Psychological and pedagogical aspects of the formation of cognitive independence of the Central Asian youth (Silk Road countries' experience)

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Abstract. The article considers the problems of developing the quality of education, which can have a significant impact on the integration processes within the scope of the project "New Silk Road" and analyzes the psychological and pedagogical aspects affecting the development of cognitive independence. The work deals with the problems, the formation of the worldview of the youth of Central Asia, the discrepancy of the modern education system with the needs of modern youth. The authors analyze the specifics of education in the countries of Central Asia, which affects the development of quality education. Recommendations on the development of cognitive independence, which is one of the main components of training highly qualified personnel of the XXI century that can be competitive at the labor market, are given.

Keywords: cognitive independence; Central Asia; students; psychological and pedagogical aspects; education system; significant impact; quality of education.

1. Introduction

In modern society, the high rate of development of information technology has a significant impact on the labor market and, consequently, new requirements for personnel training. Before the development of modern information technologies, graduates of higher education institutions were required to have a baggage of special knowledge, which could be applied in professional activities. However, in the modern society, where information can be spread quickly and easily, new technologies are constantly being developed and completely different requirements are set for the young personnel.

The process of globalization has affected all areas of society around the world. The world labor market is becoming almost identical all over the world. Therefore, at present, the requirements for training specialists around the world are becoming more and more complex every year, including the education system of Central Asia. The quality of education in the Central Asian education system can have a significant impact on the Silk Road project, accelerate its implementation and increase its effectiveness. If young professionals are trained at the right level, it contributes to effective decision-making and proper use of resources, which helps accelerate and improve the quality of work, as well as have a significant impact on the interaction between the countries.

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The system of training specialists faces new challenges in the development of new approaches, new methods and technologies of education.

What are the requirements for modern personnel?

First of all, a set of special knowledge is not enough to be in demand and to be a competitive specialist. The modern specialist requires the development of communication skills, creativity, and the ability to work in a team, as well as the development of cognitive independence, which is formed in the process of learning.

2. Methodology

The methodology of the research article was the analysis of theoretical and empirical data devoted to the study of the problem of developing the quality of education, cognitive independence of students in Central Asia, which can play a significant role in the development of the Silk Road project.

3. Results

Development of cognitive independence of students in Higher Educational Institutions of Central Asia, psychological and pedagogical aspect.

The organization of cognitive independence is, first of all, the creation of conditions that contribute to the development of independence and self-development of the individual, which involves the active participation of students in the learning process and the search for new knowledge and experience. This is the most important quality that should be developed in the learning process and is one of the key factors of success.

The organization of cognitive independence has goals:
• development of motivation to independently study new knowledge and skills;
• development of skills and abilities of self-organization, self-control, self-assessment and self-correction;
• increasing the level of general culture and the development of creative abilities;
• ensuring the full participation of students in the learning process and the formation of their desire to continue learning in the future.

When organizing cognitive independence of Central Asian students, it is necessary to take into account the main aspects affecting the learning process. First of all, this is the influence of family, traditional values, culture, religion on the one hand, and the influence of modern information technology on the other hand. Culture and religion have a significant impact on the formation of students’ worldview and cognitive abilities.

For students admitted to an educational institution it is necessary to form a trusting relationship between students and teachers, to build confidence in their abilities and success, to support the emotional stability and resilience of students, mutual support and mutual assistance, that is, to create an atmosphere that prevails in a traditional family.

The culture of the nations of Central Asia is the result of centuries of tradition. From generation to generation, one passes down judgments equal in importance to the immutable truth that the rules of common humanity place certain responsibilities on members of society. Among the most important of these are good behavior and respectful treatment of others [1].

Respect for elders and modesty is a positive characteristic of Central Asian youth. Therefore, some students may not express their views on how they would like to organize their education process while studying. Therefore, during the training the teachers can ask questions about the topics and identify the needs of students, methods and technologies of learning, which are more acceptable to them.
To form cognitive independence first of all it is important to pay attention to the structure of cognitive independence. In the structure of cognitive independence, the following components are distinguished [2]:

- motivational-volitional;
- content-operational;
- reflexive.

Diagnosis of the main components of cognitive independence of students admitted to universities allows us to identify more effective methods and technologies of formation of cognitive independence.

