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# Communicative Skills Modeling in Contextual Foreign Language Training of Industrial University Students

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## Abstract

The purpose of the study is to create a relative model of the communicative skills formation in contextual training of an industrial university students. We have identified one of the most important conditions in the communicative model constructing. It is a modeling system organization which construct the necessary subsystems in the general practical and research logic ensuring the efficiency of the created model. We consider the issue of practical model construction having identified the main stages of communicative competence formation in context training, on the example of the discipline "Foreign language."

The main means of implementing context training is a method of modeling different types of situations. The creation of a certain type model of situation is associated with the preliminary idea construction of the student behavior in one or another possible situation and the forecasting of the professional future. The method of analysis, synthesis, pedagogical forecasting, and pedagogical design are also used according to the professionally-personality-oriented approach in the education system during our research.

Communication competence is one of the main characteristics of professional competence and professional training of future engineers because the main tasks of the university are: to realize the needs of the individual in intellectual, cultural and moral development, to create conditions for professional development and improvement, to train specialists combining high culture, communication and professional skills. The high level of communication skill development allows effectively to communicate in the team of professionals to achieve the goals. Communicative competence is developed through the modeling of communicative situations and training which help to develop self-confidence, self-esteem, self-affirmation, personal and social activity. The initial stage of communication should be the entry into the modeling process which begins with the identification of a specific problem, the justification of the communication needs. The communication need is an effective way to solve the identified problem and a choice of methodological communication grounds. Modeling is one of the actions in the process of the learner's awareness of the cognitive object as a means and element of intellectual reflection. As a sign-symbolic activity, modeling encourages a student to build generalized ways to perceive objects and phenomena of surrounding reality. The level of reflection, analysis and internal action plan is increasing.

A model of professional activity, systematic and interdisciplinary knowledge is built in accordance with the production technology in contextual education. The model includes indicators such as indicator of tolerance, indicator of intercultural awareness, indicator of focus on self-education and self-improvement, indicator of interest in a future profession.

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The main type of the student speech activity is reading and working with information from the original special literature in foreign language, search, reflection and processing for further use in communication. We have analyzed and performed a meaningful interpretation of the simulation results, determined the possibilities of stability of the obtained results and a general procedure of a communicative model constructing. It responds on the process of modeling complex phenomena, such as the process of learning and communication. Modern requirements of a communication knowledge model are mainly based on context and personal-oriented approaches and provide a description of the main professional activities, knowledge, skills of future engineers of various branches of science and industry. The model of building communication skills in context learning provides prerequisites for overcoming traditional didactic approaches to knowledge acquisition, involving students in various situations that stimulate their emotional and cognitive experience. A student creates a sustained cognitive motivation to solve certain problems related to his knowledge of the surrounding reality. The contextual training model of the communicative skill formation provides prerequisites to overcome traditional didactic approaches in the knowledge mastering and student involving. This model stimulates the student emotional and cognitive experience. The student creates sustained cognitive motivation to solve certain problems associated with knowledge of the surrounding reality.

*Keywords:* modeling, communication, reflection, foreign language, contextual education, communicative model.

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## **Introduction**

The following personal and business qualities of a specialist are distinguished according to a survey of graduate students working in prestigious companies. The first point is lace - sociability, communication, focus on result achieving, customer focus, responsibility, training, ability to plan work, organization, stress resistance, accuracy, attentiveness, loyalty to the company, ability to work in a team. The second point is practical experience, work experience. The third one is knowledge (education, knowledge of a foreign language).

Contextual training allows to bring the educational process to future professional activity, create subject and social activity contexts by means of educational tasks, models and situations, to adapt the future young specialist to the conditions of professional activity. A contextual approach equips students the sum of knowledge and skills to use them in various conditions of practical activity and professional experience, the ability to use this or that information.

The essence of contextual education consists in consecutive dynamic modeling in educational activity forms of students adequate of objective, social and moral content of their future social life and professional activity (Verbickij, 1991).

According to Ivanov, Mitrofanov, Sokolova (2003), the contextual approach is focused on the result of education, and the result is considered not the sum of learned information but the person's ability to act in various situations (Kozyrev, Radionova & Tryapicyna, 2008),

The concept of context education is designed to present students with future experiences appropriate to their needs, interests, maturity and goals during a given period of their development (Spicer, 1999).

