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DOI: [10.15293/2226-3365.1604.09](https://doi.org/10.15293/2226-3365.1604.09)

УДК 372.881.1

## МОДЕЛЬ ТЕХНОЛОГИИ ИНОЯЗЫЧНОЙ ПОДГОТОВКИ СТУДЕНТОВ ИНЖЕНЕРНЫХ СПЕЦИАЛЬНОСТЕЙ В УСЛОВИЯХ ПОЛИЯЗЫЧНОГО ОБРАЗОВАНИЯ В КАЗАХСТАНЕ

*Ж. Г. Шайхызада (Караганда, Казахстан), Е. А. Костина (Новосибирск, Россия),  
А. М. Затынейко, А. Е. Кубеева, Б. А. Жетписбаева (Караганда, Казахстан)*

*На сегодняшний день иноязычное образование является значимой составляющей высшего профессионального образования, т. к. в процессе вхождения вузов Казахстана в Болонский процесс, предполагающий академическое и профессиональное признание казахстанских дипломов на европейском пространстве, высокий уровень компетентности по иностранному языку необходим специалистам любого профиля. В особенности данное положение, связанное с необходимостью международной аккредитации образовательных программ в области инженерии, техники и технологий и возможностью получения отечественными специалистами звания «Евроинженер», актуально в области подготовки инженерных кадров в Казахстане. Необходимость подготовки будущих инженеров в соответствии с Европейскими стандартами актуализировала перед вузами Казахстана задачи, связанные с целенаправленным и непрерывным обучением иностранным языкам, которое должно быть ориентировано на формирование иноязычной коммуникативной компетентности студентов вузов. Решение данных задач требует определенного концептуального подхода к иноязычной подготовке студентов инженерных специальностей в рамках их высшего профессионального обучения, который бы обеспечил наиболее*

**Шайхызада Жанар Газизкызы** – докторант, руководитель Центра развития полиязычного образования, Карагандинский государственный университет им. академика Е. А. Букетова, Казахстан.

Е-mail: [shaikhyzada@yandex.ru](mailto:shaikhyzada@yandex.ru)

**Костина Екатерина Алексеевна** – кандидат педагогических наук, доцент, профессор кафедры английского языка, декан факультета иностранных языков, Новосибирский государственный педагогический университет, Россия.

Е-mail: [ea\\_kostina@mail.ru](mailto:ea_kostina@mail.ru)

**Затынейко Анатолий Михайлович** – кандидат педагогических наук, доцент физико-технического факультета, Карагандинский государственный университет им. академика Е. А. Букетова, Казахстан.

Е-mail: [tolik\\_zzz79@mail.ru](mailto:tolik_zzz79@mail.ru)

**Кубеева Айсулу Еркиновна** – магистр педагогических наук, Карагандинский государственный университет им. академика Е. А. Букетова, Казахстан.

**Жетписбаева Бахытгуль Асылбековна** – доктор педагогических наук, профессор, декан факультета иностранных языков, Карагандинский государственный университет им. академика Е. А. Букетова, Казахстан.

Е-mail: [zhetpisbajeva@mail.ru](mailto:zhetpisbajeva@mail.ru)



*оптимальный путь достижения указанной цели. В этой связи авторы статьи обращаются к вопросу применения педагогических технологий при изучении иностранных языков, позволяющих четко определять цели, планировать ожидаемый результат и ориентировать деятельность на его достижение, вводят новое понятие «технология иноязычной подготовки студентов инженерных специальностей вузов» и раскрывают его сущность. В статье авторами также представлена модель данной технологии, включающая такие взаимосвязанные друг с другом составляющие как цель и результат обучения иностранным языкам, содержательный, организационно-процессуальный и контрольно-оценочный компоненты. Представленная модель технологии предполагает модернизацию процесса обучения языкам, отбор содержания иноязычного обучения и приведение национальной системы оценивания в соответствие с Европейской системой перевода зачетных единиц (ECTS). Таким образом, посредством соответствующего определения и организации каждого компонента модели, технология иноязычной подготовки студентов инженерных специальностей в вузе способствует достижению главной цели обучения иностранным языкам в вузе – формированию иноязычной коммуникативной компетентности студентов.*

**Ключевые слова:** технология, высшее инженерное образование, Евроинженер, иноязычное образование, иноязычная подготовка, иноязычная коммуникативная компетентность, педагогическая технология, модель, содержание обучения иностранным языкам

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DOI: [10.15293/2226-3365.1604.09](https://doi.org/10.15293/2226-3365.1604.09)

Zhanar G. Shaikhyzada, PhD Student, Head of the Centre of Multicultural Education Development, Academician E. A. Buketov Karaganda State University, Karaganda, Republic of Kazakhstan.

