73% of the same respondents prefers offline format.

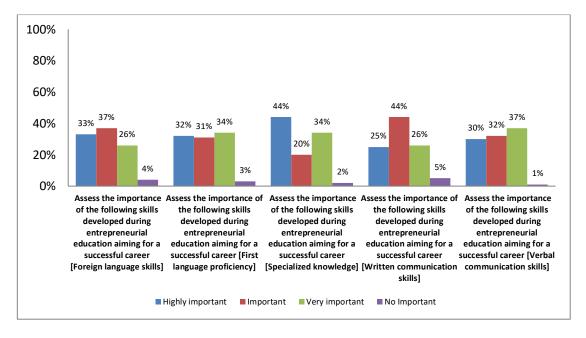
## 3.3 Skills important for anentrepreneurial education

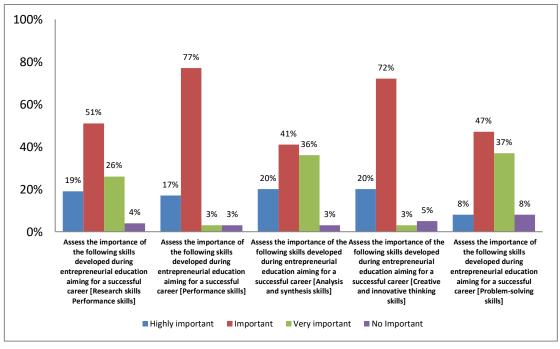
12. Assess the importance of the following skills developed during entrepreneurial education aiming for a successful career.