Identification of the motivational-volitional sphere allows us to determine through which channels we can influence the development of motivation for learning.

There are many techniques for determining the motivational-volitional sphere. First of all, it is a conversation with students, observation, polls, which are conducted annually at the Academic, Research and Production Complex “International University of Kyrgyzstan”. Also during classes, the use of psychological techniques such as: projective drawing tests to determine abilities, the method of studying motivation for learning in higher education by T.I. Ilyina, the determination of the needs hierarchy and others.

It is also necessary to determine the level of cognitive independence of students, because before starting the process of learning, for some students need an individual approach. One of the tests that determines students' cognitive independence is called "Test for determining the level of independent learning". It helps to assess students' ability to control their learning process, their ability to set learning priorities, and to organize their time. This test includes various items related to the ability to set goals, plan one's activities, analyze information, and make independent decisions.

More and more students come to the training sessions interested in acquiring practical skills that they could apply in the job market. Therefore, it is interesting for students to go on field events, guest lectures, master classes, etc. All disciplines should be aimed at acquiring certain skills that graduates can apply in practice.

A study of the cultural and psychological characteristics of Central Asian youth [3] revealed such indicators of independence as high productivity of divergent thinking and a high level of claims.

The high productivity of divergent thinking allows Central Asian youth to find non-standard ways to solve a particular problem.

Therefore, it is necessary to pay attention to the way of teaching, practical skills are better learned when the students are dealing with situational tasks of "case" technology. First, given out situational problems, where students themselves analyze them and look for ways to solve problems, and then in the classroom they are offered options for solutions. The meaning of the technology of problem-based learning is reduced to teaching students to identify problems both in the process of learning and in life situations, and to find ways to solve them [5]. In our opinion, this method is one of effective methods of activation of cognitive independence.

The specifics of education of young generation in Central Asia is aimed at achieving high goals, and, consequently, young people have unrealistic expectations and requirements in relation to themselves and other people. Thereafter, if young people do not achieve their goals, it can lead to disappointment, low self-esteem, stress, and sometimes leaving for pseudo-religious organizations where they can promise all that they could not achieve.

Therefore, in the first place, the educational system needs to develop methods for developing self-confidence and a realistic assessment of one's own forces and capabilities.

There is another characteristic of young people in Central Asia, many of them want to go abroad, almost 50% of students plan to study or work abroad. Therefore, they are more interested in foreign training programs and one of the requirements in training is the accordance of the educational space to foreign universities.
In general, the knowledge of socio-psychological characteristics of Central Asian youth, taking into account the specificity of cognitive thinking, and the culture of Central Asia can help ensure the cognitive independence of modern Central Asian youth.

The following psychological and pedagogical methods can be used to ensure cognitive independence of Central Asian students:

- **Active involving of students in the educational process.** For this purpose, it is possible to organize discussion of the topics on which students have questions, to stimulate independent study of literature on the topic, to conduct practical classes and trainings.
- **Development of independent thinking skills.** Students can learn to parse complex topics, identify key information, analyze data, and reach conclusions.
- **Gradual progression from supervised to independent work.** Tasks that are assigned to students should be difficult but achievable. While working on them, students should make a gradual progression into more independent work, receiving feedback and guidance.
- **The use of interactive teaching methods.** For example, a learning game or project work, which helps students develop independent work skills, creativity, communication, and collaboration.
- **Organization of work in small groups.** This promotes personal development, critical thinking, speech and teamwork.
- **Developing personalized learning plans** for each student based on the student's needs, hobbies, and talents.
- **Creating a supportive learning environment** where students can feel comfortable and free to express their thoughts, ideas and opinions.
- **Teaching self-organization and time management skills.** This will help students manage their time more effectively, complete their tasks and achieve academic success.

All of these methods can help Central Asian students become more independent, confident, and successful in their studies and in their lives.

### 4. Discussion

The opportunities of today's youth are a high potential that can be developed with a proper approach, readiness to receive a variety of information from different sources, a high degree of adaptation and mobility, the ability to look for all kinds of ways to solve a problem, and the desire to influence the environment. The young person wants to show their independence, their uniqueness, their personality.