ORCID ID: <http://orcid.org/0000-0002-4923-3556>

E-mail: [shaikhyzada@yandex.ru](mailto:shaikhyzada@yandex.ru)

Ekaterina A. Kostina, Candidate of Pedagogical Sciences, Associate Professor, Professor of the English Language Chair, Dean of the Faculty of Foreign Languages, Novosibirsk State Pedagogical University, Novosibirsk, Russian Federation.

ORCID ID: <http://orcid.org/0000-0002-1428-7095>

E-mail: [ea\\_kostina@mail.ru](mailto:ea_kostina@mail.ru)

Anatoly M. Zatyneyko, Candidate of Pedagogical Sciences, Associate Professor of Physic-Technical Faculty, Academician E. A. Buketov Karaganda State University, Karaganda, Republic of Kazakhstan.

ORCID ID: <http://orcid.org/0000-0002-6960-4203>

E-mail: [tolik\\_zzz79@mail.ru](mailto:tolik_zzz79@mail.ru)

Aissulu E. Kubeyeva, Master of Pedagogical Sciences, Academician E. A. Buketov Karaganda State University, Karaganda, Republic of Kazakhstan.

ORCID ID: <http://orcid.org/0000-0001-7255-6858>

E-mail: [aseka@mail.ru](mailto:aseka@mail.ru)

Bakhytgul A. Zhetpisbayeva, Doctor of Pedagogical Sciences, Professor, Dean of Foreign Languages Faculty, Academician E. A. Buketov Karaganda State University, Karaganda, Republic of Kazakhstan.

ORCID ID: <http://orcid.org/0000-0002-1528-4494>

E-mail: [zhetpisbayeva@mail.ru](mailto:zhetpisbayeva@mail.ru)

## THE MODEL OF TECHNOLOGY OF UNIVERSITY ENGINEERING STUDENTS' FOREIGN LANGUAGE TRAINING IN CONDITIONS OF MULTILINGUAL EDUCATION IN KAZAKHSTAN

### Abstract

*Nowadays foreign language education is considered to be an essential component of higher vocational education since during the introduction of Kazakhstan's higher educational establishments in the Bologna process, which implies the academic and professional recognition of the country's diplomas in European countries, a high level of foreign language proficiency is necessary for experts of any profile. In particular, this statement is of great importance in the field of training engineering specialists in Kazakhstan connected with the necessity of international accreditation of educational programs in the field of engineering and technologies and the possibility for engineering professionals to receive the rank of "Euro engineer". The demand to train engineers in compliance with the European standards of engineering education foregrounds for Kazakhstan's universities issues concerning purposeful and continuous foreign languages teaching which has to be aimed at the formation of*

*students' foreign language communicative competency. The solution of these issues calls for a new conceptual approach to engineering students' foreign language training within higher vocational education which would provide with the most optimal way of achieving the stated goal. In this regard, the article authors address to the question of using pedagogical technologies in the process of foreign languages teaching and learning which enable to set up precise goals, plan the expected outcome and focus the whole activity on its achievement. In the article the authors introduce the new concept "technology of university engineering students' foreign language training" and provide insight into it. They also present the model of this technology which includes such interrelated components as the goal and outcomes of foreign languages teaching, content-related, organizational-procedural and monitoring-assessment components. The presented model suggests the modernization of the process of foreign language teaching, the selection of the language learning content and the putting of the national assessment system in conformity with the European Credit Transfer and Accumulation System (ECTS). Thus, through the relative determination and organization of each structural component of its model, the technology of university engineering students' foreign language training condition facilitates the achievement of the main goal of teaching foreign languages in higher schools – the formation of students' foreign language communicative competency.*

#### **Keywords**

*Technology, higher engineering education, Euroengineer, foreign language education, foreign language training, foreign language communicative competency, pedagogical technology, model, content of foreign language learning*

#### **Introduction and Problem Statement**

Recent years in the field of foreign languages teaching and learning there have constantly been discussions concerning the usage of technologies which are understood not only as new technical tools but also as new forms and methods of teaching, new approaches to the learning process, etc.