**Brusov State University** 



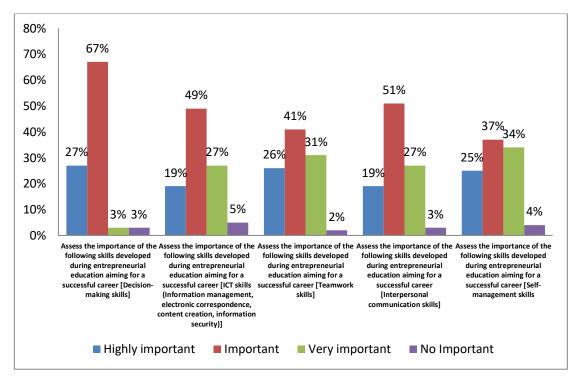


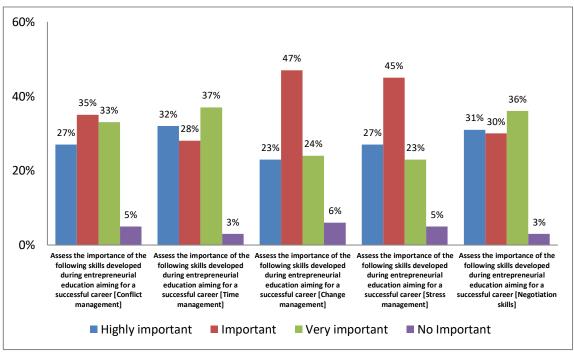






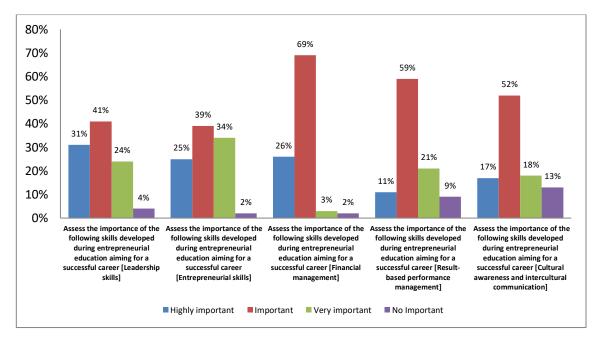


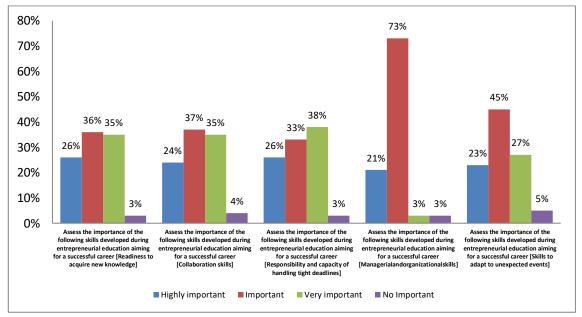












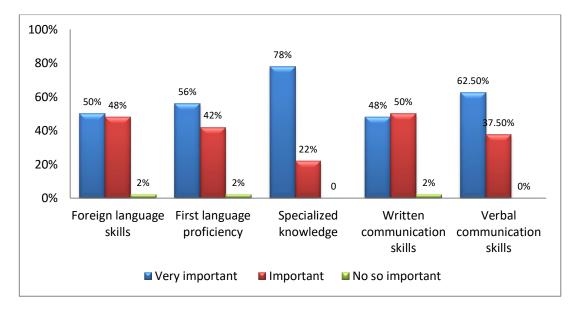
While assessing the importance of a number of skills developed during entrepreneurial education aiming for a successful career, the vast majority of the respondents have attached value to **soft skills**relating to *communication*, including interpersonal communication (51%), cultural awareness and intercultural communication (52%); and creative/innovative thinking (72%).

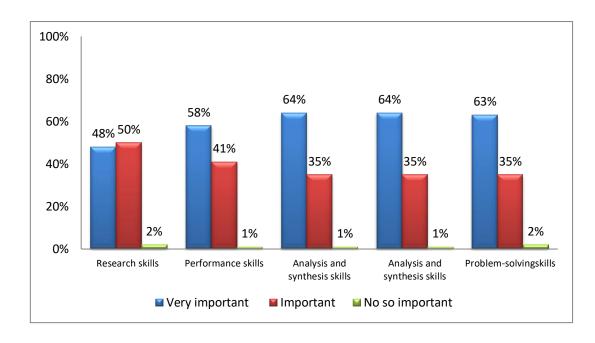
However, performance skills (77%), particularly result-based performance management skills (59%), are among the highest ranked capacities prioritized by the students in terms of designing a successful career. Simultaneously, managerial and organizational skills (73%) are another set of abilities highlighted within the relevant context. Finally, financial management (69%), decision-making (67%) and research skills (51%) complete the list of the skills surpassing the 50% threshold of priority skills.

