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CREATIVE EDUCATION AND NEW LEARNING AS MEANS OF ENCOURAGING CREATIVITY, ORIGINAL THINKING AND ENTREPRENEURSHIP

Abstract: Teaching and learning for a New Age require a new model of education. It means an interactive and creative education based on individual needs and abilities. The new education strategy also needs freedom in learning and teaching and an active mode of learning influences innovative personality development which creates something unique and turns it into entrepreneurial activity. Our research shows that the modern business environment should be accompanied by the change in educational environment. Namely, it is necessary to offer multi-dimensional relationships between entrepreneurship course concepts and community-based on entrepreneurship experiences. It is concluded that synergy of business and education environment must be flexible, welcome ideas, empower freedom in learning and teaching and foster strong links between government, schools, associations, and communities.

Key words: *education, individuality, freedom, contemporary technologies, new learning, entrepreneurship*

INTRODUCTION

Education throughout the world faces challenges, and they may be economic, technological, social, and personal. This requires a high degree of flexibility and adaptability of the education system to these challenges. Accordingly, researchers stress the need for a greater degree of promotion of creativity in learning based on broader conceptions of young people abilities and better powers of communication. New approaches are also needed to find a way to promote students' motivation, self-esteem and the skills. To all these we would add the need for greater emphasis on individuality, whose development is conditioned by encouraging freedom of learning. It means that we should emphasize the full development of all the

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individual potentialities, such as original thinking and reasoning, creativity, innovative and entrepreneurial capabilities. At the same time, these are the four strategic objectives of European Education and Training 2020 [3]. The Conclusions of the Council on developing the role of education in a fully-functioning knowledge triangle encourages education and training institutions to ensure that curricula as well as teaching and examination methods at all levels of education incorporate and foster creativity, innovation and entrepreneurship [4]. The recently published Europe 2020 Strategy [5] sets several initiatives such as “Innovation Union”, “New Skills for New Jobs”, “Youth on the Move”, and “Digital Agenda”, where creativity plays an important role. This requires a fundamental rethinking of educational systems, both formal and informal. The learning is fostered by multidimensional interactions between students and teachers. While learners should be in the center of educational processes, teachers play critical roles as coaches. Despite an increased interest in this kind of research, theoretical standing of a new creative education approaches which should foster individuality through more freedom in learning are surprisingly absent in the literature. Therefore, our objective was to investigate the opportunity for the development of the educational strategies that will create an educational environment which encourages individuality. Bearing in mind that freedom is the essence of the development of individuality, we investigate in this research the opportunities to foster freedom in education. More freedom in learning will make a strong impact on individual creativity, original thinking and encourage entrepreneurial behaviour. In addition, it is necessary to stress that there is little documented evidence of what specific factors are effective in fostering the entrepreneurial abilities of students through education and raising entrepreneurial intentions after students’ graduation. Therefore, we also tried in our research to explore these specific factors. Our research findings help us propose a new creative educational model.

THEORETICAL BACKGROUND: LINKING EDUCATION, CREATIVITY, ORIGINAL THINKING AND ENTREPRENEURSHIP

A good education system gives students the freedom to recognize their capabilities and individual potentials. In this way, as Forte [8] elaborates, in order to let students the freedom to learn, creating a new classroom atmosphere where thinking, questioning and imagining is encouraged, and is not hampered, is critical. In this context, education should foster students to work collaboratively; ask questions and act creatively about ideas and issues across a range of disciplines. As creative thinkers, they try to imagine and explore alternatives, and to think in a different manner. Such an approach is required for a solid academic foundation as well as in order to enhance their intelligence, including “soft skills” such as understanding, empathy and communication skills [7]. The use of different learning materials and various resources allows students with various principal learning styles to understand information in the most effective way. The learning is fostered through multidimensional interactions between students and teachers. To learn on their