The introduction of technologies in educational process is primarily concerned with the enhancement of the content and methods of foreign languages teaching for the purposes of modern life needs. In Kazakhstan's educational practice the questions of foreign languages teaching and learning are included into the system of foreign language education defined in the Concept of Foreign Language Education Development of Kazakhstan Republic as a new methodology with the intercultural dominant realized through the goal, the selection of the

content and technologies of foreign languages teaching adequate to the process of the formation and the development of an individual capable to carry out effectively intercultural communication<sup>1</sup>.

The theoretical and methodological literature has also widely used the notion of "foreign language training" which relates to the studying of the same questions foreign language education is engaged in. Hence, in our opinion, it is possible to speak about the equality of these two concepts with the only difference that within the framework of a certain stage of education (pre-school, school, higher education, etc.) or a certain level of foreign language learning it is more correct to speak about foreign language training. In other words, *foreign language training* is the realization of foreign language education at a certain stage of national education system or a certain level of foreign language learning.

<sup>1</sup> The Concept of Foreign Language Education. Almaty, Abylay Khan Kazakh University of

International Relations and World Languages, 2006, 20 p.

Being an integral part of education system in general, foreign language education is presently seen as a significant component of higher vocational education. This fact is explained by the introduction of Kazakhstani higher educational establishments in the Bologna process which implies the academic and professional recognition of domestic diplomas in European countries and, therefore, a high level of foreign language proficiency is necessary for experts of any profile.

It results in the necessity to improve foreign language training in universities. In particular, this statement is of great importance in the field of training Kazakhstan's engineering specialists since the demand for the qualified engineers with foreign language skills is a nationwide requirement. So, for example, the improvement of the quality of engineers' vocational education is stated as one of top-priority objectives in the State Program of Industrial-and-Innovative Development of the Republic of Kazakhstan for 2015–2019 and a necessary condition for the introduction of Kazakhstan in the European federation of national engineering associations (Fédération Européenne d'Associations Nationales d'Ingénieurs, FEANI) which is officially recognized by the European commission as the expert on engineering education. The membership in this organization will facilitate the creation of Kazakhstan's system of professional accreditation of educational programs in the field of engineering and technologies and the possibility for our professionals to receive the rank of "Euro engineer" which provides the recognition and acknowledgement of their professional competencies almost in all countries of Europe.

According to the fundamental documents of the European federation of national engineering

associations (FEANI), the requirements to Euro engineers' competencies include not only relevant engineering education, professional knowledge and skills (problem analysis, carrying out of researches, designing, evaluation of engineering activity, etc.), personal skills (communication skills, adherence to professional ethics, understanding of the engineer's responsibilities to the society) but also the knowledge of European languages which is a necessary tool for conversing and working with foreign colleagues<sup>2</sup>.

The importance of the given statement poses for Kazakhstan's universities a problem of educating qualified engineers capable to perform professional activities in the foreign language environment. Therefore, in conditions of the international educational sphere the issues on future engineers' foreign language training within their higher vocational education has become of key importance and led to the need for the revision of the goals, structure and content of vocational education of engineering students. That is why the study of foreign languages is one of the most important criteria for professional life activity of a man in the modern multilingual and multicultural world. At the same time the practice which has developed during many years of teaching foreign languages to engineering students in Kazakhstan's higher schools is characterized by some difficulties: there is no succession and continuity in foreign languages teaching between education stages (school–college–university); there are no unified requirements to defining the goals, objectives and subject-matters for developing speech skills as well as no unified requirements to language proficiency levels, in particular to language for special purposes; there is no unified approach to converting the Kazakhstan assessment system

<sup>2</sup> ENAEE Mission. General Policy Statement. Brussels, ENAEE, 2009, 12p.

into European Credit Transfer and Accumulation System (ECTS).

The technology of foreign language training of university engineering students is designed to solve the listed above problems. And in order to reveal the essence of this kind of technology it is seen necessary to specify the concept "pedagogical technology".

### Methodology and methods

The notion of technology is actively penetrating humanitarian fields of people's activity (policy, art, culture, healthcare, and education) and it is connected with the main characteristic of any technology: the accurate planning of the expected outcome of this or that activity and focus on its achievement.

