

Depending on the concept of "individual student," first of all, a person's public qualities are recognized. The social essence of a person is formed in his relationship with the society.

In terms of society, the quantity and quality of the person are varied. Sociology of society defines the psychological type of society.

An individual has multi-stage structure. Hence, the highest level of psychological structure of individual students is the need-cause zone - the orientation of the individual, his or her community, other people, relationships, and social and job responsibilities. At the same time, the significance of the individual student is not only its direction, but also its ability to realize its capabilities. And this, in its turn, is linked to the human flexibility, ability, knowledge and dexterity, emotional, volunteer, and mental functions. [4-3]

A person does not come to life with the ability, his character, and his curiosity, all of which are formed on the basis of a certain naturally occurring human life. The basis of the human body, that is, its genotype determines its anatomical-physiological features, the movement of the nervous system. The owner of the biomedical structure is the person who is gaining an individual degree in the past, with the ability to experience accumulated experience in the form of knowledge, tradition, natural and spiritual culture.

The development of individual students is related to continuously expanding their capabilities and increasing their needs. This level of development is measured by a zone of relationships that are characteristic of a person. The rule of human development is insignificant and does not exceed everyday life. And the person with high level of development is distinguished by his spiritual status and social value values.

References:

1. Nemov R.S. Psychology Almaty 2003 (pages 198-201).
2. Content of the psychological service system at school. Taraz 2002
3. Shevardrin N. I. «Psycho diagnostics, correction and improvement of personality» M, 1998 r.
4. Zhumabayev A. Content of psychological service at school.// Taraz city. - 2002, 8 - 11 p.
5. Kerimov LK The tragic subdivision and its transformation.

M.R.Mamedova, A.S.Askarova, S.A.Bolegenova, S.A.Bolegenova, N.R.Mazhrenova,
Zh.K.Shortanbayeva
Al-Farabi Kazakh National University (Almaty, Kazakhstan)
Madinamamedova777@gmail.com

The perspectives for using online courses to implement the concept of lifelong learning

In the rapidly developing society access to the education is the key to stay informed on all the latest scientific and technological progress. The education is not always accessible to the population who are trying to catch up with the fast pace of life. However, there is a solution in the face of online courses, which has been implemented by several other countries and which has shown tremendous success in its performance over the years and that's been introduced to our educational systems too.

A recent message from the head of our state, Kassym-Zhomart Tokayev, to the people of Kazakhstan refers to the quality of education and, in particular, higher education. High-quality education and progress in the field of science will ensure the progress of the nation, therefore, due attention must be paid to raising the level of scientific research and its application in practice.

At all times one of the most important functions of the education system was its continuity, which is the possibility of personality in various periods of his life to be trained and acquire new knowledge in kindergartens, schools, colleges, universities. In recent decades, given the rapid

development of scientific and technological progress, which requires constant improvement of knowledge, students, teachers, and everyone else needs to take actions towards self-development.

In connection with the transition of the education system to the Bologna process, the continuity of the learning process in higher education will be held on 1st and 2nd levels of education. Further, of course, possible to enter doctoral studies, but not every University graduate continues his studies in the University. After graduation, the student starts his career and almost immediately encounters a lack of knowledge or complete lack of, for example, in a new area of interest. Electronic educational resources that universities commonly use in their activities assist the independent work of teaching. They give the ability to view, remember or pass the training course again. However, electronic educational resources aren't enough, especially if the student is a versatile personality. Nowadays to be fully prepared, is the key to achieving success. Therefore, it will be more convenient to suggest using massive open online courses, as this area is one of the most popular, which in recent years has grown rapidly and is gaining momentum. [2]

The use of massive open online courses (MOOC) provides the opportunity to hear the best lecturers from all over the world, allows you to gain knowledge without the job training, and reduces the need of educational migration.

