Individual educational paths

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Abstract: At present, professional institutions are operating under difficult conditions. To maintain competitiveness, universities are trying to attract students also by individual training. The article gives the results of a survey of students with the purpose to determine the problem of actualisation of the individual educational path of a student. Analysis of the survey results showed the level of student's knowledge about the possibilities of individualization of the educational process, maturity of ideas about individual educational paths and attitude to them, and participation in their constructionand actualisation.

1 Introduction

Innovations in education lead to changes in the future training of specialists. The modern economy imposes ever higher demands on the level and content of higher education, which must comply with the information technology methods of production and be very sensitive to the requirements of the labour market, focusing on changing the current and immediate situation. To achieve scientific and economic progress, the state needs competent specialists. They can modernise the country in every possible way, make adjustments to the weak points of the economy and manufacturing of the country [1]. Many Professional and Higher Education institutions become regional, interregional and international innovative-resource educational centers. Their innovative activity is directed on retraining and further training of staff, continuous education of citizens, distance education, and other innovations..

Higher education is considered a key factor and essential for the future success of people in modern society .Currently, the question of the education process individualisation remains relevant. Students have the right to choose the level, type, terms, and methods of their education and also an opportunity to take part in the build-up of the content of their education. These rights are regularized by article 34 «Basic rights of students and measures of their social support and stimulation «of FederalLaw№273-FL dated December29,2012,» About education in the Russian Federation. «In connection with this fact, the providing the opportunity for each student to build an individual education path (IEP) should be an integral part of the educational process at any university.

Many authors, such as E. I. Ogorodnikova, N. A. Labunskaya, S. L. Kliminskaya, and others, studied the introduction and application of IEPs in higher education institutions. According to N.A. Labunskaya, the significance of individual educational path is that the use this educational format means the creation of a flexible express format for building and

developing individual professional skills, value orientations, attitudes, and beliefs using modern educational programs and technologies taking into account individual needs [2].

In the paper S.L. Kliminskaya it is noted that the construction of an individual educational path must comply with the following principles: awareness of the trend and opportunity to participate in their own education, flexibility and liveliness of the educational system in compliance with the requirements of the labor market, individualisation and creative component when working with a mentor [3]. To build and organize training on individual paths, it is necessary to use special techniques and technologies. In her work, E.I. Ogorodnikova proposes to single out two stages of building an individual educational path: goal-setting and technological. They provide for the creation of an individual educational program as a means of implementing the educational path. [4]

Based on the review of literature, we can conclude that the topic of IEP implementation in higher education institutions currently is relevant.

The scientific novelty of this study consists of the presentation of the results of the study on the state of the problem of the implementation of individual educational trajectories of students.

2 Survey results

Aimed at identifying the students' ability to participate in the design of the content of their educational programs, the method of empirical research– questions -was used. The survey was conducted in an online format, using the Google Forms online service. 150 Russian full-time Bachelor's degree students of the 1-4 years of study took part in the survey. The respondents were asked to choose an answer from the listed options.

The main objective of higher education is the formation of a creative personality of a specialist capable of self-development, self-education, and innovation. The first question that students answered was what higher education is for them, and how they see it. 58.7%of students choose the answer «comprehensive development of personal skills;"another 41.3%chosetheanswer"improving the quality of education.”

The 2-nd question was: "Do you know what an Individual educational path is?" 58% of the students chose the answer "no", the other 42% answered "yes" to this question. Numbers represent that almost half of the students do not know what is an "Individual educational path", i.e., not all universitiesimplement the process of individualisation of training.

AIEP is a professional training program that provides implementation of an educational standard and allows a person to design one's own educational path with the assistance and help of teachers (tutors). These learning methodologies consist of letting the students play an active role in their learning process rather than just receiving knowledge directly from teachers [5].