Long time the term "technology" stayed out of the conceptual framework of pedagogy, though its literal meaning ("doctrine about best practices") does not contradict pedagogy objectives: description, explanation, forecasting and designing of pedagogical processes [1]. The idea of technologization of education and learning processes occurred in the first half of the XX-th century as the reaction to expanding opportunities of technical teaching aids. Now it is already the objective trend more and more proving itself in education practice and stipulated by a number of current problems realized by teachers, students and their parents, managers and methodologists.

The concept "pedagogical technology" is a rough translation of the English concept "educational technology". That is why in Russian and Kazakhstan's pedagogy these two terms are often seen as synonymous. Having arisen in the second half of last millennium in the USA the term "educational technology" was quickly included into the lexicon of all developed countries. In the foreign pedagogical literature the

concept "educational technology" originally corresponded with the idea of "technologization" of educational process whose supporters saw the wide use of technical training aids as the major way to increase the efficiency of the learning process [2]. This interpretation of educational technology remained up to the middle of the 1970-s.

In the 70-s of the XX-th century foreign pedagogy generated the idea of complete controllability of the educational process which soon led to the following instruction in teaching practice: didactic problems can be solved by managing the learning process with precisely set goals the achievement of which can be clearly described and defined. The first contribution to the theoretical working out of this problem has been brought by B. Bloom whose researches resulted in the book "Taxonomy of Educational Objectives" presenting "the classification of educational goals". The consecutive orientation on clearly defined goals, thus, becomes the key note of the technological construction of the educational process [3].

Accordingly, many international editions presented the new interpretation of the essence of educational technology: it is "not simply researches in the field of using technical teaching aids or computers; it is researches to reveal principles and develop ways of optimization of the educational process by analyzing the factors raising educational efficiency, designing and implementing methods and materials, and evaluating applied methods"<sup>3</sup>.

The study of pedagogical technology definitions of the next years shows that foreign approaches to its definition can be subdivided into: narrow definitions, i.e. definitions connected with the use of various equipment in the educational process (M. Clark, F. Perceval,

<sup>3</sup> Howe A., Romiszowski A.J. International Yearbook on Technology of Education and Training, 1978/79. London, Kogan Page, 1978, 764p.

G. Ellington); wide definitions which are based on the complex use of technical and human resources (D. Finn, P. Mitchell, etc.).

P. Mitchell's studies significantly impacted the development of educational technology. He described educational technology as an interdisciplinary conglomerate of ideas, concepts, systems, approaches and methods of teaching used to increase the efficiency of pedagogical systems<sup>4</sup>. Other attempts of foreign researchers to define educational technology are based on only one of its features, for instance: educational technology as technical teaching aids [4], educational technology as the educational process [5], and educational technology as a set of knowledge [4].

Present researchers of educational technology problems also note the changing context of its meaning and dissolving boundaries of its essence [6]. Therefore, the UNESCO defines educational technology as a double-natured structure: on the one hand, these are audiovisual aids, computers and other various sorts of hard and software; on the other hand, it is the methodology of planning, realizing and evaluating the learning process and knowledge acquisition<sup>5</sup>.

There are two more definition of educational technology provided by the Association for Educational Communications and Technology (AECT) which are also of interest for us. The first one officially accepted in 1979 states that "pedagogical technology is a complex integrative process including people, ideas, means and ways of the organization of educational activity for the analysis of problems and the management of the process of solving problems covering all aspects of knowledge acquisition".

Thus, pedagogical technology was considered to be the strictly scientific designing and exact reproduction of pedagogical actions guaranteeing success<sup>6</sup>. In 2008 AECT provided the new edition of educational technology definition according to which this is the study and ethical practice of facilitating learning and improving performance by creating, using, and managing appropriate technological processes and resources<sup>7</sup>. According to D.Hlynka and M.Jacobsen, the new AECT definition is important because it provides us with guidance and a direction. The sharp focus on facilitating learning and improving performance via technological processes and resources, versus products or tools, is vital to understanding the educational part of the definition. Distinct from computer scientists or engineers, most educators are not in the business of designing or inventing the hardware, cables and connectors. Instead, educators select and evaluate technological processes and resources; they create environments and design learning experiences; they assess learners and deep learning and evaluate the quality of performances. [7].