own, the youth need an unlimited time to play, explore, become bored, overcome boredom, discover their own interests, and pursue those interests [9]. It helps students develop their analytical and critical reasoning skills with particular emphasis on exploring and evaluating competing claims and different perspectives. Education leads to greater personal freedom through greater competence, if it becomes organized to consider diverse perspectives [2]. However, as Forte [8], argues, a student's freedom to learn requires the teacher's freedom to teach and these are in a close relationship with each other. The term 'freedom' in education, however, is often misunderstood to imply that the teacher has a passive attitude and that guidance and supervision should be abandoned. In contrast to this view, in our opinion, education plays a crucial role and significantly determines whether its outcome will be "passive imitators" or "active, creative contributors". In line with our opinion, the aim of education is an inward freedom i. e. a freedom of expression and a freedom of inquiry [14]. Creative teachers are willing to change and welcome new experiences; they aren't afraid to go off the main track or step into the unknown [15]. Namely, the teachers are key figures to implement change, but they need support to understand and accept creativity in their practices. Creative teaching may be defined in two ways: firstly, teaching creatively and secondly, teaching for creativity [11]. Teaching creatively can be described as teachers using approaches to make learning more interesting, engaging, exciting and effective. Teachers have to attract the students' interest and attention in a new way, and as a result the development of creative approaches is called for [15]. Recent literature suggests that creative individuals are more likely to engage in entrepreneurial behavior [16]. The concept of creativity is one that is often discussed in conjunction with entrepreneurship because the creative thinking is an essential element in the formulation of business ideas and is necessary in every stage of business development and execution. Creativity has usually been defined as the production of novel ideas that are useful and appropriate to the situation [1], [12]. It means escaping from the existing perceptions and concepts to open up new ways of looking at and doing things [9]. Creativity has also been seen in literature as a form of knowledge creation and a way to benefit learning [6]. In addition, creativity and innovation have close links with knowledge and learning. Hence, creative education involves a balance between teaching knowledge and skills, and encouraging innovation [11].

In order to efficiently prepare for fast changes in society and work environment, education should provide necessary knowledge and practical skills for students which are trained for management and entrepreneurship. Accordingly, students have to be encouraged to pursue creative and logical thinking and included in the creation of case studies. Tools based on critical thinking depend on careful analysis, evaluation, and reasoning including both deductive and inductive reasoning and both analytical and systems thinking. Some of the tools provide ways to summarize and communicate existing knowledge; others focus on the collection, analysis and display of new data. They are useful in understanding the existing knowledge, gaining additional knowledge and developing and testing changes [9].

The course curricula have to be devised in view of the experience acquired from either the entrepreneurship environment or another environment, depending on the type of the curriculum. It is necessary, however, to stress that there is little documented evidence of what specific factors within the curricula are effective in fostering the entrepreneurial abilities of students through education and raising entrepreneurial intentions after students' graduation. In this context, current educational systems need to adopt new methods and strategies that are able to support the educational goals set and ensure the freedom of learning and teaching.

METHODOLOGY

Our research investigates four main questions as follows: (i) What is the meaning of freedom in learning and teaching? (ii) What should be done to increase freedom in learning and foster individuality? (iii) How can we encourage the entrepreneurial abilities of students through education? and (iv) In what direction the educational strategies should be developed? The research methodology in this research is qualitative in nature. This approach involves carrying out in-depth interviews with respondents from Serbia, the USA, Nigeria and China.

RESEARCH FINDINGS

The research findings are presented according to the aforementioned research questions. The general information of the respondents is as follows:

Table 1 General information of respondents

Gender	Male	Female
Number (Percent (%))	30 (50%)	30 (50%)
Occupation	Teacher/Lecturer	Student
Number (Percent (%))	24 (40%)	36 (60%)

Any deviations from the mean values of the rate of impact of the responses offered are tested using the t-student distribution on the level of value of significance 0.05. The mean values of responses did not show any significant differences, which can be brought into connection with the fact that the offered answers are treated as important factors. The following graphs present the students' estimates as to which of the offered responses is more significant for the learning process.

Question one: What is the meaning of freedom in learning and teaching?

Offered answers:

- A. Each student must be involved in deciding which skills to develop
- B. Students are free to express their opinion even if it is wrong
- C. Students can recognize their individual potentials
- D. Flexibility in learning, taking into account the time and place of learning