New literature in the field of university education suggests that the convergence of basic skills and contextual learning can be the solution to many problems in education (Heller & Greenleaf, 2007; Lee & Spratley, 2010).

One way to create such relationships is to contextualize or teach basic skills in the context of disciplinary subject areas (Voss, 1987).

Identification and application of practical learning models (model of personal growth and development, "student" model, management model, structured learning model and others) contributes to acquisition of practical skills from students. (Valeeva, Koroleva, & Sahapova, 2014). In turn, the use of new educational technologies makes it possible to design practical skills in foreign language classes (Shakirova & Valeeva, 2016).

### **Purpose and objectives of the study**

The purpose of the study is to create a relative model of the communicative skills formation in contextual training of an industrial university students. We have identified one of the most important conditions in the communicative model constructing. It is a modeling system organization which construct the necessary subsystems in the general practical and research logic ensuring the efficiency of the created model. We consider the issue of practical model construction having identified the main stages of communicative competence formation in context training, for example: the discipline "Foreign language".

### **Literature review**

The possibility of modeling complex phenomena of the social sphere is discussed by Dakhin (2005). The scientist links the effectiveness of the simulated system to the fundamental problem of each designed

model completeness. the scientist calls one of the effective ways to increase the degree of model validity. It is an integrated or systemic context approach. This approach allows to introduce additional submodels through extensive expansion of the model system and to take various factors and directions of dynamic investigated system.

The complex model is not a simple sum of composite models but it represents a system. This system combines t composite elements which are interconnected each other and provide a scientific interpretation of the predicted results (Yadrovskaya, 2013).

One of the most important conditions of pedagogical model constructing is the organization of system modeling by constructing the necessary subsystems in the common practical and research logic, ensuring efficiency of the created model. Let us consider the question of practical construction of the model highlighting the main stages of this activity.

We rely on the works of such scientists as: Greenhalgh (2004), Dakhin (2005), Zaire-Beck (1995), Kuzmina (2014), Kukharev (2012), Fishman (2012) and others in our research. We have analyzed the most rational aspects of their proposed systems of pedagogical models construction and have described the process of didactic-methodical model creating. Moreover, we think that it is necessary to define main stages according to the complexity of the modeling subject and the system of mastering knowledge.

The initial step of the simulation should be to enter the simulation process, which begins by identifying a specific problem, justifying of the need to perform an effective way of identified problem solving and selecting of methodological grounds.

The process of problem identifying is based on the practice of pedagogical activity, specific problem situations in the contradictions of pedagogical reality.

The next stage is a specific formulated problem object of pedagogical reality. We think that communication is the analyzed object because it has the main place and role in pedagogical reality.

Communication object needs modeling and functions ensuring interaction with other objects of pedagogical reality. An organic combination of the model is created and the pedagogical reality ensures the impact of the model on the reality.

We try to limit the pedagogical reality to the boundaries of the object and set the goal and tasks of the simulation. We have determined the necessity and possibilities of the model 's influence on the pedagogical reality in which the pedagogical problem is found.

The important stage of modeling process is the selection of the modeling apparatus: the selection of modeling methods (the experimental model was chosen), methods of model research (games, exercises, conversation, role-playing), methods of stability and stability of indicators, etc.

### Methodology

The main means of implementing context training is a method of modeling different types of situations. The creation of a certain type model of situation is associated with the preliminary idea construction of the student behavior in one or another possible situation and the forecasting of the professional future. The method of analysis, synthesis, pedagogical forecasting and pedagogical design are also used according to the professionally-personality-oriented approach in the education system during our research.

It is important to emphasize that communication model is capable to perform the following functions in the pedagogical theory and practice.

