Assessing Entrepreneurial Intentions, Motivations and Barriers Amongst WBC Students Through Developing a Network of Co-Creative Centers–iDEA Labs

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1 Introduction

Entrepreneurial learning and trainings that lead to business empowerment are gaining momentum in the last few decades around the world, with different success across the globe. This chapter investigates some aspects of this phenomenon in the context of Western Balkans region, trying to identify basis for entrepreneurial activation among young people. This region has some common problems in this area, most of which could be described with the following facts (OECD 2012; Todorovic et al. 2012; Radevic and Tinaj 2011; Karanassios et al. 2006):

- Small percentage of students is ready to start their own business after graduation.
- Majority of students report that during their studies they are only acquiring knowledge and skills useful to the public sector or to very big enterprises.
- Even when there is some form of entrepreneurial education, it is still academically driven.
- There are few students apart from those from economy and business studies that are engaged in entrepreneurial learning.
- Networking skills across the region and national boundaries are very limited.
- Knowledge about financial instruments of the equity and participation type is scarce.
- Companies are often isolated from higher education, thus not transferring their practical knowledge to active students.

And although it is found that individuals rely on their adaptive resources and entrepreneurial self-efficacy as they form entrepreneurial intentions (Tolentino et al. 2014), it is still necessary to offer organized support to young people in order to

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influence their career choices. There are different approaches on how to spark entrepreneurial learning in contexts that are lagging behind this type of learning, varying from immersing students in existing organizations to constructing hybrid spaces where business skills could be learned in parallel to creative idea development (Tekic et al. 2013; McPhee et al. 2012). Indeed, pre-incubators and incubators can be observed as enterprise teaching laboratories in which all main aspects of enterprise education can be undertaken (Kirby 2004). Students are found to highly benefit active means of learning about entrepreneurial activities, especially when they are let to run their own business in semi-controlled environment (Vincett and Farlow 2008).

In order to construct effective context for entrepreneurial learning, this chapter aims to identify students' potentials for the entrepreneurial and innovative activities. This will be achieved by summarizing answers given to a custom-made survey by student sample from the Western Balkans region. In the next step, this chapter will try to propose a model that describes teaching-and-working space within a university that could help students improve their knowledge and skills relative to business thinking and enterprise.

2 Research Method and Samples

Aiming to explore students' potentials for the entrepreneurial and innovative activities, a number of universities in the Western Balkans region were contacted, as well as other higher education institutions, which were observed as a dynamic context relevant for this project. Since most of the institutions did not have any data that could serve this purpose, it was necessary to assess students' potentials in a new research activity. Therefore, students were intended to be directly approached, so that a baseline for relevant activities could be set. The research question aimed to offer solution for the entire region, so the research activity had to cover as much of the population as possible, advocating for a diversified sample from multiple contexts. Nevertheless, the sample obtained in this study was appropriate, since there was no random access to students: research project partners were allowed to approach any student group they could agree with.

In order to explore structure and dynamic of students' entrepreneurial thinking and acting, as well as their ideation and innovation potentials, a questionnaire was designed, comprised of a number of thematic closed-ended questions (presented in Appendix).

Table 1 Students' intentions about career future

Descriptive Statistics: After you finish your current studies, how much are the following options appealing to you? (1–7 scale)		
	Mean	SD
To be employed in a government-owned organization	5.01	1.944
To continue with education	4.93	1.897
To start my own business	4.90	1.986
To be employed in a privately owned company	4.04	1.897

2.1 Data Collection and Sample Properties

The questionnaire was published in the form of a printed survey and distributed to three universities in Serbia, two in Bosnia & Herzegovina, and one in Montenegro in June and July of 2014.

The total sample of students has reached number of 1794. Students in the sample were mostly 18–25 years old. There were 52.7% of students identifying themselves as female and 47.3% as male. Current year of study is dominantly first (967 students) or a senior year (401 third year and 390 fourth year). The research wanted to cover especially students who are in their last year of study, but different studies vary between being 3 and 4 years long, hence two group of students from study years 3 and 4.

3 Data Analysis

The students were firstly asked about their preferences for their near future, after they finish their current studies. This question is important since it can describe current students' state-of-mind, which may stimulate or hinder them from developing their own business. As shown in Table 1, students give the highest mark to employment in public or government sector, which is closely followed by continuing their education and starting their own business; working in a privately owned company is the least appealing. Although the "own business" option is third in the ranking, the difference from the first option is quite small and not statistically significant, only 0.11 points on a 1–7 scale.