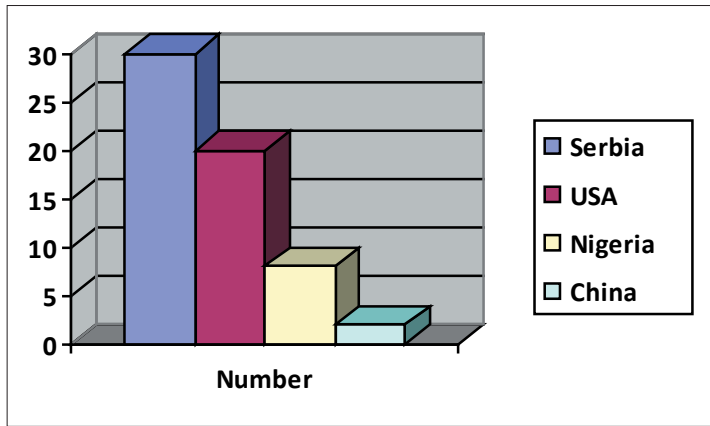


Figure 1. Frequency of respondents based on their nationality

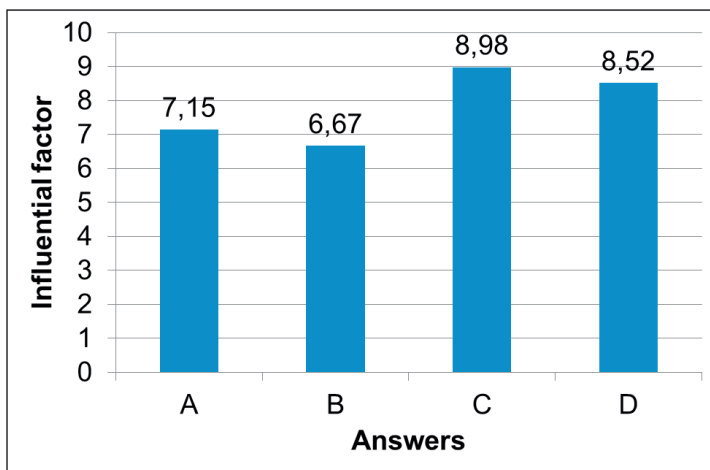


Figure 2. What is the meaning of freedom in learning and teaching

Question two: What should be done to increase freedom in learning and foster individuality?

Offered answers:

- A. To obtain better learning environments for students
- B. To obtain freedom in teaching
- C. Fostering young people's learning freedom through multi dimensional relationships between course concepts and community
- D. Support individuals to take ownership of their own learning processes

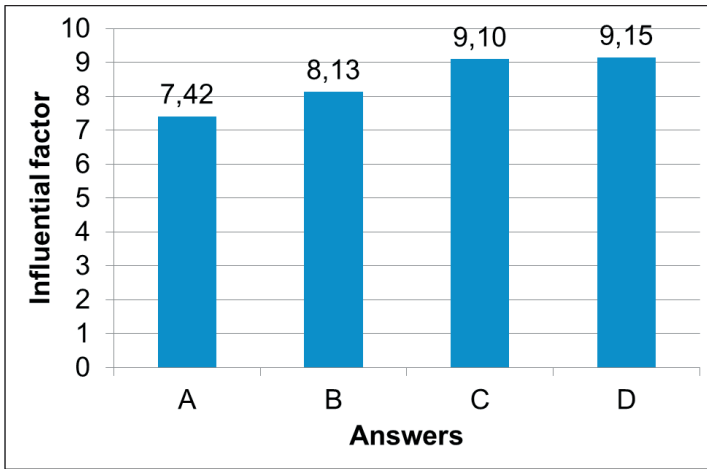


Figure 3. What should be done to increase the freedom in learning and foster individuality?

Question three: How can we encourage the entrepreneurial abilities of students through education?

Offered answers:

- A. Fostering creativity through education
- B. Offer students the tools to think originally, develop and test their business ideas
- C. Fostering innovative personality development that creates something unique and turning it into entrepreneurial activity
- D. Offer multi dimensional relationships between course concepts and community – based entrepreneurship experiences

The comparison among answers obtained from the lecturers as to what they understand as the freedom of learning reveals certain differences. Namely, the lecturers understood the freedom of learning as a higher degree of interaction between teachers and students, as well as flexibility of the curricula to be geared to students' individual needs and capabilities. In this context we will quote the answers given by lecturers-respondents that best reflect the attitudes of the lecturers:

- For all practical purposes, students should have the flexibility in learning since it is a skill, and the reaction ultimately determines the level of perception of the curriculum. Basically, it is an interaction between the teacher and the students which must reflect freedom and not rigidity.
- Freedom in learning connote creating an educational atmosphere wherein students are able to choose and develop skills that are in line with their innate ability and background.
- Higher degree of interactive learning.

The majority of students understand the freedom of learning as a higher degree of autonomy in learning as well as an opportunity to express their views, attitudes and ideas freely in view of different issues during the education process. Hereinafter we list a number of characteristic answers given by students-respondents, e. g.:

- Freedom in learning means for a student to be able to pursue his/her own knowledge; to be the motivating and responsible agent of his/her own learning process
- Opportunity to study without any obstacle and expose anything which relates to skills, potential and creativity
- Students can develop their individual potentials and learn to teach themselves.

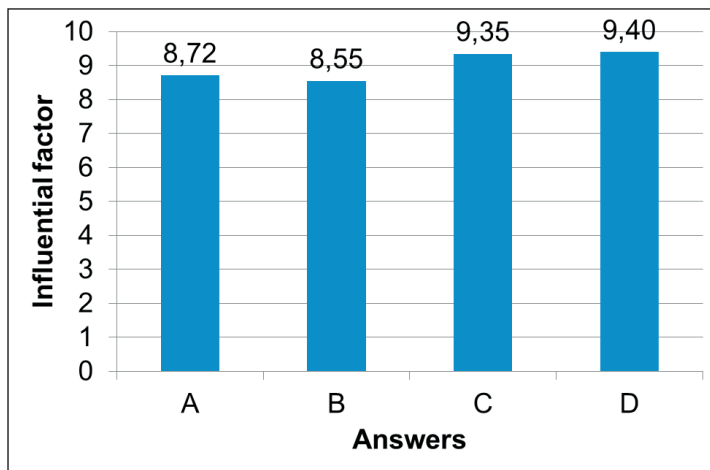


Figure 4. How can we encourage the entrepreneurial abilities of students through education

Question four: In what direction the educational strategies should be developed?