Vanadzor State University



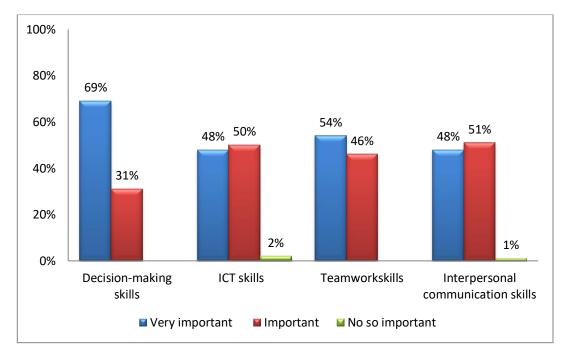


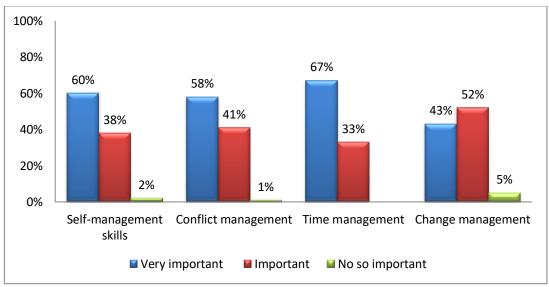






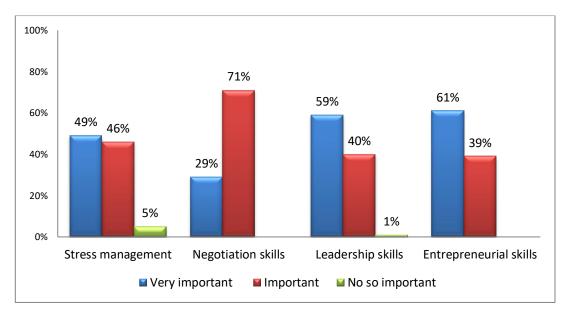


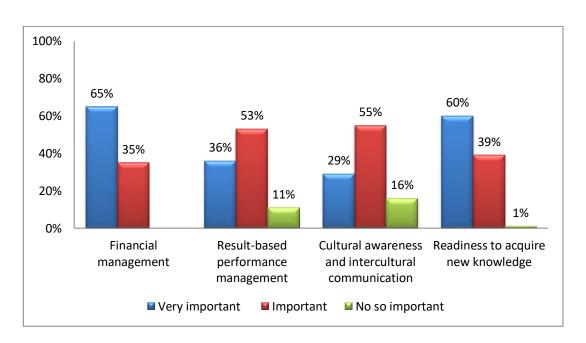






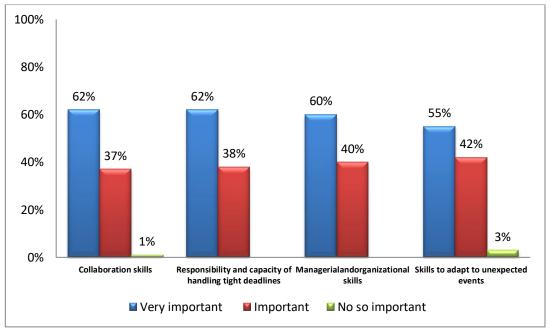












VSU students consider specialized knowledge most important (78%-very important and 22%-important). Almost all skills mentioned in the survey are considered by the students very important or important. Not so important are considered the skills concerning cultural awareness and intercultural communication (16%).

# 4. Analyzing the Incorporated Companies' (Students with Experience). Assessment of Local Needs Results

In section 4 we continue our study to discover the crucial entrepreneurial needs identifying the overall picture of the relevant environment according to the assessment of the relevant incorporated companies. The answers to the questions listed below support us in our search of final outcomes:

- Which training courses do you prefer most for your individual and professional development?
- What are the obstacles to taking up entrepreneurship?
- What are the needs for entrepreneurial education?
- How does the students' specialized knowledge relate to entrepreneurship?
- What skills are significant for the students to become competent and well-rounded in the market?

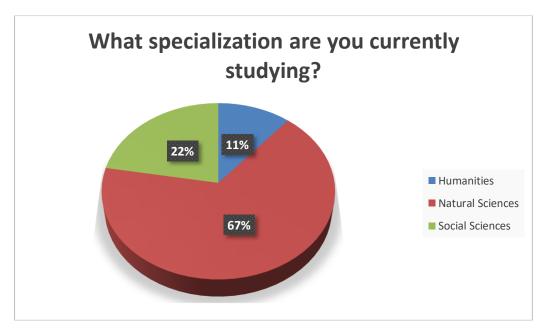
## 4.1. General data about the respondents

(please analyze this section 3.1 by country)

1. What specialization are you currently studying?

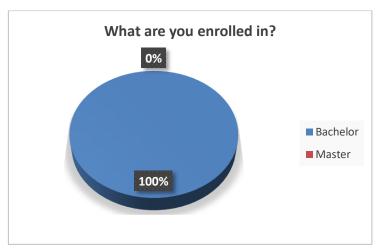






The study held among experienced students, incorporated companies, comes to prove that unlike the previous section, here most of the surveyed students are involved in Humanities (67%). Similarly, it is worth mentioning though that future specialists of Technical Sciences and Arts have not been surveyed.

#### 2. You are enrolled in:

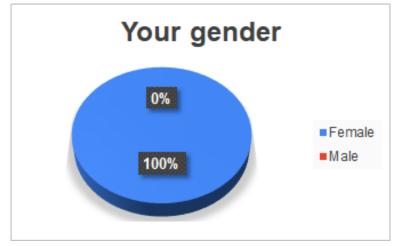


As shown, all of the surveyed participants are BA students.

# 3. Your gender is:

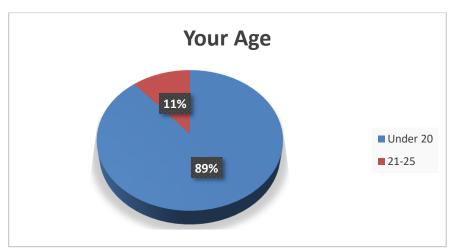






Interestingly enough, 100% of the respondents are female.