To shed more light on students' entrepreneurial intentions, answers to "start my own business" alternative were more closely observed on their own. It can be seen that a big number of students find starting their own business as much appealing as possible (31.3% students marked this option with the highest mark 7, Fig. 1). So, although the "employment in a government-owned organization" is marked as the most appealing option on average, there is still a big number of students who would be very happy working on their own. This gives hope to projects that nurture students' entrepreneurship education.

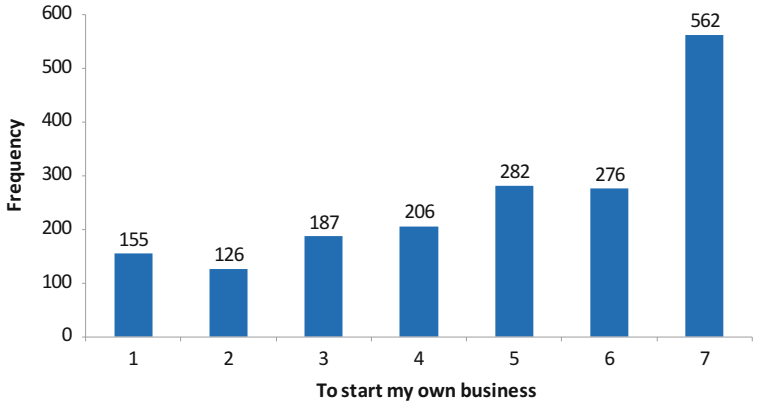

Fig. 1 Answer distribution to the "start my own business" alternative

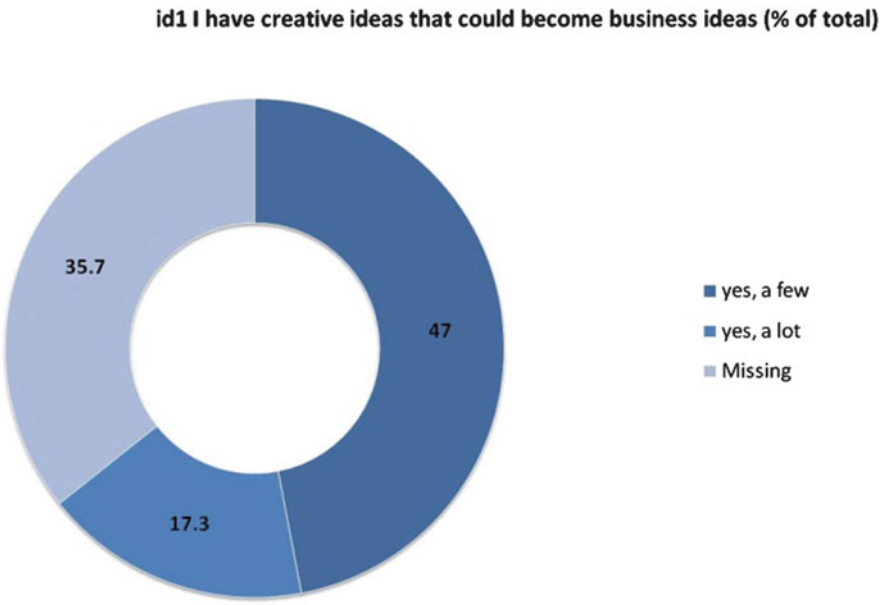

Fig. 2 Number of students who believe that they possess creative ideas or not

We can also observe that a big number of students from the sample have at least a few creative ideas that they believe could become business ideas. Furthermore, 18% of students believe they have a lot of creative ideas that they believe could become business ideas, which means almost one in five students could carry a big innovative potential (Fig. 2). This innovation potential is something that needs to be well taken care of and utilized for the benefit of both students and their universities.

