THE ROLE OF INTERDISCIPLINARY INTEGRATION WHILE DEVELOPING COGNITIVE PROCESS AMONG STUDENTS

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Abstract

The article is devoted to the issues of students’ cognitive process in learning foreign language for specific purposes, which is critical to students’ further professional maturing as specialists.

The authors of the article give characteristics to methods of developing students’ cognitive interest. Interdisciplinary integration is stated as a tool to solve tasks set before teachers. Implementation of interdisciplinary connections within learning foreign languages undergoes several stages. The article analyzes each stage of implementing interdisciplinary ties while learning foreign language.

The article concludes that interdisciplinary integration facilitates developing students’ cognitive interest, promoting motivation and mastering methods of research activity.

1 INTRODUCTION

Socio-economic changes in Russia, which have taken place during last 10-15 years, have triggered significant changes in the sphere of education. Today the primary objective of professional education is not only forming the whole system of universal knowledge and skills, but also developing skills of students to acquire knowledge independently and operate them [1], ability to successful socialization and adaptation on the labour market.

The importance of these tasks stimulates scientific search of new technologies that include methods providing interests and skills development of students. The importance of the present research paper is determined by the fact that forming students’ cognitive interest allows to create conditions for development of students’ activity and independent work. Cognitive interest is crucial for students’ further professional maturing; also, it contributes to the development of students’ personality potential, targets students at achieving goals and developing strategies of professional growth.

The objective of the article is to analyze the ways of developing cognitive interest of students in learning foreign language for specific purposes. Cognitive interest is directed both at the definite sphere of knowledge, as at its objective side, and at the process of acquiring knowledge [2:167].

Cognitive interest is an integral part of students’ motivation system, as it influences personal attitude of students towards cognitive activity.

2 METHODOLOGY

The authors consider the requirements to results of acquisition Bachelor’s and Master’s programs in the field of study “Economics” and “Management”. It is necessary to form cultural and professional competence for students’ successful professional performance. Moreover, the method of developing cognitive interest provides successful development of abstract thinking, readiness to use creative potential, ability to conduct independent research works and other competences, whereof ICT proficiency is regarded as a priority [3].

In contexts of growing information flow and increase of demands placed on future specialists and shortage of academic hours, interdisciplinary integration could become the tool to solve tasks set before teachers. Let us consider the issue on the example of integration of foreign language and special subjects of economic major in Master’s program in the field of study “Economics” and “Management”.

Implementation of interdisciplinary connections while learning foreign languages undergoes several stages: the stage of acquired knowledge and skills generalization within one subject, the stage of «interdisciplinary transfer and integration» of knowledge and mastered skills and the stage of creative use of acquired knowledge and skills in learning and research activity [4: 30-31]. Thereby, due to
interdisciplinary integration students master not only general educational skills, but also methods of research and scientific work.

The effective implementation of the professional communication education mainly depends on the professional preparation level of a foreign languages teacher. One of the basic requirements is the teaching competence, which implies professional knowledge and ability to apply it in practice.

The methodological literature devoted to the foreign language teaching in the professional field points out that a teacher meets the challenge, because in addition to general language the special vocabulary knowledge is necessary. A teacher should also know the subject as such (economy, management, banking etc.), and have an idea about the communication strategies inherent to a certain profession.

The organization of interdisciplinary integration requires from a teacher of foreign languages additional preparation and erudition and students’ skills of independent learning.

Interdisciplinary integration is possible only in cooperation with colleagues teaching subjects of economic major.

Thus, additional requirements to a teacher of foreign languages in business and economy are:

- knowledge of the business communication language;
- knowledge of the profession language;
- interest to the professional field of students;
- idea about the entire set of skills required in the future professional activities;
- desire to improve their professional knowledge and skills.

One of the most important issues that a teacher faces is selection of training contents. Training contents should have the following important components:

1. Pragmatic component, including topics and situations, types of communicative tasks, speech actions topical for particular types of situations;

2. Speech component, which includes texts demonstrating solution of topical communicative tasks, presents functioning of language units, reflects an objective and comprehensive communication plan and is stated to be one of the elements of professional competency.

The right choice of language material in many ways predetermines success of a teacher’s pedagogical activity aimed at developing students’ cognitive process. The question of selection of material is multi-sided and includes a set of such questions as principles, criteria, sources of selection etc.

Practice of organizing academic activity of teaching professional communication in German shows that learning materials should meet the following requirements:

- present linguistic information of the appropriate level (grammar structures, specialty lexis, stylistic peculiarities of professional discourse);
- facilitate the development of oral and written communicative skills;
- develop cross-cultural competency;
- have structure in accordance with the principle of problem solving;
- present an educative value for students.

One of the most solemn requirements we followed while selecting the material, was congruence of the material source with the objective of learning. Learning a certain topic students are suggested a diversity of texts (encyclopedic articles, scientific texts, articles from specialised journals and newspapers etc.), diagrams and graphs, statistic data, audiotexts (recording of analytical programs, radio reports devoted to economic questions) [5].

Selected educational materials should correspond to the following characteristics:

1. Authenticity. Educational material should be presented by samples of native speakers’ speech, speech compositions, generated in real communication situations in a certain social environment. The authenticity principle does not contrast to methodical processing of language material to achieve greater pedagogical effect. However, after such treatment material should
not lose its authenticity for students, it should be logical, informative, emotional, considering interests of supposed reader, should be written in appropriate language.

2 Typicality. Learning materials should be presented by speech compositions, regularly reproduced in repeating communication situations.