# 4. How old are you?

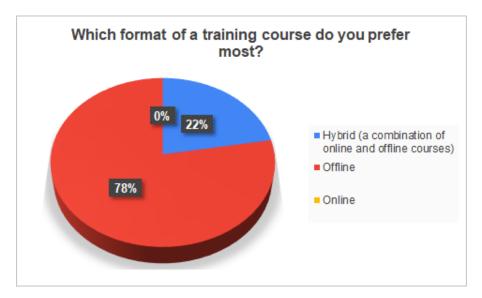


The predominant majority of the surveyed participants (89%) is under 20, which is basically conditioned by their being undergraduate students, and only 11% is within 21-25 age category.

5. Which format of a training course do you prefer most.







78% of the surveyed experienced students prefers face to face training format to the online model, and only 22% believes that a mixture of both formats would work best for them. Thus, none of the respondents voted for online format.

6. Do you think you need to study English to develop entrepreneurial skills?



Like students, incorporated companies also predominantly prioritize English when it comes to their professional development. This proves the significance of English in terms of taking their entrepreneurial skills to the next level.

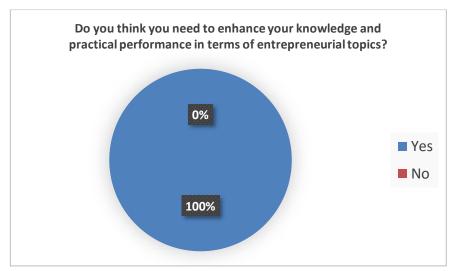
#### 4.2 Needs for entrepreneurial education

7. Do you think you need to enhance your knowledge and practical performance in terms of entrepreneurial topics?

**Brusov State University** 

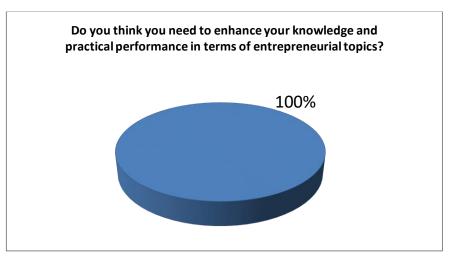






As simple as it is shown in the pie chart, all of the respondents attach value to elevating their entrepreneurial skills and knowledge.

# Vanadzor State University

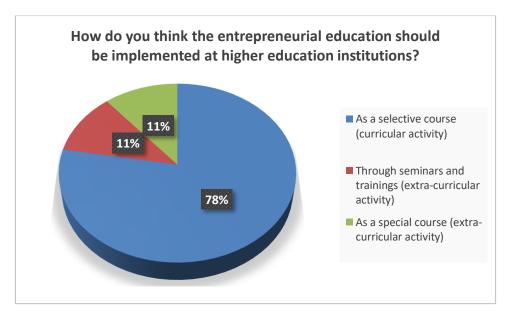


Evidently, all VSU students having experience in entrepreneurial activity consider the need to enhance the knowledge and practical performance in terms of entrepreneurial topics.

8. How do you think the entrepreneurial education should be implemented at higher education institutions?



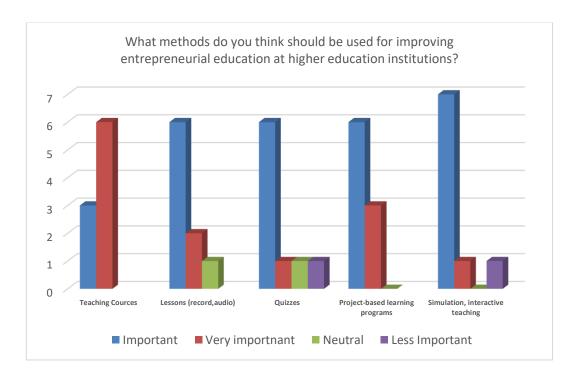




While considering the format in which entrepreneurial skills and knowledge should be delivered to the students, incorporated companies put forward the *selective course format* as a part of academic curriculum. 78% of the respondents is sure that entrepreneurship should be studied within the framework of a selective course at HEIs.