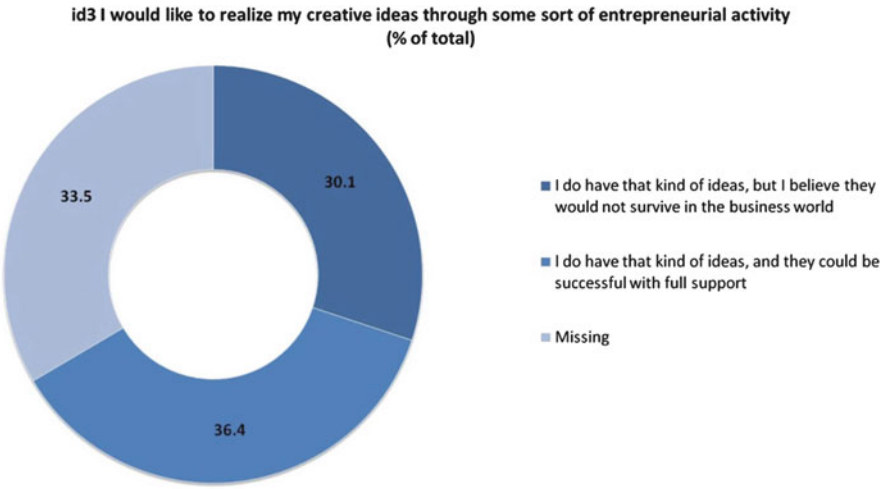

Fig. 3 Students' preferences about realizing their creative ideas

Students were then asked about their readiness to employ their ideas in some sort of entrepreneurial activity, with slightly more than 50% of those that stated they have some creative ideas (36.4% of the total sample) being optimistic about possible success of their creative ideas (Fig. 3). On the other hand, almost every other student that has some creative ideas is feeling pessimistic about those ideas, fearing that they would not survive in the business world. This finding suggests that we need to find means and ways to encourage students to work on realization of their ideas, without fear of failure.

The students were also asked about main obstacles that stand in their way when trying to realize their creative ideas. As shown in Fig. 4, the biggest obstacle is lack of working equipment, followed by lack of working space.

Students were next asked to mark their agreement with a number of statements relevant to this research, on a scale from 1 to 7. As shown in Fig. 5, the statement that students on average mostly identify with is the one that states that their University needs a place where students could develop their creative ideas. This finding is very relevant to this project, as it shows that students have this kind of need. Also, statements about students wanting to be involved in extracurricular activities and practical challenges are highly marked.

More than half of the students (62.6%) state that they would be interested in using some space organized for students' idea development, whether they may have their own ideas or not. While being aware of socially desirable responses that probably did inflate this percent, still there is enough space for optimistic plans with establishing idea labs (Fig. 6).

Finally, the students were asked about their curriculum and teachers' behavior as being growing factors for (a) students' creative ideas and creative problem solving and (b) for their team work with other students (Fig. 7). The results for both

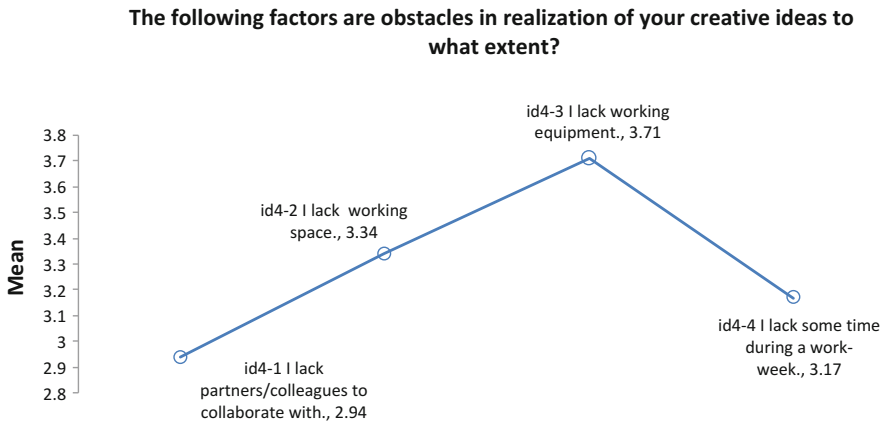

Fig. 4 Severity of obstacles that students face when trying to realize their creative ideas

questions are quite similar and positively correlated (Spearman's rho 0.61, significant at 0.01 level), indicating that they share a common relation with curriculum and teachers. Since most of the curricula deals with subjects that are not creative by nature, it is acceptable to have this type of distribution to these questions, as we cannot expect every subject to develop creative thinking due to convergent problems found in many subjects. Still, the number of students who graded their curriculum and teachers' behavior as very simulative to their creative thinking is encouraging and shows a potential that could be harnessed.

4 Data Summary and Model Proposition

First of all, a significant number of students, 31.3% of the sample, have stated that starting their own business after their studies sounds highly appealing. This means that one in every three students has, at least, good motivation to start thinking in entrepreneurial mindset. This also means that promoting entrepreneurial goals, although highly beneficial, is not something that is primary since a good percentage of students is already inclined to this.