3 Modernity. Texts should reflect modern social and cultural situation in the country the language of which is studied.

4 Cognitive value. Texts including significant information for perception of certain phenomenon are considered to be possessing cognitive value. This criterion correlates with problematics of educational materials, which defines informative value of texts. Only with consideration of these criteria, educational materials provide development of students' personal potential, correlation of the material with communicative and cognitive requirements of students, stimulating of students' cognitive activity.

5 Professional direction. This criterion of educational materials selection is generated by future profession's direction. It promotes specialists communicative competence. Therefore, developed skills are directly connected with students' professional specialization, which assumes practical implementation of acquired knowledge and skills in the process of business and professionally oriented communication.

The result of interdisciplinary integration organization's first stage, that is of the stage of acquired knowledge and skills generalization while learning a foreign language, is mastering language material, cross-cultural component and development of communicative competence. Students acquire knowledge of factual material, perceiving and analyzing information etc. within the subjects of economic major.

At this stage, various strategies are used. They are distinguished both by Russian and foreign methodologists.

- cognitive strategies enable to understand and produce a foreign language;
- social strategies help communicate with the foreign cultural agents;
- emotional strategies allow to control emotions and develop motivation;
- metacognitive strategies provide management of education by means of planning, organizing, self-esteem;
- strategies on constructing written discourse;
- compensation strategies help compensate the lack of the knowledge.

Practical application of these strategies makes the learning process of business communication more effective.

At the stage of «interdisciplinary transfer and integration» of knowledge and mastered skills a teacher using different methods and tasks develop competencies that a future specialist need. It is necessary to mention that at master’s program students should be suggested problematic tasks and active forms of students work. Problem question, problem situation (case) and problem task are such type of tasks. Problematic assignments help to develop students' abstract thinking. While solving problem tasks, elaborating projects students should learn to search and evaluate the information, generalize the results of their work; therefore, there is further mastering of learning and research skills. Problem tasks create conditions of using applying foreign language and specialty subjects’ knowledge in practice. The latter contributes to realizing the importance of knowledge and motivation growth, stimulates students’ cognitive activity, as such tasks contain definite cognitive difficulties [6, 106-109].

Another example showing tasks of the second and third stages of interdisciplinary integration is – case study. Students from the fields of study “Economics” and “Management” deal with situations of definite cases demanding solutions at classes. Real situations from the production sphere are described in details with certain data, facts and processes. The problem, on the contrary, is not depicted distinctly; it is highlighted from the different perspectives. Search and problem formulation is a solving case aspect. Students are suggested to find solution to formulated problem and there is no single correct way of solution. Consequently, students learn to argue in favour of their choice and persuade opponents. Here they enjoy mastering various rhetoric devices, prosody and figurative linguistic means [7], [8]. The solution is suggested at the final stage, that of presentation. This method lets concentrate not only one topic, but to appeal to knowledge from other spheres of economics,
knowledge of real situation on the labour market and production sphere [9], thus interdisciplinary integration is provided.

3 RESULTS
Summarizing the abovementioned, it should be stressed that case solution integrates scientific, research and communicative components. Teachers of foreign languages pay special attention to development of students’ communicative competence. They are motivated to communicate while working in a group or at plenary work. In order to present their opinions conclusively and defend their ideas students should be able to formulate their thoughts correctly using appropriate grammatical and lexical means, showing their linguistic competence. A big role is assigned to the means of texts logical construction, which allow communicating thoughts and ideas clearly to the audience. During the process, students interact with each other, with a teacher, solve diverse communicative tasks, and play different communicative roles (socio-cultural competence). Due to scientific and professionally oriented case content students master special terminology, which in its turn is built into the system of terms acquired due to specialty subjects [10, 61-74].

Working over text lies in the center of case study. Following the principles of language materials selection, a teacher can raise students’ motivation and develop their communicative competence and cognitive interest. It was mentioned above, the diversity of the texts allows to develop such skills of text work as analysis and generalization of the content, received from different sources, extracting basic information, comparison of different viewpoints.

It is impossible to fulfill case study successfully without following cognitive and communicative competencies:

- processing of certain text material;
- classification, definition, analysis, synthesis
- persuasion, argumentation, explanation, hypothesizing, advancement of propositions, recommendations;
- ability to criticize and accept criticism in a constructive way;
- defend opinion before group;
- take responsibility for group’s work;
- present the received conclusion in the form of presentation before audience.

Therefore, case study method is a connecting part between professionally oriented content and communicative component, which contributes to reproductive and productive skills development of students. Case studies are forms of realizing interdisciplinary integration at the lessons of foreign language in non-language universities.

4 CONCLUSIONS
- Education is communicative in nature, communication is carried out in the conditions close to real communication;
- students should be trained to take an effective part in the intercultural communication;
- foreign languages materials should be selected with regard to certain communicative situation according to the performing functions and communicative intentions of the speaker.
- foreign languages materials topics should not duplicate knowledge that students get at their specialty classes; they should complement and complete the knowledge;
- implementation of interdisciplinary integration requires additional qualification from a teacher of foreign languages and anticipates close collaboration with colleagues in the field of economic studies;
- at classes of foreign language classes the ones searching the principle of cognitive interest should be taken into account;
- learning process happens with regard to student’s cognitive activity directly related to acquiring, organizing and use of knowledge. This means: students master strategies and teaching
techniques and communication appropriate to a particular stage of their personal and language development;

- a teacher should consider the professional and personal interests of students [11];
- problem solving tasks help to develop students’ cognitive interest;
- business role-playing games create conditions for applying content knowledge on foreign language and specialists’ major discipline to critical thinking, problem solving, and analytical tasks throughout their education therefore increases motivational statement.

REFERENCES