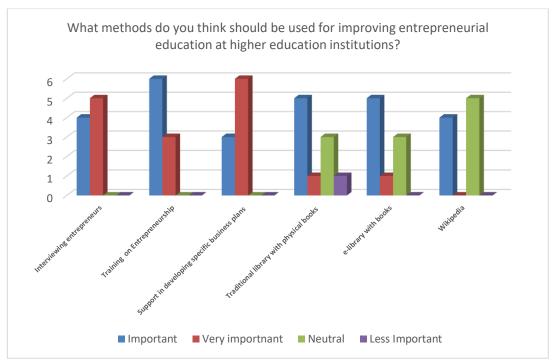
Whereas 11% believes that non-formal, extra-curricular activities in the form of seminars and trainings would work better in this regard. However, the rest of the surveyed participants - another 11%, thinks that the course should be implemented as a special program (extra-curricular activity).

9. What methods do you think should be used for improving entrepreneurial education at higher education institutions?









To improve entrepreneurial education at HEIs (Higher education institutions) a number of methods were suggested during the survey. Ultimately, "simulation, interactive teaching" has received most of the votes proving that mock games and instructiveness are the highest ranked components while learning. Interestingly enough, incorporated companies consider traditional methods like "lessons" (both recorded and audio), "quizzes" and "teaching courses" as effective methods to improve entrepreneurial education at HEIs.

In parallel, "training on entrepreneurship" and "support in developing specific business plans" are also prioritized which shows that non-formal education is also valued by the experienced students.

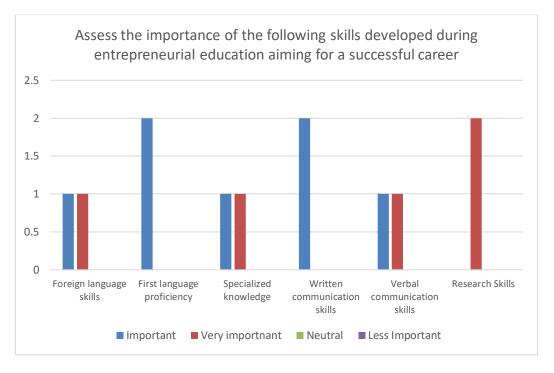
#### 4.3 Skills important for anentrepreneurial education

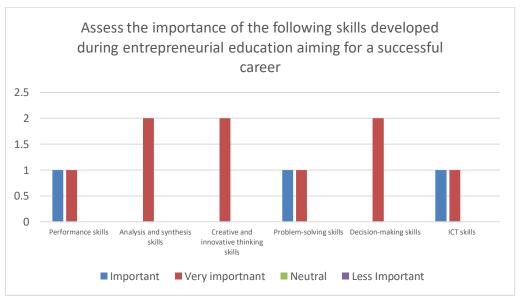
10. Assess the importance of the following skills developed during entrepreneurial education aiming for a successful career