Therefore, these days both interpretations of educational technology can be come across in foreign literature: its initial understanding as the maximum use of opportunities of technical teaching aids and the understanding of educational technology related with the idea of managing the whole educational process, i.e. purposeful setting up of educational goals in accordance with the purposes of the whole course of the educational process, monitoring and evaluating the efficiency of the chosen forms, methods, means, assessing current outcomes, correctional measures [8–10].

<sup>4</sup> The Encyclopedia of Educational Media Communications and Technologies. London, 1978, 745 p.

<sup>5</sup> New Trends in the Utilization of Educational Technology for Science Education. Belgium, the UNESCO Press, 1974, 242 p.

<sup>6</sup> Educational Technology: A Glossary of Terms. Washington, DC, AECT, 1979, 169 p.

<sup>7</sup> Januszewski A., Molenda M. Educational Technology: A Definition with Commentary. New York, Lawrence Erlbaum Associates, 2008, 369 p.

In the Soviet (Russian) pedagogical literature there are many terms characterizing these or those technologies (pedagogical technology, educational technology, teaching technology, learning technology, traditional technology, author's technology, etc.) and originally many teachers did not differentiate between the concepts "pedagogical technology", "technology of learning", "educational technology".

There are different ways to the understanding and the usage of the term "pedagogical technology". So, for example, G. K. Selevko singles out four positions in the scientific understanding and the usage of the term "pedagogical technology": 1. Pedagogical technologies, as a means, i.e. the development and the implementation of methodological toolkit, facilities, educational equipment and technical teaching aids for the purposes of the educational process. 2. Pedagogical technologies as a method. 3. Pedagogical technologies as a research area. 4. Pedagogical technologies as a multidimensional concept [11].

Representatives of all four positions specified by G. K. Selevko interpret the concept "pedagogical technology" differently. It is understood as a set of means and methods of the reproduction of theoretically based processes of learning and education which allow to successfully realize stated educational goals [12]; a complex of psychological-and-pedagogical instructions defining a specified set and configuration of forms, methods, ways, teaching techniques, educational means; it is an organizational-and-methodological toolkit of the educational process [13]; a system set and order of functioning of all personal, instrument and methodological means used for the achievement of educational goals [14]; a model of joint pedagogical activity on designing, organizing and carrying out the educational process with provision of comfortable conditions for students

and a teacher [15]; an ordered set of actions, operations and procedures contributing to the achievement of the predicted and diagnosed outcome in changing conditions of the educational process [13].

G. K. Selevko gives the following definition: "pedagogical (educational) technology is the functioning system of all pedagogical process components which is scientifically-based, programmed in time and space and leading to the planned outcomes" [11]. He also singles out three aspects in "pedagogical technology": 1) scientific: pedagogical technologies are a part of pedagogical science studying and developing goals, content and methods of teaching and designing pedagogical processes; 2) procedure-descriptive: the description (algorithm) of a process, a set of goals, content, methods and means to achieve planned teaching outcomes; 3) procedure-operative: the realization of the technological (pedagogical) process, the functioning of all personal, instrument and methodological pedagogical means [11].

The further development of researches in the field of pedagogical technology has even more expanded its understanding that was reflected in various definitions of this concept by various teachers and methodologists. But in spite of the fact that there are a lot of definitions of the concept "pedagogical technology", all of them to some extent correspond to the criteria of technological effectiveness by G. K. Selevko: *conceptual importance* – each pedagogical technology has to be supported by a certain scientific concept; *systematic approach* – pedagogical technology must possess all features of a system (process logic, interrelation of all its parts, integrity) and provide the harmonization of goals, content and methodological system of the education process; *controllability* assumes the possibility of diagnostic goal-setting, planning, designing of the education process, stage-by-stage diagnostics, the variation of means and



methods for the purpose of outcome adjustment; *efficiency* – modern pedagogical technologies have to be effective and optimized on expenses, guarantee the achievement of the certain education standard; *reproducibility* implies the possibility to implement (repeat, reproduce) pedagogical technology in other similar educational institutions [11].