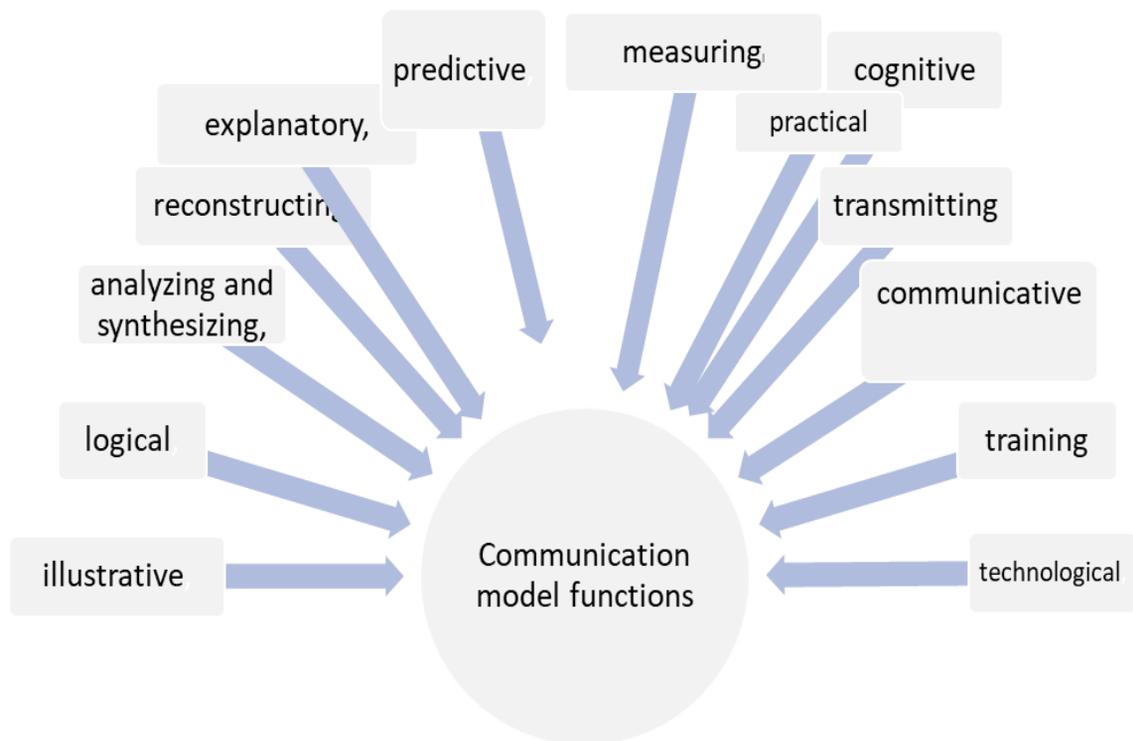


Figure 1. Communication model functions

The following personal and business qualities of a specialist are distinguished according to a survey of graduate students working in prestigious companies. The first point is lace - sociability, communication, focus on result achieving, customer focus, responsibility, training, ability to plan work, organization, stress resistance, accuracy, attentiveness, loyalty to the company, ability to work in a team. The second point is practical experience, work experience. The third one is knowledge (education, knowledge of a foreign language).

The intensive development of society puts forward some requirements for the educational and professional qualifications of workers in various industries. The main feature of every higher educational graduate should be competitiveness. It involves the possession of theoretical knowledge and the ability to put this knowledge into practice, communication skills, a high level of development, the ability to think non-standard, holistic, critically, independently to make decisions and adapt in any conditions, to use a creative approach in solving problem production situations.

The concept of competence is borrowed from the West pedagogical vocabulary. It has been recently studied at different international organizations. They put forward their recommendations on the competence formation. Competence means "a person's ability to respond social and individual needs, to carry out activities, to perform work or tasks in a qualified manner". It is important to study the foundations of foreign language and computer science in the process of specialist forming in different industrial fields.

The thinking and communicative development is extremely necessary for an engineer. The holistic, creative and critical thinking develops because communicative and search principles directly influence the logical thinking development.

The skilled person can only be competent due to his efforts, using of certain information resources, applying of different behavior patterns and choosing of the best corresponds. The development of these qualities can be facilitated by the use of innovative technologies and teaching methods in the educational process. Markovskaya (2011) consists that the technology of holistic thinking improving is directed to the development of educational actions and an innovative technology of teaching modern society.

The ability to study provides the student with the opportunity to carry out educational activities independently, to determine the objectives of the training, to search for and actually use sources and means of achieving it, to be able to assess and monitor educational activities and results (Isakova, 2017). It creates conditions for human development and its realization in the "ability to learn," and it also allows to gain experience of cooperation (this experience will provide the person readiness for permanent education, high

professional and social mobility in future life). The ability to study also provides the best assimilation of knowledge, the formation of the world picture, the development of skills and abilities, the development of competencies in all fields of knowledge in professional activities.

