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5. Проблемы подготовки специалистов

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**ENHANCEMENT OF EFFICIENCY OF TEACHING
READING SCIENTIFIC AND TECHNICAL TEXTS AT HIGHER
TECHNICAL EDUCATIONAL INSTITUTIONS**

Abstract: Methods of increasing efficiency of teaching students to read professionally oriented texts in a foreign language are considered. A number of methods of logical-semantic transformation of a text while taking into account individual learning abilities of students are presented. Implementation of these methods allows to aim educational process at active independent work of students.

Keywords: teaching reading texts in a foreign language, communicative competence, adaptive system of training, individualization of education.

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**ПІДВИЩЕННЯ ЕФЕКТИВНОСТІ НАВЧАННЯ ЧИТАННЯ НАУКОВО-
ТЕХНІЧНИХ ТЕКСТІВ СТУДЕНТІВ ТЕХНІЧНИХ СПЕЦІАЛЬНОСТЕЙ**

Анотація: Розглянуті методи підвищення ефективності навчання студентів читання науково-технічних текстів іноземною мовою за фахом. Представлений ряд методичних прийомів логіко-семантичної переробки текстової інформації з урахуванням індивідуальних здібностей студентів. Реалізація цих пропозицій

дозволить зорієнтувати навчальний процес на активну самостійну роботу студентів.

Ключові слова: навчання читання текстів іноземною мовою, комунікативна компетенція, адаптивна система навчання, індивідуалізація навчання.

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ПОВЫШЕНИЕ ЭФФЕКТИВНОСТИ ОБУЧЕНИЯ ЧТЕНИЮ НАУЧНО-ТЕХНИЧЕСКИХ ТЕКСТОВ СТУДЕНТОВ ТЕХНИЧЕСКИХ СПЕЦИАЛЬНОСТЕЙ

Аннотация: Рассмотрены методы повышения эффективности обучения студентов чтению научно-технических текстов на иностранном языке по специальности. Представлен ряд методических приемов логико-семантической переработки текстовой информации с учетом индивидуальных способностей студентов. Реализация этих предложений позволит шире применять в учебном процессе активную самостоятельную работу студентов.

Ключевые слова: обучение чтению текстов на иностранном языке, коммуникативная компетенция, адаптивная система обучения, индивидуализация обучения.

The process of communication in a foreign language is not only a goal, but also a means of achieving that goal, while developing target language learners' reading skills and the competence of overcoming difficulties in reading. Exploring the structure of communication, psychologists distinguish the following characteristics:

1) intentionality, the presence of a specific purpose, quite independent or subordinated to other goals;

2) efficiency, i.e. the degree of coincidence of the achieved result with the set goal;

3) normativity, expressed in social control over the communication process and its results.

As noted in [1], linguistic communication is an inalienable and specific condition of human development in a society. Relationships in communication should be subjected to achieving a meaningful goal, based, based on the individual experience of interlocutors. This goal is related to the need for self-expression and self-actualization with the analysis of the connection between a personality and society.

It is impossible for a person to acquire communicative skills in a foreign language without developing the ability to understand him/ herself and other people based the specifics of the mental processes, aimed at emotional evaluative sphere of human response and social experience.

One of the conditions for the formation of foreign language communicative competence is ensuring the acquisition of the skills of fluent conscious reading in a foreign language as a means of communication, mediated by the text. Communicative reading tasks are given taking into account the peculiarities of this type of activities, not only focusing on the understanding of what is being read. So the information obtained is used either in the intellectual cognitive sphere or for performing certain practical actions. Therefore, the types of communicative tasks can be represented as:

1) information retrieval, tasks in which the cognitive function of reading is realized;

2) information-behavioral tasks, involving motivation to act and reflecting the regulatory function of reading;

3) emotional and evaluative tasks, implementing the value-oriented function of reading.

Thus, the purpose of reading is realized, first of all, in solving communicative problems, enhancing the perception of the ideas given in the text, which determines the appropriate stages while working on the text: anticipation of the content by the title of the text, guessing the meaning of unfamiliar words by the context or searching for definitions in dictionary, selection of logically meaningful parts, using the

obtained information in speech activities. Being a "trigger" in the organization of speech activities of students, communicative tasks provide the "situational conditionality" of the process of reading. So, in the process of teaching to understand the text it is necessary to take into account the following factors that affect the situation of indirect "mediated" communication:

1) whether the communicative task and the content of the text are concerned with the motivational sphere of students (hence – the extent to which thinking and memorizing processes are activated);

2) whether students previously knew something about the content of the text (hence - different amount of information obtained);

3) how deeply the content of the text should be penetrated into (complete understanding of detail or just inferring basic information);

4) whether there are many difficulties and how they can be eliminated (accessibility, feasibility of the text);

5) how the information obtained from the text should be used.