However, what the young person wants to show is limited:
- lack of thorough knowledge in a particular area;
- unformed consciousness. For example: the desire to achieve everything at a fast pace, which can lead to antisocial behavior;
- unformed a unique core of worldview, when a young person with full confidence can express their point of view;
- lack of life experience on which a young person can confidently act in one direction or another, etc.

Students from Academic, Research and Production Complex “International University of Kyrgyzstan” conducted an independent study on "Quality training through the eyes of students", in which students from different Kyrgyz universities answered questions of our students, and suggested the following ways of improving the quality of education:
- take into account the learning needs of young people;
- a new format of education, using modern educational technologies;
- the way of presenting information should be changed, since today's youth get information from social networks, where new forms of learning are developed every year;
- more outdoor activities out of university and pay more time for practical training for the
future profession.

As noted by the students, if we pay attention to the above recommendations, the learning process would be more interesting and productive.

For the organization of cognitive independence, the creation of appropriate conditions is necessary. First of all, the possession of modern information technology.

Modern information technology allows you to learn as much information as possible and for the younger generation nowadays there are more opportunities to acquire knowledge, skills and abilities faster and more effectively. Teachers' skills in modern information technology significantly improve the quality of education. Higher education institutions invest a lot of money in professional development, but there are difficulties in learning modern information technology. The older generation is slower to adopt the new format of education.

It is no secret that the older generation in learning new technologies turns to young people for help, who in turn come to classes in order to get the knowledge they don't get from social networks.

Therefore, in the information space, young people accept those ideas and notions that are not always useful in the everyday life and professional activities of young people. This is used by those who are good at techniques and ways of presenting information in the information space. That is bloggers, marketing experts, whose baggage of knowledge may not be at a high level, but the knowledge of modern information technology can increase the number of subscribers.

Most young people prefer to spend less time behind a training bench, and try to get as much practical experience as possible and work within one or two years of study.

The next problem area in the educational environment is a high level of pretensions and a low level of knowledge. The main value in the choice of future profession is a high salary, so there are cases when employers' job offers are rejected because of low salaries. Modern young people are more mobile, so at the first opportunity try to get a better-paid job, so the complaint of employers is that young people are more superficial with labor activity.

A positive dynamic in the development of Central Asian countries should be referred to the culture and traditions of the people that influence the high birth rate. Currently, young people in Central Asia account for 25% of the total population [4]. However, decreasing birth rates in many developed countries of the world and the need for young professionals contribute to the drain of valuable personnel from Central Asian countries. Many young people want to work or study abroad, so we are currently training personnel not only for their own country.

The education system must respond to modern realities; another problem is the development of social and human science. For the development of intercultural relations of Central Asian countries, it is necessary to develop the social and human sciences, which form the worldview of young people. However, in many universities, they give more preference to natural sciences and applied disciplines because they form practical skills. Students do not see the point in studying the social sciences and humanities, although with this knowledge we get a holistic picture of the world, it forms the worldview. The worldview of today's youth is shaped by social networks, which are most often used for political purposes and in information warfare. The Islamization of Central Asian youth is progressing at a rapid pace as Central Asian youth are longing for a powerful system that explains the world and gives meaning to their lives [6].

Not only universities, but also all educational institutions need government support, joint projects and a unified platform allowing the development of social and human sciences that would strengthen cultural ties between peoples and mutual cooperation. Modern realities require more efforts in rethinking their methods, approaches, and teaching technologies. These and other challenges require the modern education system to search for new methods and technologies of education, the proper use of modern technologies and the potential of today's young people.
5. Conclusion

The development of students' independence in educational activities is an important direction in modern pedagogy, as it is necessary to train competitive specialists who can work successfully in a rapidly changing environment. To develop this quality it is necessary to take into account psychological and pedagogical characteristics of Central Asian youth, create conditions for independent work, encourage and support the initiative and creativity of students.

The new challenges and demands of our time require new approaches to the education of young people. In modern education system, more time should be given to interactive teaching methods: discussion, debates, group projects, games and problem-oriented tasks helps students to become more active participants in the learning process, contributing to the development of cognitive independence. The development of cognitive independence in turn contributes to competitiveness in the labor market, not only in Central Asia, but also around the world.

References