**Brusov State University** 



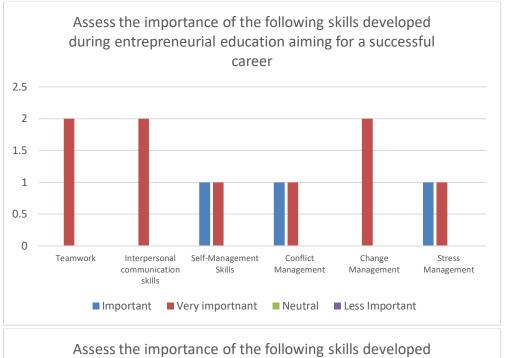


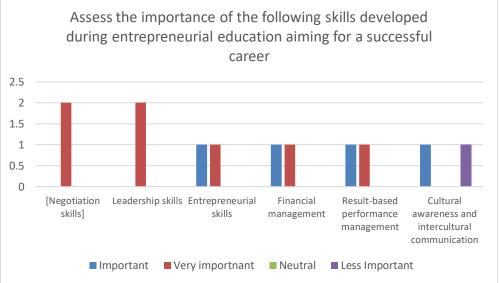


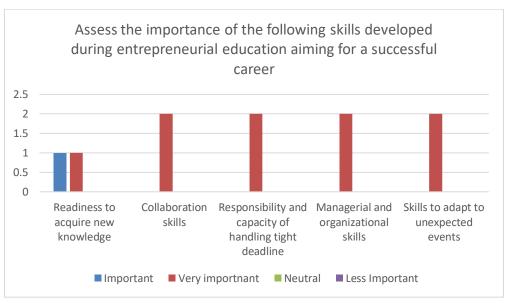












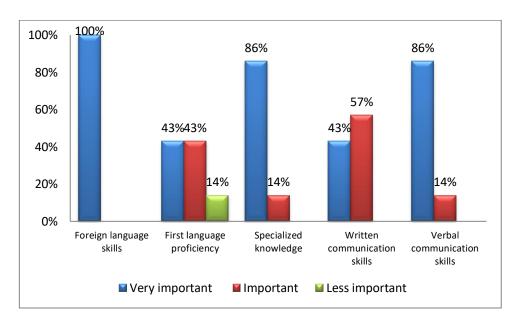


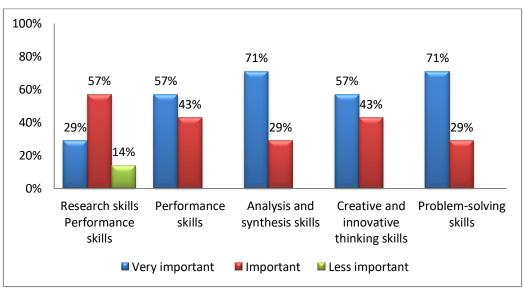


While assessing the importance of a number of skills developed during entrepreneurial education aiming for a successful career, the vast majority of the respondents have attached value to the following **soft skills:** 

- *Communication skills,* including negotiation, interpersonal communication and written communication skills,
- Teamwork, leadership and collaboration capacities,
- Change management skills, that is skills to adapt to unexpected events,
- Creative and innovative thinking, decision-making skills,
- Research skills, analysis and synthesis skills,
- Managerial and *organizational skills*, responsibility and capacity of handling tight deadlines.