Offered answers:

- A. To be more oriented towards students' individual needs
- B. To increase an individual's level of independence and freedom
- C. To increase creative abilities and original thinking
- D. All of the above

The analyses conducted for each of the selected countries separately (one country from Europe, Africa, America – the USA and Asia each) reveal that the differences among the answers are really small. Thus as many as 75% of respondents in Nigeria think that the freedom of learning and teaching primarily means an opportunity for students to recognize their potentials and talents in the course of their education. On the other hand, the majority of respondents from the USA

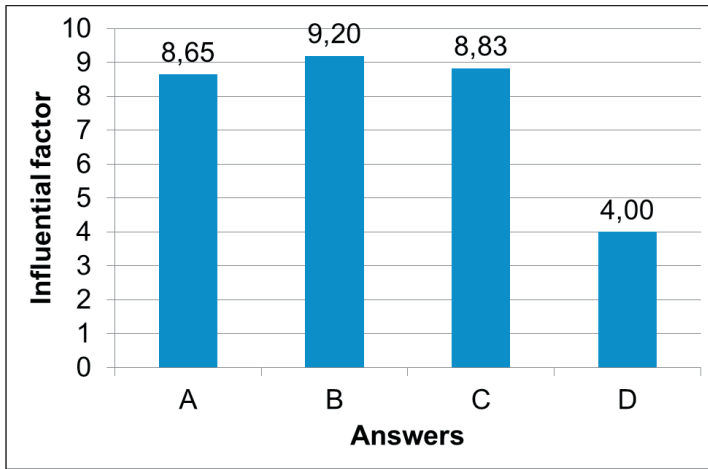


Figure 5. In what direction should the educational strategies be developed

and China, 75% and 60%, respectively, state that the key to the freedom of learning is the opportunity for the students to express their views openly, whereas the respondents in Serbia opted for answers C and B in almost equal numbers (free expression of attitude and identification of individual potentials in the course of education). In answering to the second question, relating to the possibilities of fostering freedom in learning, the analysis of answers per each country has shown that the answers in Serbia, the USA and Nigeria are almost identical. Namely, more than 60% of respondents in these countries answer in favour of encouraging freedom in the young during the education process, through multidimensional communication as well as through connecting the curriculum to the local community (both within and without the educational institution). The respondents in China, however, connect the enhancement of freedom in learning to the improvement of conditions for studying and creating a positive climate in this view (60%). The answers to the third question are also similar for Serbia, the USA and Nigeria. According to these respondents, fostering innovative competencies in students lead to unique solutions that can result in starting up entrepreneurial business. The respondents in China are the only ones that attached equal importance to answers B and C (40%). Namely, they maintain that a determinant role in enhancing entrepreneurial activities is that of fostering innovative competencies in students together with testing new ideas in the course of education. This helps students “jump into” entrepreneurial waters more readily and with less risk taking.

As regards the answer to the question of the direction to which the future strategies of education should be oriented, there is an almost unanimous agreement among the respondents in all the four countries. An equal percentage of respondents in China (43%) as in Nigeria maintain that strategies in education should be

individual-oriented, allowing students more autonomy and freedom in learning. The same answers were obtained from the respondents in Serbia (47%), and in the USA (32%).

DEVELOPING EDUCATION STRATEGY BASED ON FREEDOM OF LEARNING AND TEACHING

The creative practices in education should help learners work on building their knowledge by defining things which are especially important to them, and in the process, strengthen their sense of self and individuality. They also involve developing students' personal qualities, including a strong sense of responsibility to oneself and to others [2]. In other words, the new education model should be based on individual's growth and be able to foster the individuality, flexibility and personality enabling the development towards the following:

- promoting achievement;
- tackling barriers to inclusion;
- creating a learning and teaching environment that is sensitive to individual needs
- original and creative thinking,
- intelligent decision-making,
- fostering young people's learning experiences through multi-dimensional relationships between course concepts and community
- support individuals to take ownership of their own learning processes
- improving student's relationships with teachers, where the teacher is a coach
- acquisition of knowledge for resolving problems,
- flexible adaptation to new situations,
- effective cooperation with others,
- learner centered pedagogy – it is focused on individual learners – their experiences, perspectives, backgrounds, talents, interests, capacities and needs with a focus on leaning; in this context, new education strategies should encourage interaction between teachers and learners. This approach to education strategy means an active mode of learning influencing innovative personality development that creates something unique and turning it into entrepreneurial activity (figure 6).