Thus, on the basis of the above stated, it is possible to assert that pedagogy generated a separate subject field – technologies – which assumes the management of the educational process and the guaranteed achievement of the set educational goals. And in spite of the fact that there are still various approaches to understanding of the concept "pedagogical technology", we can state that pedagogical technology is a deeply thought over model of the educational and pedagogical activity on designing, organizing and carrying out the educational process and that it assumes the realization of the idea of full controllability of the educational process.

The analysis of the scientific-and-theoretical literature also allows to draw a conclusion that pedagogical technology is interrelated with the system approach to education, covers all elements of pedagogical system: from the goal-setting to the designing of the whole educational process and monitoring of its efficiency. That is pedagogical technologies must be considered as a regular and consecutive embodiment in practice of the previously designed education process as the system of ways and means to achieve the educational goals through the management of this process.

In the definition of the concept "foreign language training" concerning university students of engineering majors we refer to the definition of pedagogical technology and criteria of technological effectiveness given by G. K. Selevko. Basing on them as well as the understanding of the essence of foreign language education specified above, we define the

*technology of university engineering students' foreign language training* as a system of principles and regulations of foreign language education aimed at forming the engineer of a new formation in accordance with international standard requirements by means of the special organization of the process of foreign languages teaching and learning, the improvement of its structure, content and assessment system. At the same time the organization of foreign languages teaching process, the improvement of its structure, content, assessment system is reached by their maximum adequacy to the purposes of foreign language education at a certain stage of education system. Hence, it is necessary to differentiate between technologies of foreign language training at school, college and higher school.

Thus, summarizing the aforesaid, we note that the understanding of the essence of "technology of university engineering students' foreign language training" is primarily interrelated with the concepts "pedagogical technology" and "foreign language education". The purpose of the technology of foreign language training in higher educational establishment is to determine the optimal way to achieve the goals of foreign language teaching through the modernization of the structure and the process of foreign language learning, the selection of the content of language learning, putting the assessment system in conformity with the European system.

The definition of the technology of university engineering students' foreign language training allows us to proceed to the question of its working out. The process of working out any technology may be named as the process of instructional design which involves creating the image of a forthcoming activity that leads to the forecasting of outcomes of this activity. At the same time it is necessary to consider that instructional design assumes a consecutive and

continuous movement in which all components, stages, states, processes, phenomena and participants of this movement are interrelated [16].

In turn, in pedagogical science the designing of pedagogical technologies or educational technologies, except for the designated above, assumes working out of the content of a discipline, forms of the educational process organization, the choice of methods and aids, defining the system of monitoring and assessment of formed knowledge and skills [17]. The content of pedagogical technology is understood as the content and structure of a material which is offered to students for studying, and also a complex of various problems, exercises, tasks which help them to form educational and professional skills. In addition, a very important role is played by the organization of studies which should be directed on mastering knowledge, abilities and skills; the forms of monitoring, assessment results should be noted here as well.

Thus, the technological approach to educational process presumes: setting of the goals and their maximum specification with the orientation to outcome achievement; profiling of the content; the organization of the whole educational process according to the educational goals; the assessment of current outcomes; the adjustment of the components of the educational process directed on the achievement of the set goals; the final evaluation and assessment of outcomes and, probably, a new goal-setting [18].

Summarizing all above told, we can state that the main components of technologies are educational goals, content, organization of the educational process, means of pedagogical interaction of a student and a teacher, performance outcome.

As it has been defined above, the technology of university engineering students' foreign language training implies the

determination of the optimal way of achieving the goals of foreign languages learning through the modernization of its following structural components: the learning process, the content and the assessment system. Hence, the given technology will represent the integrated cohesion of content-related, organizational-and-procedural and monitoring-and-assessment components. Along with the given components the other structural components of our model are the goal and the outcome of foreign languages teaching of students of engineering majors.

To present our developed technology, we will address to the modeling method. In pedagogical science the modeling method is proved in works of V. G. Afanasyev, V. A. Venikov, B. A. Glinsky, I. B. Novik, V. A. Schtoph, etc. We will take advantage of the fullest, in our opinion, definition of modeling given by G. V. Sukhodolsky who interprets it "as a process of creating the hierarchy of models where a real-life system is modeled in various aspects and by various means" [19].