A variety of methods must be used in certain stages of communicative skills modeling. For example, basic classes provide using of

- a structured review method (that is `we know – we want to know – we have already learned)
- training in pairs,
- line of values,
- brainstorming,
- search for questions,
- board of questions,
- directed training (Shakirova, 2006).

All these technologies are aimed at communicative skills formation, thinking development, ability to find solutions in a problem situation. Thus, the formation of communicative skills is quite possible through the use of innovative teaching methods in completely unexpected situations and in non-core disciplines (Isakova, 2018).

The following functional varieties of speech are distinguished within the framework of Business Foreign Language training:

Table 1. Functional varieties of speech in Business Foreign Language training

Oral business/professional communication within the official-business functional style;
The scientific sublanguage of commerce in the framework of the scientific functional style (sublanguage of the economy);
Correspondence and contract documentation in the framework of an official business style;
Advertising in the framework of a journalistic functional style

These tasks are assisted by methodological recommendations and an integrated approach to training.

The course is designed for 36 hours. The main topics are only taken:

- Application for employment, recommendations;
- Advantages and disadvantages of job applicants:
- Compilation of a resume in accordance with generally accepted standards and language norms;
- Preparation of questions for the interview.
- Job advertisements.
- Letters of invitation, inquiries, price lists, technical documentation.

Students receive practical skills which help them to see themselves from the outside, to orient in the labor market and to feel confident hunting a job.

We have developed forms of documents for applying of a job or internship abroad due to the future students' specialty. In this regard, we are faced with several specific tasks:

- the development of individual student abilities, inclinations and interests (including professional);
- nurturing the broaden horizons of students through the cultural values;
- education of activity and independence through the active inclusion of foreign language communication in the activities;
- improvement of the ability to annotate and abstract foreign texts, use technical documents.

## **Results**

Thus, communicative skills modeling in contextual foreign language training of industrial university students consists of some pedagogical models:

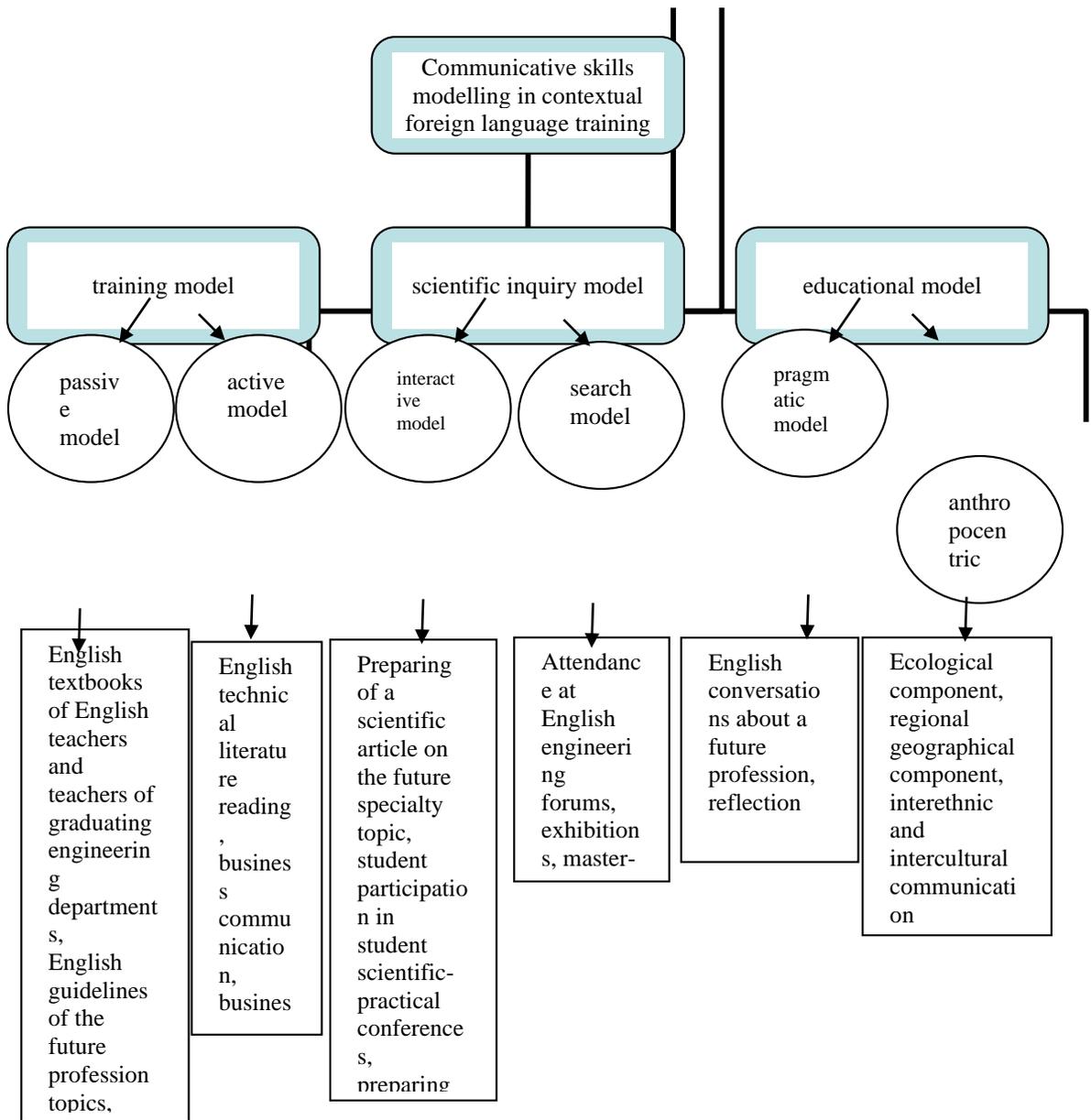


Figure 2. Communicative skills modelling in contextual foreign language training

Communication competence is one of the main characteristics of professional competence and professional training of future engineers because the main tasks of the university are: to realize the needs of the individual in intellectual, cultural and moral development, to create conditions for professional development and improvement, to train specialists combining high culture, communication and

professional skills. The high level of communication skill development allows effectively to communicate in the team of professionals to achieve the goals.

## **Discussions**

Communicative competence is developed through the modeling of communicative situations and training which help to develop self-confidence, self-esteem, self-affirmation, personal and social activity. The initial stage of communication should be the entry into the modeling process which begins with the identification of a specific problem, the justification of the communication needs.

The communication need is an effective way to solve the identified problem and a choice of methodological communication grounds. Modeling is one of the actions in the process of the learner's awareness of the cognitive object as a means and element of intellectual reflection. As a sign-symbolic activity, modeling encourages a student to build generalized ways to perceive objects and phenomena of surrounding reality. The level of reflection, analysis and internal action plan is increasing.

A model of professional activity, systematic and interdisciplinary knowledge is built in accordance with the production technology in contextual education. The model includes indicators such as indicator of tolerance, indicator of intercultural awareness, indicator of focus on self-education and self-improvement, indicator of interest in a future profession.

## **Conclusion**

The main type of the student speech activity is reading and working with information from the original special literature in foreign language, search, reflection and processing for further use in communication. We have analyzed and performed a meaningful interpretation of the simulation results, determined the possibilities of stability of the obtained results and a general procedure of a communicative model constructing. It responds on the process of modeling complex phenomena, such as the process of learning and communication.

Modern requirements of a communication knowledge model are mainly based on context and personal-oriented approaches and provide a description of the main professional activities, knowledge, skills of future engineers of various branches of science and industry.

The model of building communication skills in context learning provides prerequisites for overcoming traditional didactic approaches to knowledge acquisition, involving students in various situations that

stimulate their emotional and cognitive experience. A student creates a sustained cognitive motivation to solve certain problems related to his knowledge of the surrounding reality.

The contextual training model of the communicative skill formation provides prerequisites to overcome traditional didactic approaches in the knowledge mastering and student involving. This model stimulates the student emotional and cognitive experience. The student creates sustained cognitive motivation to solve certain problems associated with knowledge of the surrounding reality.

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