CONCLUSION

In traditional education students are passive participants on all the education levels. Their personal creativeness is not encouraged, nor is they challenged to think critically. On completing the process of formal education they are capable of more or less successfully reproducing the information they learned in the course of their schooling, however, they have not learned to implement the acquired knowledge in practice and use this knowledge as basis for creating new ideas and making business decisions autonomously. The knowledge students acquired in the course

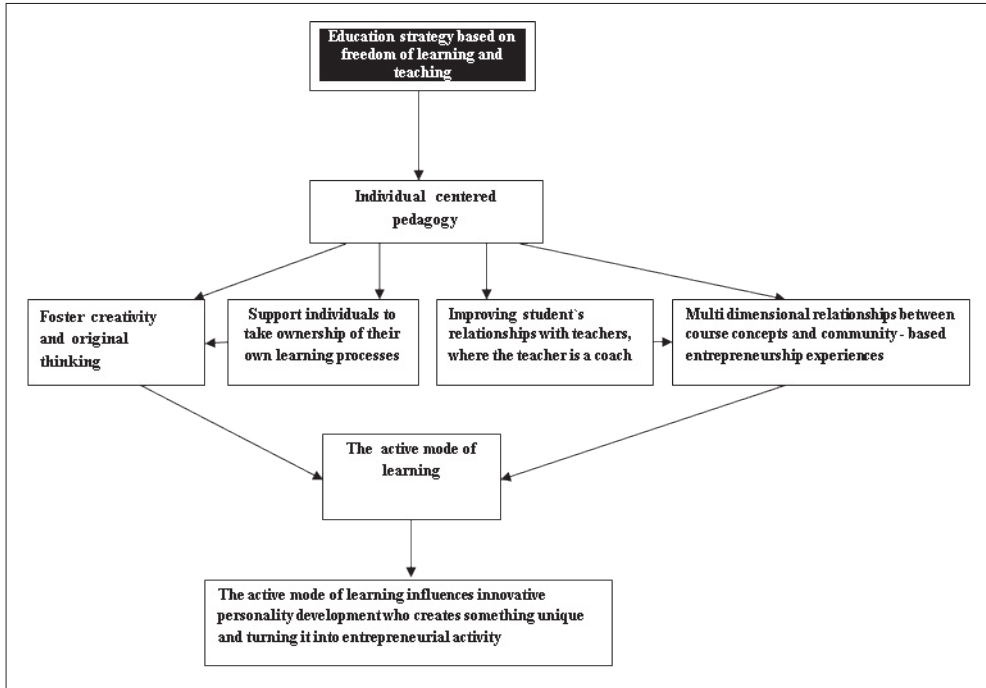


Figure 6. Developing education strategy based on freedom of learning and teaching
(Source: Author)

of their education process has frequently turned out not to be really applicable or be rather inadequate to meet the modern requirements of the business environment. Hence it is necessary that the fast changes characteristic of the new economy and the modern business environment be accompanied by the change in the learning environment. The new learning environment should provide preconditions for independent learning and support human development process. Meeting these challenges calls for an education strategy, which seeks to establish new goals of education and place greater emphasis on individuality? In this context, new education strategies should encourage interaction between teachers and learners. In order to prepare students for learning and growth in a technologically-fostered and globalized world, schools must evolve from their traditional model of education to a more active, learner-centered approach to learning. Students should have the flexibility in learning since it is a skill, and the reaction ultimately determines the level of perception of the curriculum. Basically, it is an interaction between the teacher and the students which must reflect freedom and not rigidity. Namely, a newly proposed education strategy gives students the freedom to recognize their capabilities and individual potentials. To move in this direction, schools must rapidly transform from the traditional model of learning, where the curriculum is text-book-driven and facts are memorized, to a new, transformed education strategy

based on freedom of learning and teaching. The knowledge is provided through research and active mode of learning connected to previous knowledge, interests and talents. In addition, there are multi-dimensional relationships between course concepts and community – based entrepreneurship experiences. The entrepreneurship experiences help educators create modern schools with professional staff development and entrepreneurship curricula designed on the basis of linking creativity, original thinking and logical decision-making. The application of various technologies improves learning environment, makes better and faster communication and provides preconditions to transform teaching into learning. It is impossible to achieve all new education advantages without close relationships between government, schools, associations, and communities. However, only their synergies allow the education system to be efficient and effective.