Respondents Gave the Following Answers the question «Would you like to build an individual educational path in the process of studying at university?" as shown in Figure 1.
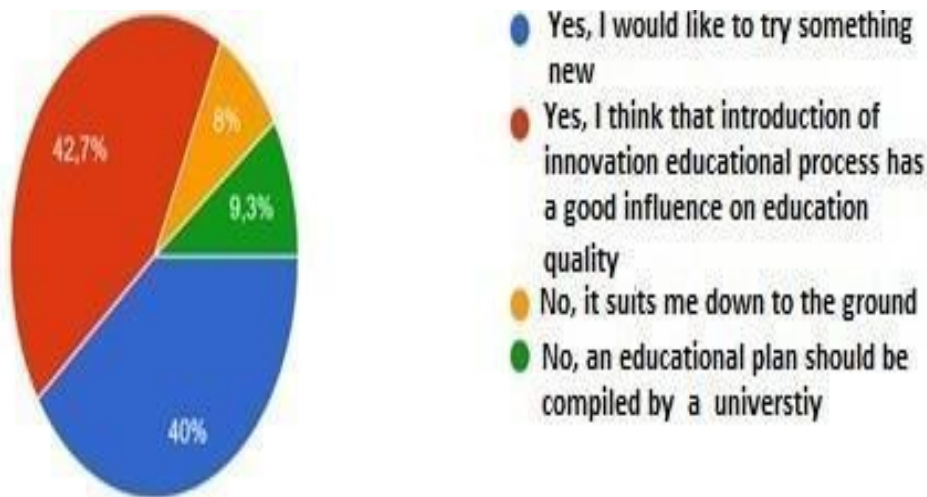
Fig. 1. Answers Of Respondents To Question «Would you like to build an individual educational path in the process of studying at university?»

From this diagram, we can see that the answers distributed as follows:

- yes, I would like to try something new – 40%
- yes, I think that introduction of innovation educational process has a good impact on the quality of education– 42,7%
- no, it suits me as it is – 8%
- no, an educational plan should be compiled by university – 9,3%.

Based on the survey, we can conclude that a large number of students are ready to switch to a new model of training. In the process of training, not only professional training but also the acquisition of such skills and qualities as flexibility, mobility, decision-making is necessary. A new format of training supposes that each student can choose the subject of each term, and the conventional groups are abolished. Each student gets an individual schedule, and in dual periods he or she works with students of different majors.

The development of an IEP is a multifaceted process. It has been meant to ensure the development of independence and initiative, opportunities for full realization of the individual's creative potential for successful activity in the professional sphere. Such aspects of the modernization process as the transition to a multi-level education system, the development of mobile educational programs and standards (European Qualifications System), the achievement of academic mobility, suggest the availability of alternatives in education and force learners to make choices based on their own capabilities and needs of the labor market. It is the choice of an IEP that will ultimately allow everyone to develop those personality traits that are most sought-after at the moment [6].

Hiring a well-qualified specialist is the company's problem; the specialist's problem is finding a good job [7]. Professions today come and go very quickly. Sometimes a traditional high school institution catches up with these changes, and a graduate may not be on demand in the labor market. That is why a large number of graduates do not work according to their specialty.

IEPs will also help to decrease the number of graduates who don't go out to work according to their specialty, and also it will help not to stay with an obsolete degree. It will be easier for students to change specialty, and also the choice of professional courses allows them to get ready for working in a specific profession of the industry.

The idea of IEPs was brought into service from the experience of Western countries.

There is no single education plan in the American higher education system. Instead, universities have a list of obligatory courses (modules) and disciplines, from which a student can choose independently. At first, all students study general subjects, and after that they choose the modules which they are interested in. Seminars and lectures are divided into obligatory and optional. Several Hundred Students Can Attend Lectures, and from two up to thirty students can attend laboratory courses or debatable classroom activities. At some universities you do not even need to choose a specialty: all students study the same courses during the first one or two years.

At European universities, training is conducted in two stages: the undergraduate (preliminary) stage, which results in getting a Bachelor's degree, and the graduate (graduating) stage, which results getting Master's degree. Masters can continue their education and go to postgraduate school, which is sometimes called doctoral candidacy within the frameworks of European education, and get a Ph.D. degree. This Degrees Higher Education (Bachelor's Degree, Master's Degree, and Ph.D.) should be topically interconnected.

Credits or points of credit were introduced to relieve the procedure of degree awarding and getting qualification, provision of transparency of educational programs and plans.