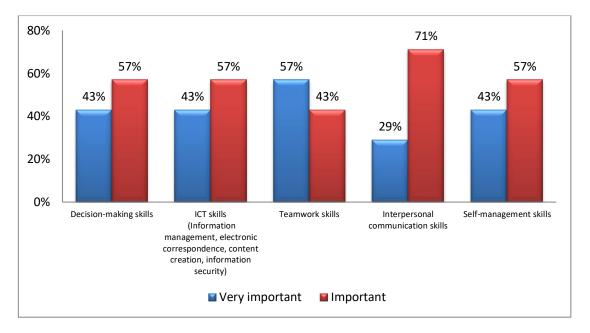
#### Vanadzor State University

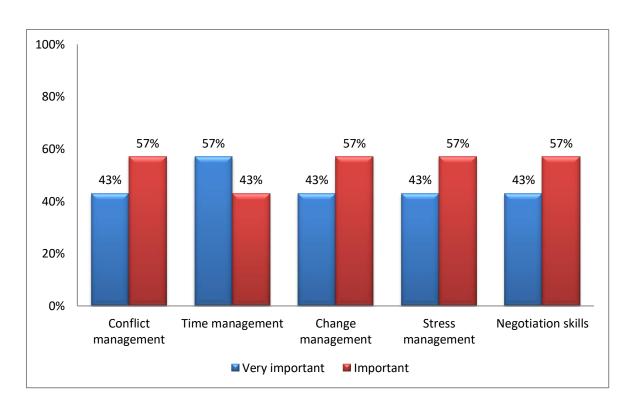






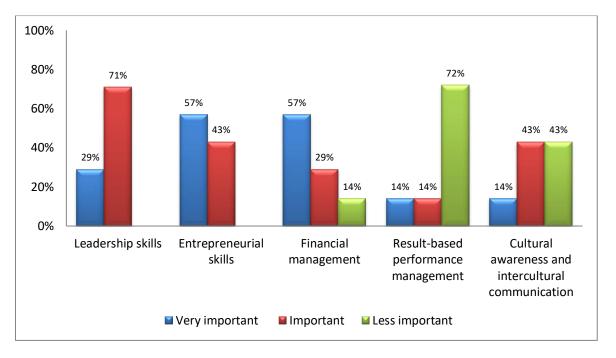


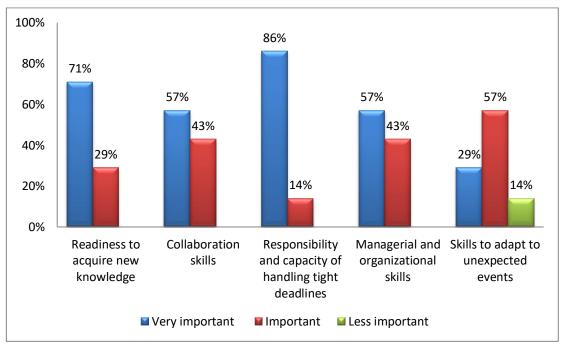












Compared to the students who don't have entrepreneurial experience, experienced students feel the importance of foreign language proficiency (100% of respondents). For both target groups (students with and without experience) specialized knowledge, verbal communication skills, ability for analysis, problem solving, time management skills, sense of responsibility, readiness to acquire new knowledge, collaboration, and managerial skills are prioritized. Surprisingly, 72% of the respondents consider result-based performance management skills less important. The same is true with the cultural awareness and intercultural communication skills (43%). 14% of experienced students consider first language proficiency, research skills, financial management skills and skills to adapt to unexpected events less important.



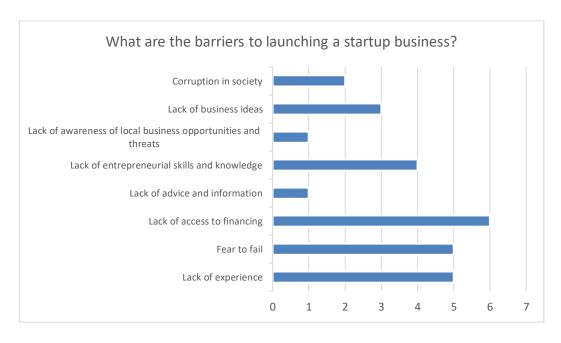


17. Which training courses do you prefer most for your individual and professional development?



While considering various courses suggested for individual and professional development, "Social Media for Business" course appeared to be the winner among the 8 programs. Next, it was the acceleration programs both for the advanced (Acceleration Program for incorporated companies) and beginner levels (From Idea to Business Concept: An entrepreneurial Journey).

16. Please choose the barriers to launching a startup business.



The surveyed incorporated companies assess "lack of access to financing" as the greatest barrier to launching a startup business. Thus, availability of financial means seems to be the biggest obstacle.





Next, it is the "fear to fail" that may create difficulties for setting up a startup, which is partly because of the "lack of experience" that students are willing to overcome.

"Lack of entrepreneurial skills and knowledge" is yet another obstacle that incorporated companies considered while assessing the barriers to launching a startup business.





# **Conclusion**

Nº	Problem	Solution
	More than 60% of the lecturers believe that there is a gap between existing and preferred entrepreneurial knowledge, especially in the field of "Digital Teaching Skills".	<ul> <li>Initiate continuous communication between lecturers and entrepreneurs to update the relevant fields of knowledge, particularly on "best practice examples".</li> <li>Initiate trainings boosting lecturers' digital teaching skills considering also the fact that the lecturers' highest interest lies in the field of "Digital skills".</li> </ul>
	Very often both lecturers and students lack soft skills, whereas employers attach great value to a number of soft competences.	Incorporate target courses focusing on a number of soft competences into the academic curriculum (either selective or compulsory programs), in particular:  • communication skills,  • emotional intelligence and  • creative/innovative thinking.
	Students highlight the lack of <i>practical knowledge</i> from actual entrepreneurs noting that they would like to enhance their knowledge and practical performance in terms of entrepreneurial topics	A component, involving interviewing entrepreneurs and/or face-to-face interaction with actual entrepreneurs, can be incorporated into the academic curriculum and/or academic internship.
	Lecturers state that they would strongly benefit from university - enterprise collaboration, which means that there exists <i>a gap between HEIs and entrepreneurial world</i> .	Develop platforms that would generate collaboration opportunities, such as <i>joint projects</i> and courses implemented cooperatively by universities and entrepreneurs.
	Lack of online teaching resources	Shape a more <i>stabilized and systematized environment for online learning</i> irrespective of the fact whether the COVID situation is going to continue or not.
	Both target groups (teachers and students) need to improve their English proficiency level	Constant elevation of their English Language knowledge and skills due to immediate communication and international trainings.