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ANNEX

Question 1. What is the meaning of freedom in learning and teaching?

A)

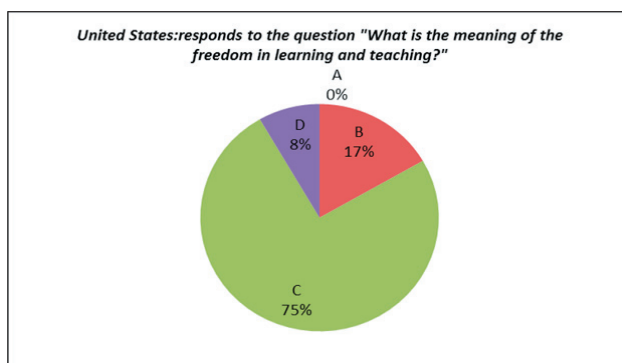


Figure 1. Percentage of the meaning of freedom in learning in United States

B)

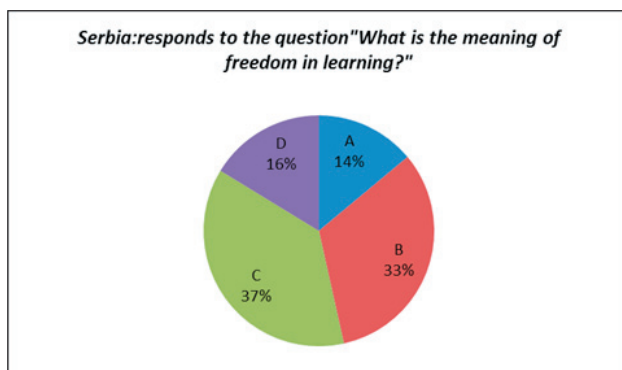


Figure 2. Percentage of the meaning of freedom in learning in Serbia

C)

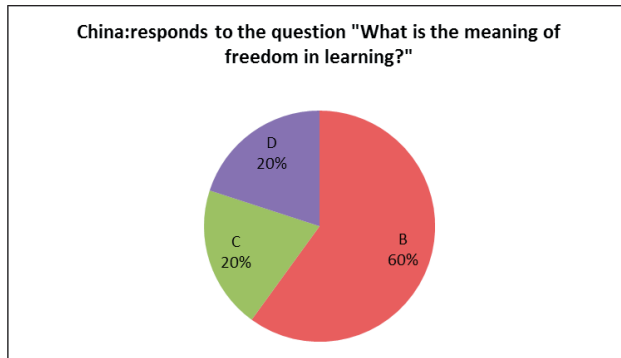


Figure 3. Percentage of the meaning of freedom in learning in China

D)

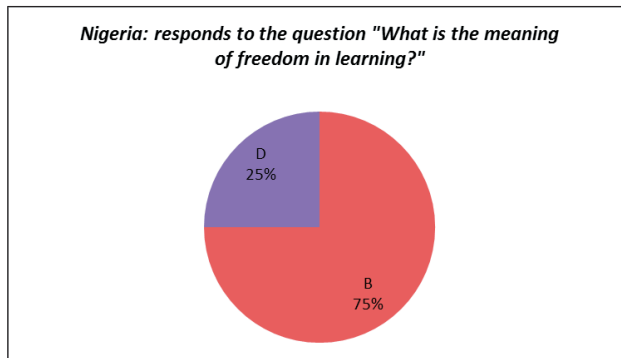


Figure 4. Percentage of the meaning of freedom in learning in Nigeria

Question two: What should be done to increase freedom in learning and foster individuality?

A)

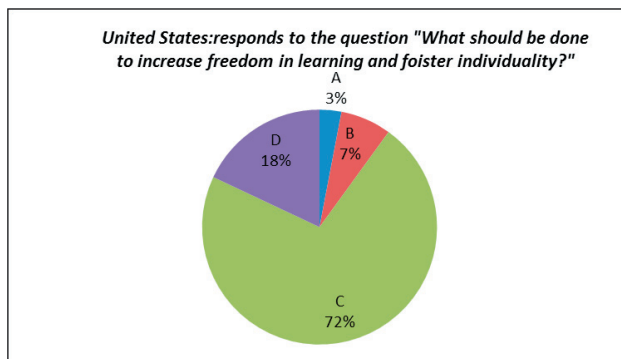


Figure 5. Percentage of the actions required to increase freedom in learning and foster individuality in the United States

B)