Credit retention means that a student will receive sought-after degree (Bachelor's or Master's) in case of he/she retains a certain amount of credits. The introduction of points of credit is also considered as a form of an educational process organization, which promotes the development of academic mobility of students. Table 1 presents the mainstream credit-module systems.

Table 1. Mainstream credit-module systems

№	Name	Countries of expansion	Brief characteristics
1	United States credit system (USCS)	United States of America	Entered for credit retention. Credit is the quantitative amount of content of the course study for obtaining the degree in demand.
2	Credit Accumulation and Transfer System (CATS)	The United Kingdom Of Great Britain and Northern Ireland	Both credit accumulation and transfer are possible. Accumulated credits can be accumulated both in your and other universities
3	European Credits Transfer System (ECTS)	Bologna process member countries	The basis of Bologna educational process was created first of all as an instrument which allows choosing a general rate of a student's education required for academic mobility of students. ECTS- credit is a numeral value which corresponds to a subject unit meant to characterize the obligation fast dent, required for its accomplishment.
4	Asia-pacific university credits transfer system (APS)	Japan, Korea, Laos, Malaysia, Mexico, Mongolia, Myanmar, Nepal, New Zealed, Papua New Guinea, China, Philippines, Singapore, Sri-Lanka, Taiwan, Thailand, Vi-Vietnam and Western Samoa, Australia,	Introduced to facilitate the exchange of students in the region and territories within the scope of UMAP (University Mobility in the Asia-Pacific region)

		Brunei, Cambodia, Canada, Chile, Fiji, Guam, Hong Kong, RSA, Indonesia	

Many universities already have optional courses, but in most cases, they are connected with the basics specialty. It is tough to Choose Something That Doesn't Relate It. Moreover, sometimes these courses can become obligatory.

Students were also were asked the following question: "Are you always careful about your choice of elective courses (optional subjects)?" "A diagram with the distribution of the respondent's answers is presented in Figure 2.
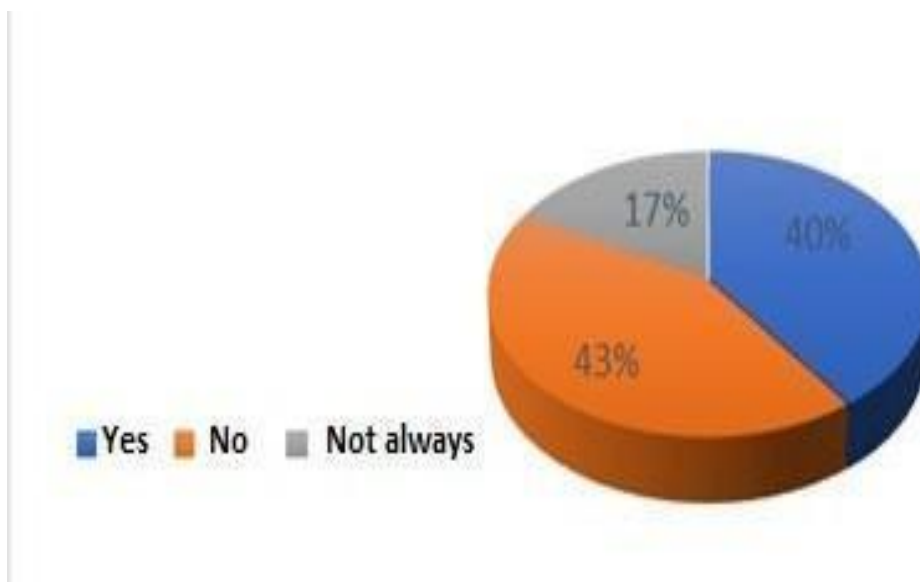

Fig. 2. Respondents' answers to the question «Are you always careful about your choice of elective courses (optional subjects)?».

Elective courses can be organized in an online format, such as MOOC. In his paper, V. Zaporozhko, says that the advantage of MOOCs is that the student gets access to world-class knowledge base. This does not depend on his/her location, social status, and other characteristics that are important for traditional forms of studying [8].