The success in solving communicative tasks after reading the text will also depend on the level of information processing, involving the following types of mental activity [2]:

1) awareness of the logical connections between words within each statement in the text;

2) awareness of the connections between the statements, i.e. constituent parts of the text;

3) awareness and identification of connections both within the text and with objects not reflected in the text;

4) identification of connections that require students' creative activities.

Based on these levels of information processing of the material being read, the conclusion can be made that in the first two cases it will be defined by the content of the text and will reflect the degree of accuracy of its comprehension, while the third and the fourth levels of activity are aimed at independent establishing of links between phenomena and mental images that reflect them.

As noted in [3], great importance in learning a foreign language at technical universities is attached to reading professionally oriented texts, pertaining to the sphere of science that students major in. Students are encouraged to read such texts, containing scientific and technical information in a foreign language. It' is a prerequisite of the successful professional activities, so they should start working with texts on their speciality in the first semester of the first academic year. The problem of selecting educational material is of vital importance at technical universities. Professionally oriented texts serve as the main source of information and on their basis students express their own opinions and perform communicative tasks. Language forms in this case are acquired by students subconsciously, strengthening their aspiration to communicate, to speak deliberately and purposefully. In this case the attention of students is drawn not to the elements of the language, but to the problems under consideration, to the necessity to transfer and obtain information, i.e. to the informative meaning of the statement, which is especially important for students of technical specialities.

Thus, the situation of "indirect communication" while reading motivates students for either practical application of the obtained information or its storage, identifying opportunities in which this information can be applied. This approach makes it possible to individualize the teacher's instruction, which is an important prerequisite of communicative-oriented teaching process.

It should also be noted, that work on improving students' reading skills is closely connected with work on the technique of reading. Alongside with the discussion of what is being read, it seems appropriate to apply the method of selective reading aloud, namely, those phrases that confirm some ideas of the text.

The division of sentences into syntagms, placing logical stress, using different intonation patterns – all these elements should be mastered to be able to adequately convey the meaning of the text. The better the mastery of reading technique is acquired, the more accurately and deeply learners can understand the text.

Work on the analysis of the content of professionally oriented texts confirms that the perception and processing, understanding of textual information requires of

the reader a great psychological and intellectual activity. It seems appropriate to use elements of an adaptive system of teaching, namely a combination of individual work with some students alongside with all other students of the group working independently. The adaptive system complements traditional forms of work, allowing to implement both differentiation of teaching and maintaining collective forms of organization of lessons [4].

The logical-semantic level of textual information processing provides the ability to single out the meaningful parts and causative- consequentive relationships in the text, establish the logical sequence of facts. Involvement of professionally oriented texts enables teachers to significantly increase the volume and expand the subject content of materials for reading, while teaching students to recognize familiar lexical and grammar material in new contexts.

An important role is played by the ability to work with dictionaries, selecting from a large number of meanings of the word exactly the one, pertaining to some definite branch of science. When working with a dictionary it is necessary to pay attention to:

- 1) the speed of finding an appropriate entry in a dictionary;
- 2) the correct choice of the appropriate meaning given in the entry of polysemantic words;
- 3) the development of “linguistic guessing” skills.

Students learn to overcome various difficulties in the process of working on text, i.e. understanding words formed by conversion, guessing the meaning by the context, without turning to a dictionary when an unfamiliar word does not contain an important semantic loading and does not play a significant role in reading comprehension. Thus, the ability to work independently is formed, to use the target language material within the curriculum requirements, analyze and summarize grammatical phenomena in the text, perform communicative tasks. The teacher purposefully and consistently conducts work on the formation and development of students' reading skills, selecting not only informative, but also interesting material.

The most important source of mental and speech activity of students is based on the comparison of different sources of information and comparison of the information obtained with facts of reality. So their own opinion is formed and expressed in their own statements.

Proceeding on several previously read texts, students are instructed how to formulate a general problem for discussion; they are encouraged to share information, express their own opinions on the ways to solve some vital problems raised in the texts. It is proposed to form a statement using speech patterns, which are arranged in accordance with the logical sequences of scientific texts, for instance:

The paragraph deals with...

The process is based on...

The experiment is aimed at...

The research resulted in... etc.

Arranged individually, such patterns may vary to form a well-structured statement based on the scientific articles. It enables students to plan their monological speech, individualize its content. The implementation of these methods is quite relevant today, when the role of reading in the system of education and self-education is constantly increasing with modern educational process envisaging active independent work of students.

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