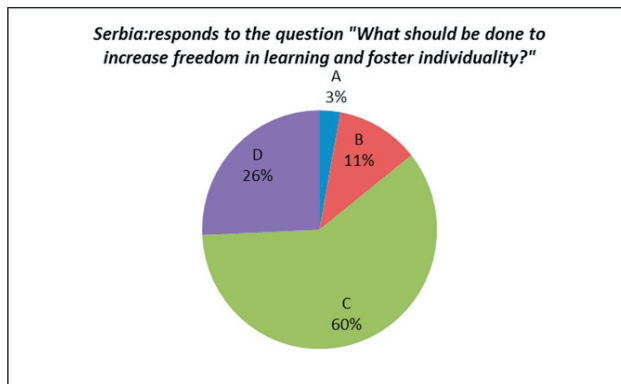


Figure 6. Percentage of the actions required to increase freedom in learning and foster individuality in Serbia

C)

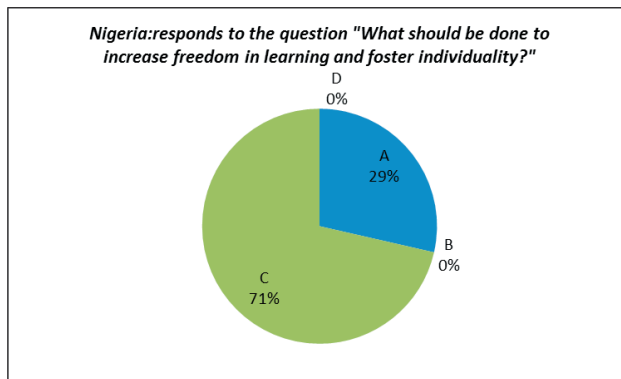


Figure 7. Percentage of the actions required to increase freedom in learning and foster individuality in Nigeria

D)

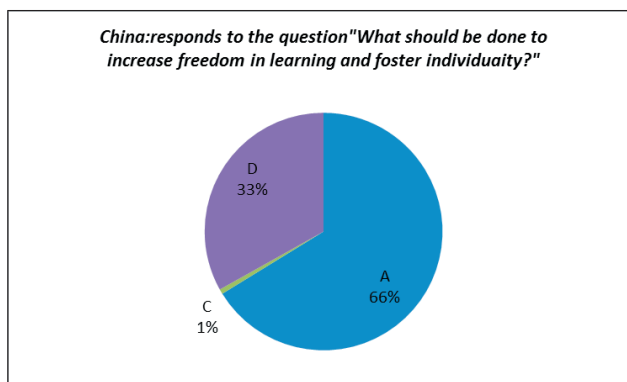


Figure 8. Percentage of the actions required to increase freedom in learning and foster individuality in China

Question three: How can we encourage the entrepreneurial abilities of students through education?

A)

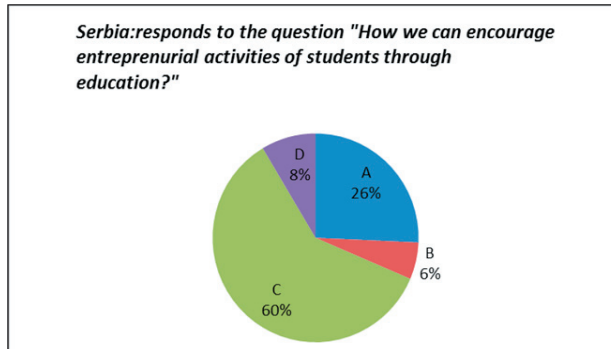


Figure 9. Percentage of the actions required to encourage the entrepreneurial abilities of students through education in Serbia

B)

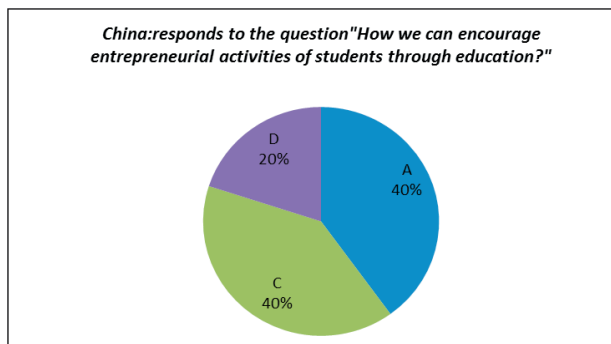


Figure 10. Percentage of the actions required to encourage the entrepreneurial abilities of students through education in China

C)

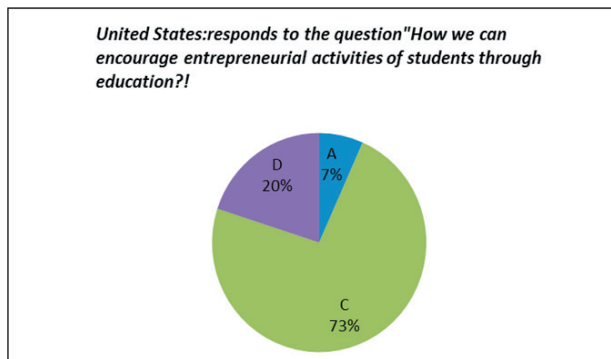


Figure 11. Percentage of the actions required to encourage the entrepreneurial abilities of students through education in United States