As one of the promising directions of development of continuous education, the article discusses. The use of MOOC in the process of training teachers creates the conditions for the construction of individual educational trajectories, the maximum individualization of the learning process. Therefore, it is concluded that intense need to develop such courses, especially for the system of advanced training and professional retraining of teachers at all levels. [1]

Since 2010, KazNU has been developing distance and e-learning and uses Moodle as Learning Management System (LMS). Moreover, in 2014 KazNU in cooperation with the teaching staff began to work on the creation of MOOC, and is currently on the Internet at <http://open.kaznu.kz>. MOOC operates its own platform based on the Open EDX system.

Currently at various stages of development are 35 MOOCs. In 2017 it is planned to work on the development of high-quality MOOC, publication on the platform and the active participation of the audience. The next stage is to establish close cooperation between the representatives of the consortium, which will create a national platform of open education in close cooperation with MES of the RK (Republic Kazakhstan). The following universities are partners for open education: Al-Farabi Kazakh National University, Atyrau University, KSTU university of the first president of the RK, Ahmet Yesevi University, Kazakh state women's pedagogical university, Narxoz University, Zhubanov University, Bolashaq academy, KAFU training future leaders, Bolashaq University, Saken Seifullin University, Alikhanov University etc.

The high productivity of online courses is characterized by the fact that through the use of available tools, such as presentations, videos, tests, chat and the ability to repeatedly review the lesson, the maximum study of the course is achieved anywhere and at any time. Moreover, it's more comfortable to follow each student's progress and no one is late for lectures due to the application you can connect to the lesson even from a mobile phone.

Open access registration of anyone to the chosen course, which is available at any convenient time for training and anywhere the only thing is required, is the Internet.

The transition to modules only after completing the tasks of the previous module disciplines, allows you to control the process, plus there is a feedback system of the student and teacher.

Distance learning is the perfect complement to traditional methods of training, and in certain conditions, and alternative, which allows the teacher not to interrupt the process of self-development and self-education in the rapidly changing conditions of modern life. [3]

Self-selection of distance learning courses offered by various organizations and experts, which enabled teachers to improve their level of knowledge in a particular area, to form readiness for effective design of educational programs based on individual educational needs of students;

designing educational environment in accordance with the modern needs of a changing information environment.

In recent years Kazakh universities create their own platforms for hosting online courses. Signing up for the course teaching comprises many ways of teaching: lectures, seminars, practical work, individual assignments, video materials, discuss their results on the forums.

In order to improve the quality of education that meets modern requirements, Kazakhstan universities, together with Russian universities, will create online courses in the field of sustainable waste management for Russian and Kazakh universities using the best practices of European experience. The project is «Improving competence in sustainable waste management in higher education institutions of Russia and Kazakhstan». Its members are partner universities: Tampere University of Applied Sciences, TAMK, Finland (Grant holder); Lillebaelt Academy (University of Applied Sciences), Denmark; Valladolid University, Spain; ITMO University (St. Petersburg National Research University of Information Technologies, Mechanics and Optics), Russia; Ural Federal University named after the First President of Russia B.N. Yeltsin, Russia; Tyumen State University, Russia; Al-Farabi Kazakh National University, Kazakhstan; Sh.UalikhanovaKokshetau State University, Kazakhstan; M.Auezov South Kazakhstan State University, Kazakhstan.

The training of highly qualified personnel in the field of sustainable waste management will give impetus to the development of research in collaboration with local enterprises and the creation of innovative technologies for the reuse of valuable components from waste. The cooperation of companies and universities as part of education should be used to the maximum extent possible during the training process to train qualified specialists, and online modules will provide the opportunity for continuing professional training for interested groups.

Teachers of Thermophysics and Technical Physics department are responsible and developing the following courses:

1. Basics of waste utilization
2. Reuse of side products and outputs
3. Physical-chemical treatment methods in waste management
4. Waste-to-energy plants and technologies
5. Energy efficient technologies in waste treatment

Training seminars were held for teachers at universities in Finland, Denmark, the Russian Federation, and Kazakhstan on the basis of Sh.Ualikhanov Kokshetau State University and M. Auezov South Kazakhstan state University.

Teachers of the Department of Thermophysics and Technical Physics of Al-Farabi Kazakh National University are responsible for the development of two modules: Non-energy and energy technologies for waste disposal.