Modeling is a theoretical method of research of certain objects by the reproduction of their characteristics on another object – a model – which represents an analogue of this or that fragment of the reality (real or cogitative), that is the model original, and a model is a unity of large systems interacting with each other [20]. When modeling pedagogical systems and some of its fragments, the other necessary condition is the definition and the formulation of the goal of the pedagogical activity as its system-forming factor. The basic requirements to the formulation of goals are the following: the reality of its achievement, the measurability of expected results as the goal in the most generalized kind represents an image of a desirable or predicted result [21].

## Results and discussion

In our work we have addressed to the method of modeling for the purpose of visual representation of the technology of university engineering students' foreign language training through the description of its structural components which are, in our opinion, a necessary condition for the achievement of the goal of teaching foreign languages in higher schools. In addition, it is necessary to notice that the components and the content of each component have been reconsidered with taking into account modern requirements to foreign language training as one of the main elements of vocational education of future engineers, and also the necessity to solve specified above problems in foreign languages teaching in higher educational establishments.

According to the definition of the concept "the technology of university engineering students' foreign language training", the model of the given technology is presented by 5 interrelated with each other components (figure 1).

*The goal-related component* of the technology model is obviously connected with the aims of foreign languages teaching of students in terms of new requirements to a university graduate of engineering majors.

The formulated goal demands the statement of objectives for its achievement. They are the singling out of structural components of engineers' foreign language communicative competency and the representation of the process of their formation. As a rule, the specified statement of objectives is caused by the fact that foreign language communicative competency is formed gradually component by component and by means of all disciplines of the degree program. And if its components are formed at the sufficient and high level, it is possible to speak about formed foreign language communicative competency as a whole.

*The content-related component* of the technology of university engineering students' foreign language training is defined by the Concepts of Continuous Foreign Language Training of Engineers in the Republic of Kazakhstan which allows to prove conceptually the structure and the content of the given training and also to provide the mechanism of diversification of engineering education in accordance with international standards.

According to the content of the goal of our technology, the content-related component of the model should be directed on the working out of such a curriculum of foreign languages teaching where an important component would be the teaching of professional communication. Moreover, this teaching process is to form foreign language professional-and-communicative competence as the basic component of students' foreign language communicative competency.

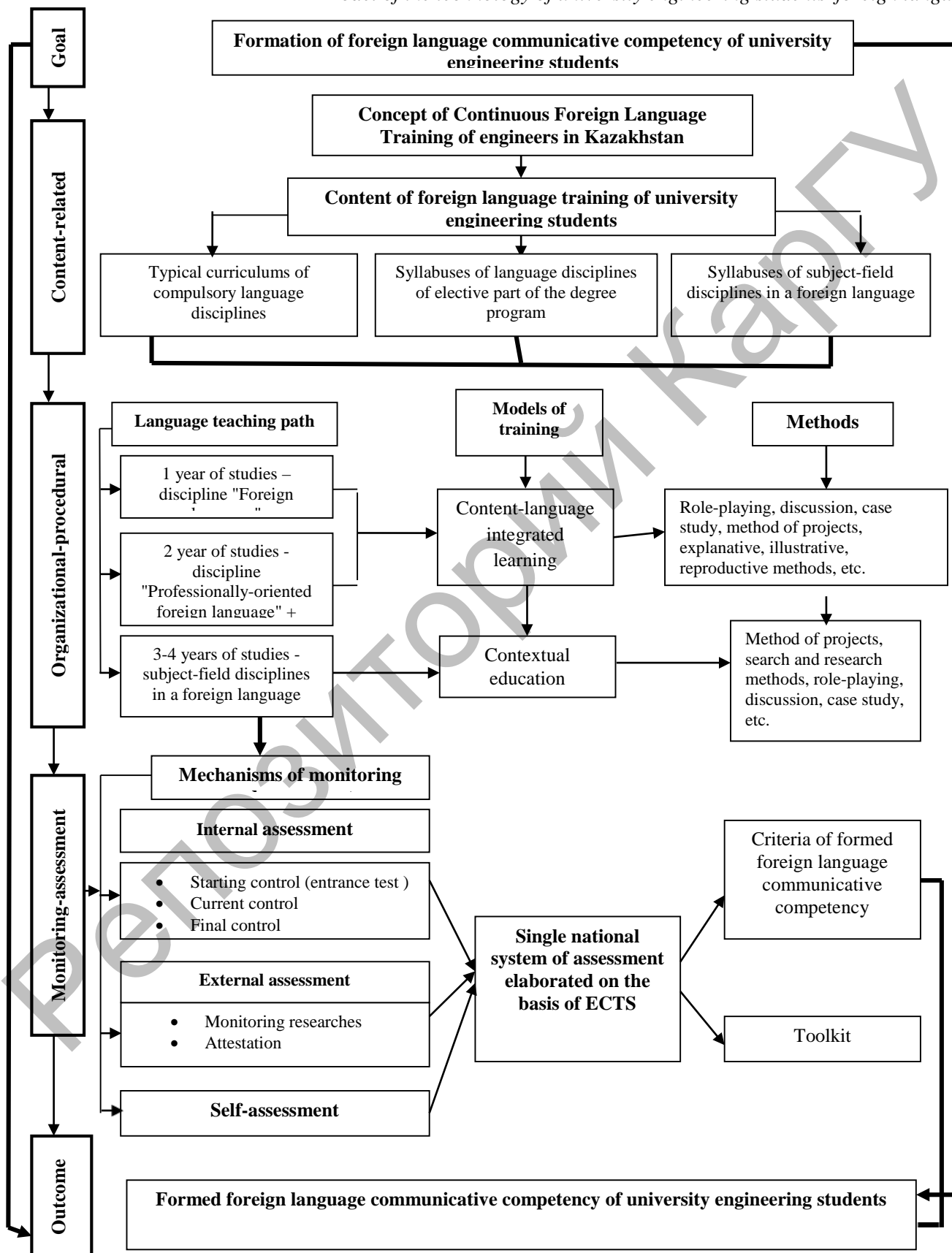
The organizational-procedural component is presented by the language teaching path, models of training and methods aimed at the formation of necessary competences.