Two-thirds of students from the sample state that they have at least a few creative ideas that they believe could become business ideas, which is another finding that supports wide adoption of an idea lab among universities and other HEIs. However, every other student that has some creative ideas believes that his or her ideas would not survive in the business world. This is a big obstacle, as it may inhibit students' entrepreneurial intentions right from the start. In order to overcome this obstacle, universities need to help students to feel more safe and able to explore and experiment with their business ideas—their entrepreneurial intentions need encouragement. In

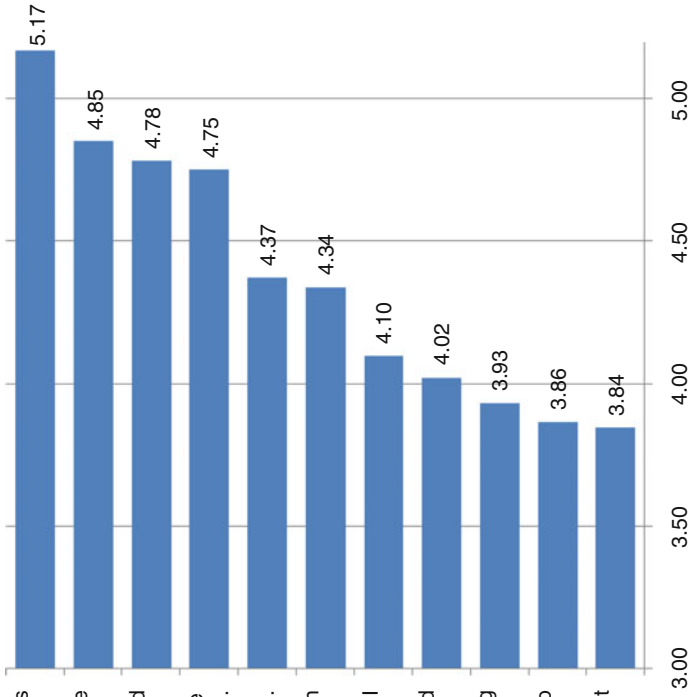

Fig. 5 Average agreement with a number of statements relevant to this research

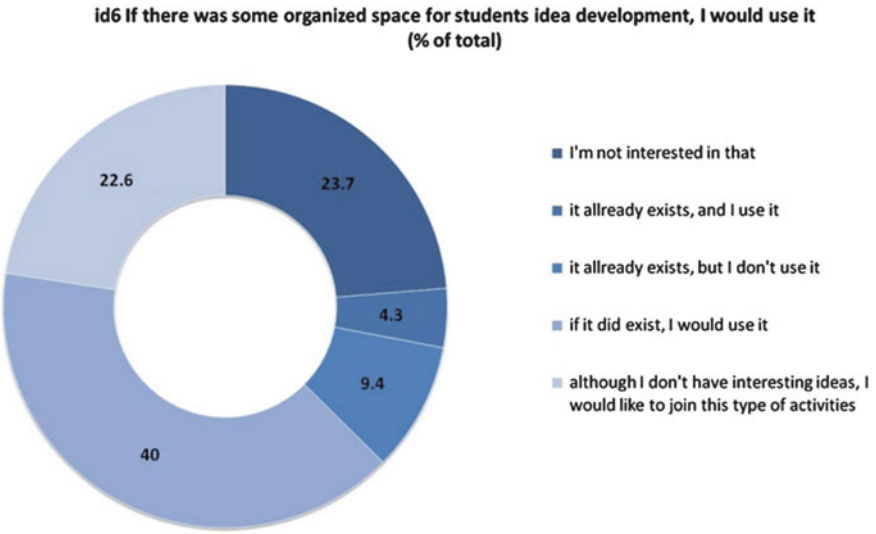

Fig. 6 Students' interest in organized space for idea development

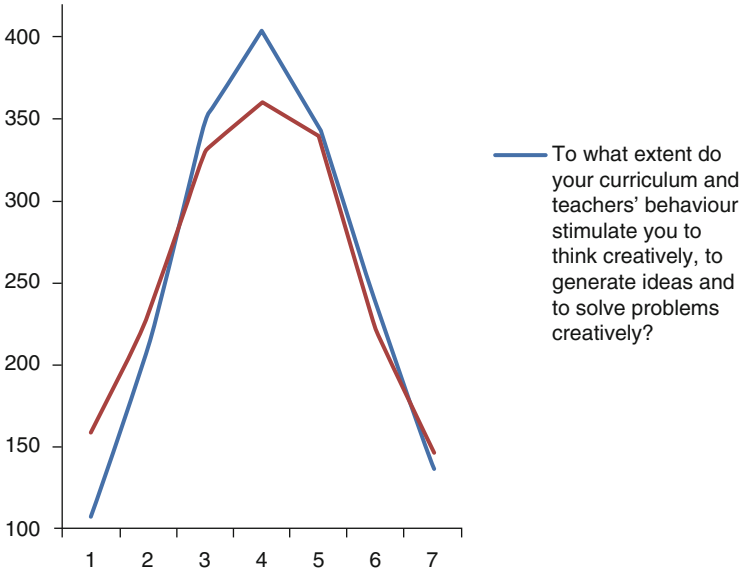

Fig. 7 Curriculum and teachers' influence on students' creative thinking, creative problem solving, and networking skills

other words, students need to be offered with some context that will help them to fail safely and to concentrate on progress instead of potential damage.

Students expressed interest in extracurricular, practical, and challenging activities, and also they are highly interested in collaborating with students from other departments. Both lack of working equipment and lack of working space are found to be significant obstacles to realization of students' creative ideas, which advocates for a specific place that could help students develop and realize their ideas, with financial support from the government institutions or international funds. Students have belief that this kind of place would be highly desirable, and they would like to be engaged in these extracurricular activities both with their colleagues and students from other departments. Almost two-thirds of the students stated that they would like to use that kind of place, whether they possess creative ideas or not.

On the basis of previously observed results, students' responses need to be combined into a coherent complex suggestion that will result in a model that can be a basis for successful entrepreneurial context for students. It is, therefore, interesting to develop a system that:

1. Embraces students with creative ideas with business potential.
2. Encourages students to realize their creative ideas in a context that frees them from fear of failure.
3. Supplies students with knowledge about business development, project managing, creative thinking, team work, networking skills.
4. Is spacially adequate and is supplied with relevant equipment.
5. Is oriented towards extracurricular, practical, and challenging activities.
6. Allows students from different departments to work together and create synergy.
7. Is organized enough to offer integral support for specific result-oriented activities.

This part of the research is intended to offer a model that could be constructed in order to answer students' needs in this area, while still being interesting to the universities and other stakeholders. The authors are proposing a model of an idea lab—a creative space that will allow university students to generate, develop, market, and commercialize their creative ideas into business concepts through entrepreneurial route (start-ups) or in collaboration with companies (open innovation). At the same time, this space would allow students to obtain usable knowledge and skills about entrepreneurial activities, both from other peers and experienced mentors. This idea lab is proposed as a hybrid between two concepts that are already familiar in this field, which target different aspects (Fig. 8). On the first side, classical living labs are intended as closed systems in which new technology concepts are put to the test in life-like situations. On the other side, pre-incubators are ment to serve as preparatory stations for business ideas.

Proposed idea lab combines these two concepts by allowing its users to test their ideas in business context, with integral support in all relevant aspects. Students, as idea lab users, will be systematically led, encouraged, and directed to develop their creativity towards business-oriented actions. Their talent, entrepreneurial skills, and abilities will be activated and improved with sets of trainings and mentorships organized by the lab. Besides starting their own business, students will be offered