For these courses, programs have been developed that are discussed with leading experts from large enterprises and state environmental services (TPP-1; TPP-2; Almaty Electric Networks; Atameken National Chamber of Entrepreneurs of the Republic of Kazakhstan, etc.). It is planned to include new disciplines in modular educational programs with the participation of employers: “Processes and equipment for waste separation at marshalling yards, storage facilities and processing enterprises”, “Environmental aspects and assessment of the impact of production and consumption waste on the environment”, “Technological processes of energy waste management”, “Thermodynamic basics of waste management”, “Environmental aspects and efficiency of energy recovery.” An agreement was reached on cooperation with the leadership of the waste sorting complex in Almaty.

Information about the project is available on the university website; trainings for the department staff on the use of online training tools (e-learning tools) and modern pedagogical approaches.

Work in this direction undoubtedly needs to be expanded, not only to stimulate small and medium-sized businesses in the field of waste recycling, but also to raise information work to a new

level. We hope that our training courses will be able to make a significant contribution to the greening of the upbringing and education of society.

The main results of the planned work - eight developed online training modules on sustainable waste management for students and employees of companies will be posted on the itmo.courses.ru platforms of ITMO University (Russia) and MOOCAl-Farabi KazNU (Kazakhstan) in February 2020 year.

Piloting of the courses will begin in September, each university will post the prepared courses on schedule. The pilot will receive feedback from students, teachers and employers, which will improve the content and structure of the courses. It should be noted the ability of making changes to the posted courses.

References:

1. Бугайчук К. Л. Массовые открытые дистанционные курсы: история, типология, перспективы // Высшее образование в России. - 2013. - № 3. - С. 148-155.

2. Велединская С. Б. Смешанное обучение (blended-learning) и его возможные перспективы в ТПУ. Уровневая подготовка специалистов: государственные и международные стандарты инженерного образования // Сборник трудов научно-методической конференции. — Томск: Изд-во ТПУ, 2013. — С. 105–106.

3. Tomlinson B., Whittaker C. Blended learning in English teaching: course, design and implementation // British Councilю - London, 2013. – Vol. 3, No. 2. – P. 23-32.

Mussaibekov R.K., Dautov A.O., Shuyushbayeva N.N.
Kokshetau State University named after Sh.Ualikhanovrashid1956@bk.ru

Applying of aesthetic elements in mathematics and physics

Frequently among of numbers and mathematical signs, we do not notice all the beauty and logic of the evidence of this science. The beauty of science was once noticed by N.E. Zhukovsky. He wrote: “Mathematics has its own beauty, both in painting and in poetry [1]

For thousands of years, the Kazakh people used a unique structure that called a yurt. This is a very beautiful home, the development of which goes into a very distant past. In the VI century BC. on the expanses of the Great Steppe in Kazakhstan, the settlement area reached 2-3 thousand. Already from the X century throughout the Great Steppe, a single type of collapsible dwelling prevailed, which served the Turks both during the Seljuk campaigns, as well as during the time of Genghis Khan. It should be noted that the yurt is the main city-forming element of nomadic people. Kazakhs, like their ancestors, preferred yurts. It was at this time that the Kazakh yurt was the pinnacle of the development of nomad architecture; it was more than the rest of the yurts. The yurt took into account: proportion, ornament: on the outside it is larger, and on the inside it is smaller and more colorful, and this has been preserved to this day [2-7].

The main elements of the wooden base of the yurt: kerege, uyk, shanrak, yesik. Let us explain these elements. Kerege is a sliding part of the yurt, its base is trellised. Uyk - dome poles. Shanrak is a circular top of the dome; a door made of wood with folds is a yesik. Kereges are formed from separate sections - a rope, each of them is made of saganak - these are slats connected to each other along the diagonal axis. The planks are interconnected and in accordance with the fact that the grid of the sliding grate has depending on the form of connection of the planks, the grid of the sliding grate formed in this case is divided into two types of kerege: wind eye (a large mesh of light poles) and net eye (small grid of square planks, and the planks are more massive than the parts of the wind eye, but the mesh in this case is smaller). Wind eye is resistant to strong winds, and net eye has the property of waterproofing during prolonged rains.