The respondents were asked the following question: «Do optional courses correspond to your personal educational needs? ». The diagram presenting the answers of the respondents is presented in shown on Fig. 3. From this diagram we can see that most students do not favor the optional courses that are provided by the university.
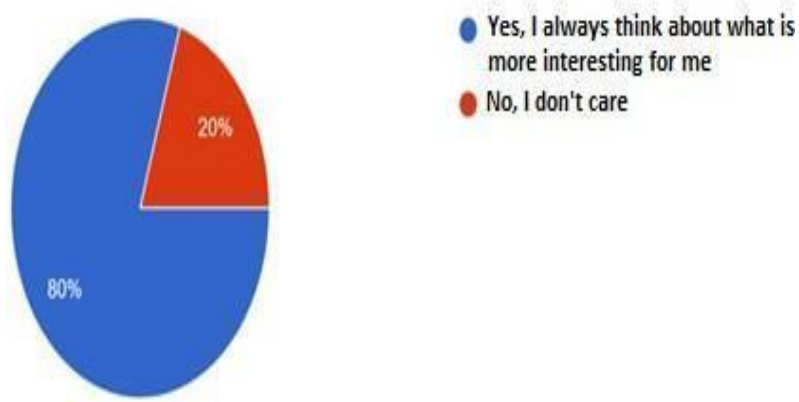
Fig. 3. The Answers of the respondents to the question «Do optional courses correspond to your personaleducational needs?»

According to the results of the survey, we can make the following conclusions:
● Most of the students do not know about individual educational paths.
● The students are ready for innovations, ready to try new forms of training.
The next question was focused on the identification of the persons who could help to structure an IEP: "Who could help you in development and actualisation of the individual educational path at the university?" The answers of the respondents are presented as a block-diagram in Fig. 4.
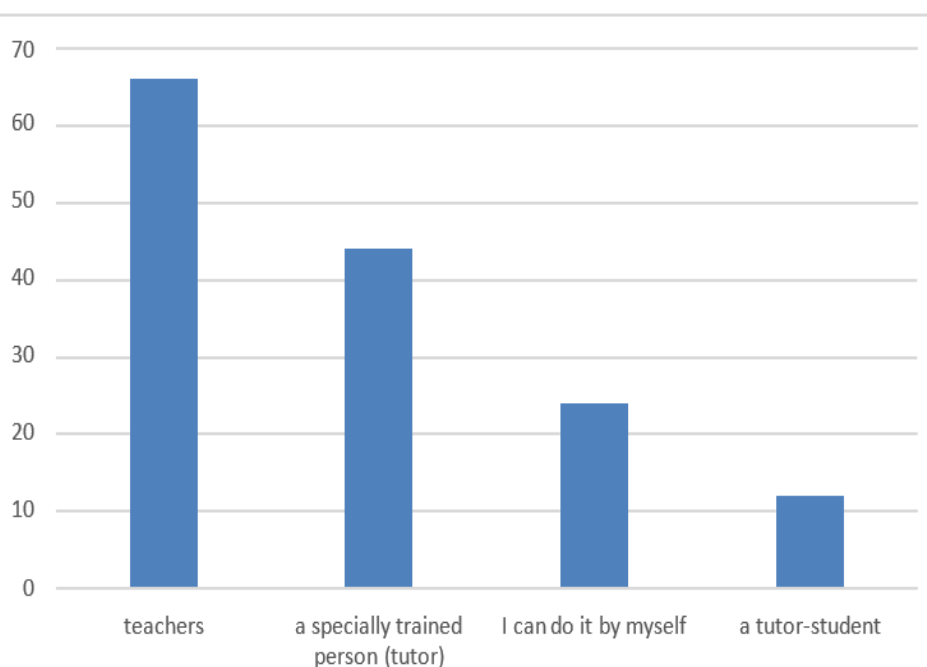

Fig. 4. The answers of the respondents to the question «Who can help you to structure an IEP?»