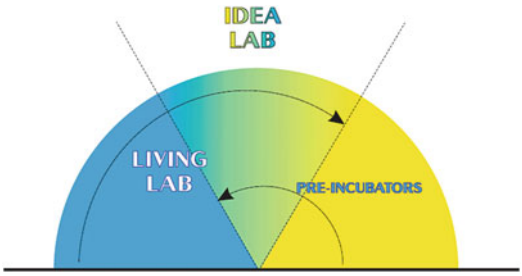

Fig. 8 A hybrid nature of proposed idea lab

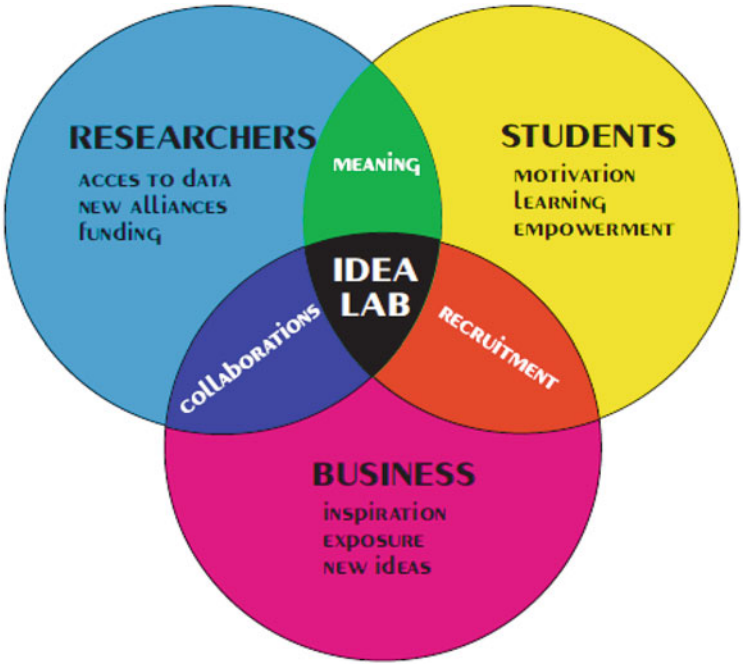

Fig. 9 Cross-section of stakeholders and their interests

engagement in solving problems and challenges from existing companies that will partner with the lab. This opportunity will be highly beneficial to the students, their university, and the involved companies, as it will allow practical knowledge, recognition in the business market, and direct contacts with the economy, as depicted in Fig. 9.

Besides proposing a single idea lab, it is relevant to construct a network of multiple idea labs that could be connected through a virtual platform for collaboration. In this way, students from different universities could benefit from contacts

with peers from other institutions, exchanging knowledge, contacts, and ideas between themselves.

Virtual part of the iDEAlab should serve as a platform and a user tool that will enable students to review and develop their entrepreneurial ideas in a simple way, in a friendly environment and in cooperation with selected tutors, regardless of the current location.

The platform should support the whole innovation cycle, from intake and development of the ideas, launching and managing projects to releasing products/services to the market. Virtual platform should provide direct communication between individuals and teams, tutors, and teams in a friendly online environment, as well as connection with other iDEAlabs from the region and with partner institutions from the business sector.

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Appendix

Questionnaire for assessing students' innovative potentials and expectations

iD01 I have creative ideas that could become business ideas.

1. No	2. Yes, a few	3. Yes, a lot

iD02 I had some ideas about how to organize some things and make them happen

1. No	2. Yes, a few	3. Yes, a lot

iD03 I would like to realize my creative ideas through some sort of entrepreneurial activity.

1. I do have that kind of ideas, but I believe they would not survive in the business world
2. I do have that kind of ideas, and they could be successful with full support

iD04 To what extent are the following factors obstacles to realization of your creative ideas?

1. I lack partners/colleagues to collaborate with	1 2 3 4 5
2. I lack working space	1 2 3 4 5
3. I lack working equipment	1 2 3 4 5
4. I lack some time during a work week	1 2 3 4 5

iD05 Identify level to which the following statements relate to your studies.

1. I am qualified to deal with practical problems and challenges	1 2 3 4 5 6 7
2. I am faced with practical challenges on my studies, and I deal with them together with my colleagues	1 2 3 4 5 6 7
3. I wish that during my studies I could be involved in some extracurricular activities with my colleagues	1 2 3 4 5 6 7
4. I wish that during my studies I could be involved in some extracurricular activities with students from other departments	1 2 3 4 5 6 7
5. I have a lot of available time for extracurricular student projects	1 2 3 4 5 6 7
6. I have a lot of knowledge that could be used in extracurricular student projects	1 2 3 4 5 6 7
7. I miss dealing with something practical and challenging, besides studies	1 2 3 4 5 6 7
8. I believe I have knowledge to help some companies solving their problems	1 2 3 4 5 6 7
9. I would gladly solve companies' challenges	1 2 3 4 5 6 7
10. I have some useful ideas that companies could apply to improve their business	1 2 3 4 5 6 7
11. I believe that the University needs a place where students could develop their creative ideas	1 2 3 4 5 6 7

iD06 If there was some organized space for students idea development, I would use it.

1. I'm not interested in that
2. It already exists, and I use it
3. It already exists, but I don't use it
4. If it did exist, I would use it
5. Although I don't have interesting ideas, I would like to join this type of activities

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