D)

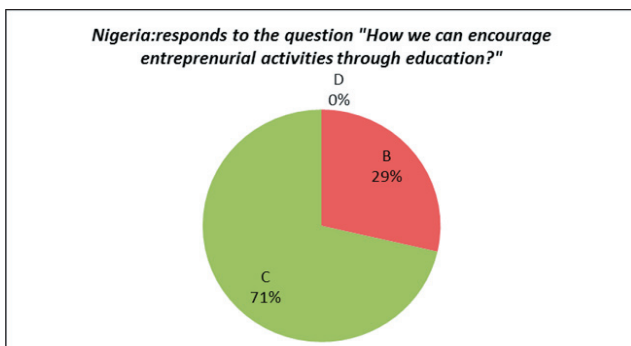


Figure 12. Percentage of the actions required to encourage the entrepreneurial abilities of students through education in Nigeria

Question four: In what direction the educational strategies should be developed?

A)

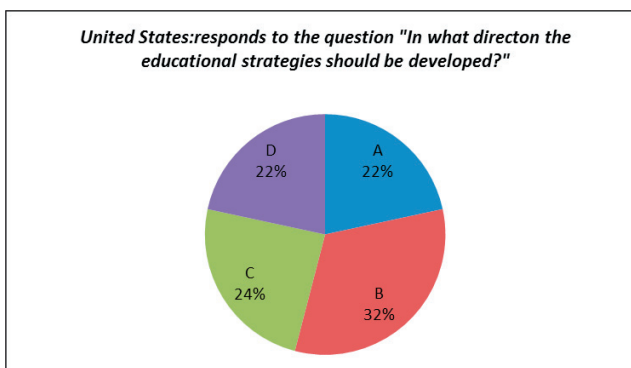


Figure 13. Percentage of the direction toward which educational strategies should be developed in United States

B)

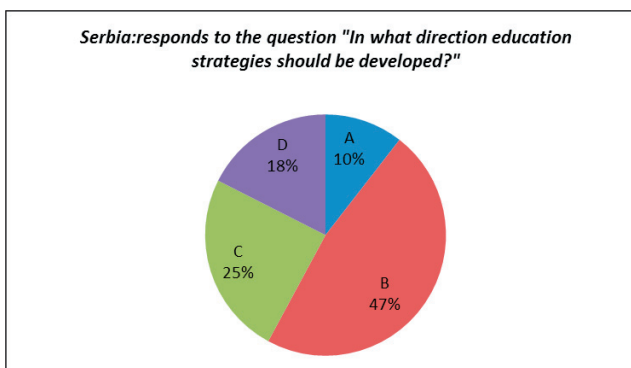


Figure 14. Percentage of the direction toward which educational strategies should be developed in United States

C)

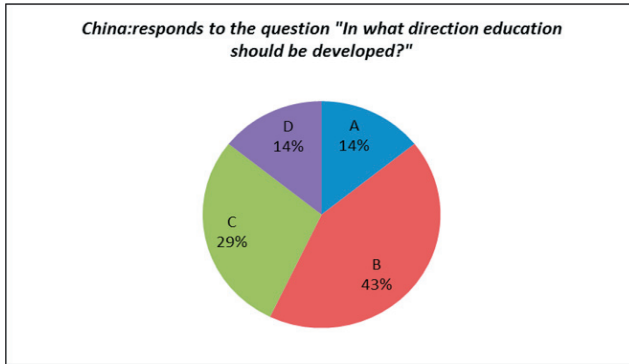


Figure 15. Percentage of the direction toward which educational strategies should be developed in China

D)

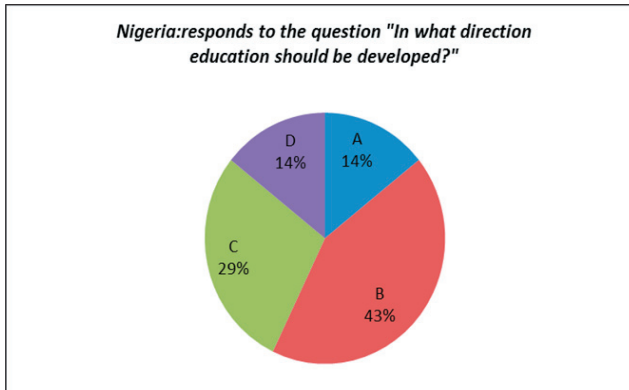


Figure 16. Percentage of the direction toward which educational strategies should be developed in Nigeria