The results of the answers to this question show that the majority (45 %) of the respondents see their teachers as tutors who help them to build-up and implement the IEP.30% of students think that specially trained people (tutors) can help them to do this. Tutors are a new phenomenon for Russia. They exist only at some universities, which is why most of the Russian students have no experience of communicating with them and do not connect their future with tutors. (Shaposhnikova2016). Based on the long-term experience of foreign universities, looking at which wecan conclude that tutoring is an essential element of the training process and the process of personal development.

Tutor support is a pedagogical activity for the individualization of education, which is focused on identifying and developing the educational motives and interests of the student, the search for educational resources necessary to create an educational program, to work with the educational request of the family, the organisation of educational reflection of the student.

A survey was conducted among students at universities where individual training paths havealreadybeenintroducedintothetrainingprocess.150peoplefromthefollowinguniversities took part in the survey: Industrial University of Tyumen, University of Tyumen, Ural Federal University named after the first President of Russia B. N. Yeltsin. Respondents answered the questions «How Much Tutors help you need when forming an IEP?"and«Evaluate The Effectiveness Of The tutor's work on a ten-point scale." Detailed diagrams are shown in Figures 5 and6.
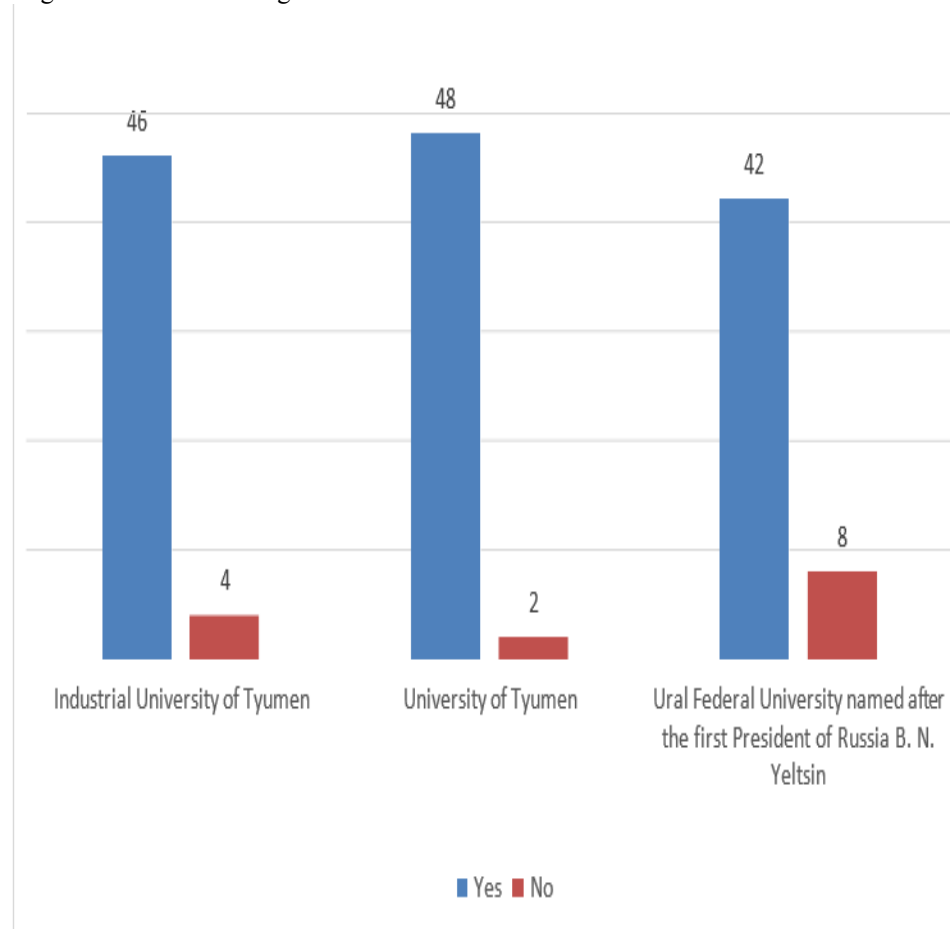