The determination of the foreign language teaching path will facilitate the achievement of the set goal of the foreign language course. The given path should include all stages of foreign language learning with corresponding language disciplines and subject-field disciplines taught in a foreign language, and also levels of mastering a foreign language according to the Common European Framework. The necessity to define such a path is caused by the problem in providing the succession and the continuity of foreign languages teaching between various stages of education and sometimes within one stage.

Having analyzed various approaches to the organization of the educational process and training models (problem-oriented, modular, student-oriented, etc.) with respect on studying their possibilities to form foreign language communicative competency of students, we have

Figure 1

Model of the technology of university engineering students' foreign language





drawn a conclusion that the nature of foreign language communicative competency can and should use possibilities of each of them. At the same time we believe that content-language integrated learning and contextual education correspond to the basic characteristics of competent-based language teaching to the fullest extent.

They allow to model the content of the professional activity mastered by students in a foreign language using professional situations and environments as a basic condition of professional knowledge and skills formation. The major methods of the organization of learning activity of students on the basis of content-language integrated learning and contextual education are information, receptive, reproductive methods, role playing and problem-solving method, research methods, case study, etc.

*The monitoring-assessment component* determines the possibilities of monitoring the process of foreign language communicative competency formation by means of structural and functional criteria of evaluating the level of formed foreign language professional-and-communicative competence basing on such factors as knowledge, abilities, skills and also procedural and outcome indicators of activity.

### Conclusions

Thus, summarizing the aforesaid, our developed model of the technology of university engineering students' foreign language training is aimed at determining the optimal way of achieving the goal of foreign languages teaching through the modernization of the process of foreign language teaching, the selection of the

language learning content, the putting of the national assessment system in conformity with the European one. Hence, the presented model of the given technology is seen as a set of such components as the goal and outcomes of foreign languages teaching, content-related, organizational-procedural and monitoring-assessment components.

This suggested model will promote:

- the unifications of the goal and objectives of engineering students' foreign language training in universities;
- the provision of the succession and the continuity of foreign languages teaching and learning between schools/colleges and universities;
- the determination of the foreign language teaching path as a whole which will contribute to the achievement of the set goal;
- the achievement of the goal of foreign languages teaching in higher schools – the formation of students' foreign language communicative competency – through the unified approach to the definition of the goal, objectives and content of foreign language teaching, the determination of foreign language teaching path in general, the organization of the whole process of foreign language teaching and transfer of national assessment system into ECTS.

This all will result in developing the effective process of the formation of students' foreign language communicative competency which is presently considered as an integral component of their professionalism and, therefore, achieving the main goal of engineering education – training competitive engineers



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