Fig. 5. Respondent's answers to the question «How much do tutors need when forming IEP?»
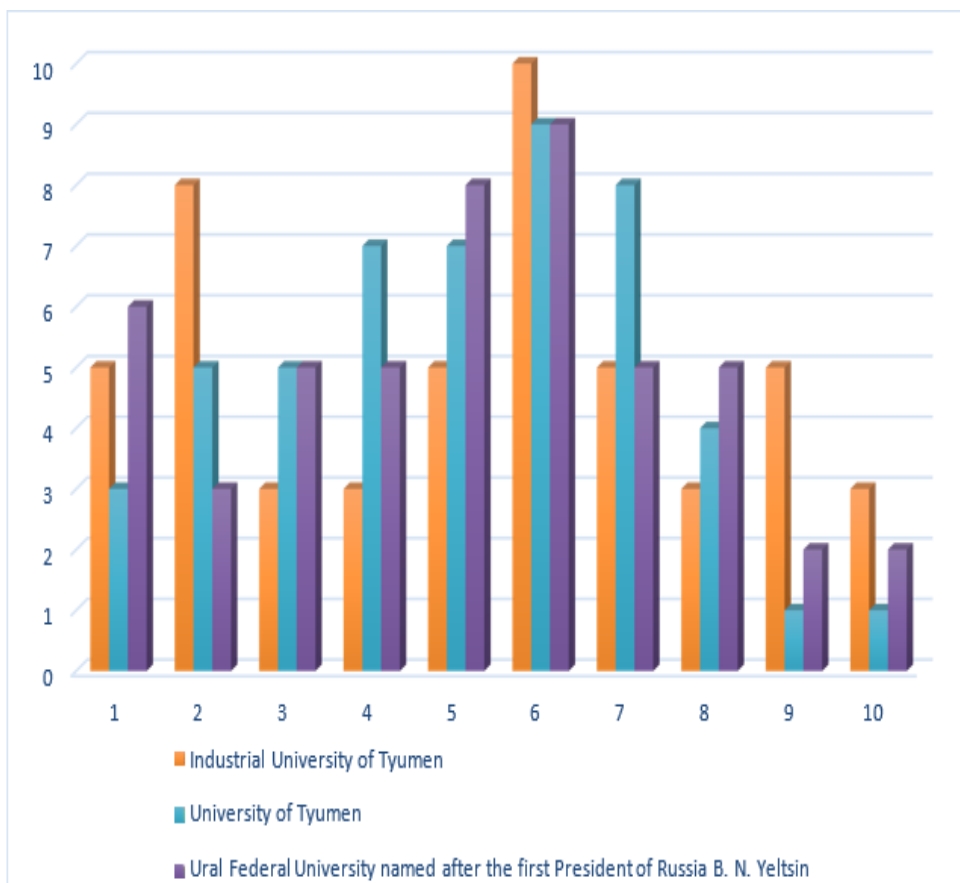
Fig. 6.Estimation of efficiency of tutor training

As can be seen from Figure 5, students consider that tutors play an important role in the formation of IEPs. We can see from Figure 6, that many students are not satisfied with the work of their tutors. In most cases, this may be due to a personal gap between tutors and students. It is not very easy for students, who have no regular help from tutors, to choose their paths and make this choice correctly.

3 Conclusion

As a result of the survey, the readiness of students to switch to individual educational paths was shown. It follows from this that in the future; individualisation will spread through the entire educational system. Students will not be attached to universities and will be able to organize the programs constructor: for example, during several terms, students will study at one place, then they will be transferred to another. They will be able to study part of their program online abroad or on educational platforms.

Educational web platforms became one of the branches of individual education. Nowadays, a student from any region can take courses on basic subjects from leading Russian universities. However, there currently is no complete concept of online learning. Therefore, the development of an adaptive-learning system, which would be able to provide for the construction of individual educational trajectories, based on new approaches, is the current challenge for modern education [9].

IEPs is a new phenomenon for Russian higher school. That is why it can help Russian universities to individualize the educational processing the higher school, and also minimize complexities in the organization of IEPs for students. By adjusting his/her educational path, as a result, the student becomes a unique specialist, i.e. no one else will not have an absolutely similar set of subjects. This becomes an advantage when looking for a job and increases the prestige of the educational institution.

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