

Жамият ва инновациялар – Общество и инновации – Society and innovations

Journal home page:

https://inscience.uz/index.php/socinov/index



Formation of students' communicative competencies based on the integration of foreign languages and natural sciences

Makhfuza TOGAYEVA

Gulistan State university

ARTICLE INFO

Article history:

Received January 2021 Received in revised form 15 January 2021 Accepted 20 February 2021 Available online 7 March 2021

Keywords:

Natural sciences
Foreign year
Concept
Modern teaching methods
Communicative

ABSTRACT

This article discusses the development of foreign language and science teaching methods, as well as the growing demand and skills of students as a result of the integration of these disciplines. One of the most important factors is to further enhance the role of communicative concepts in students and to develop such concepts in them

2181-1415/© 2021 in Science LLC.

This is an open access article under the Attribution 4.0 International (CC BY 4.0) license (https://creativecommons.org/licenses/by/4.0/deed.ru)

Chet tillari va tabiiy fanlarni birlashtirish asosida talabalarning kommunikativ kompetensiyalarini shakllantirish

RNUATOHHA

*Калит сўзлар:*Tabiiy fanlar
Xorijiy yil
Tushuncha
Zamonaviy o'qitish usullari
Kommunikativ

Ushbu maqolada chet el tili va fanlarni o'qitish metodikasining rivojlanishi, shuningdek, ushbu fanlarning birlashtirilishi natijasida talabalarning talab va ko'nikmalarining o'sib borishi haqida so'z boradi. Talabalarda kommunikativ tushunchalarning rolini yanada oshirish va ularda bunday tushunchalarni rivojlantirish eng muhim omillardan biridir.

Формирование коммуникативных компетенций студентов на основе интеграции иностранных языков и естествознания

КИЦАТОННА

Ключевые слова: Естественные науки Зарубежный год В данной статье обсуждается развитие методов обучения иностранным языкам и естествознанию, а также растущий



Концепция Современные методы обучения Коммуникатив спрос и навыки студентов в результате интеграции этих дисциплин. Одним из наиболее важных факторов является дальнейшее повышение роли коммуникативных концепций в учащихся и развитие таких концепций у них.

Natural science is the science of nature as a whole, the components of which are closely related and interrelated with the natural sciences. At present, the range of scientific research in the natural sciences is very wide. The system of natural sciences includes interdisciplinary sciences that combine a number of traditional sciences (biophysics, biochemistry, geophysics, astrophysics, geochemistry, etc.) in addition to the basic natural sciences: physics, chemistry, biology, geography, geology, astronomy. Astronomy (from the Greek astronomer - star and nomos - law) - is the study of stars. Astronomy is the study of the structure and development of cosmic bodies and their systems. This classical science is experiencing in the twentieth century and in the 21st century. His second youth observations related to the rapid development of technology (reflector telescopes, radiation receivers (antennas), etc.) - his main research method. Astronomy studies

radio waves, light, infrared, ultraviolet, X-rays, and gamma rays. Astronomy is divided into celestial mechanics, radio astronomy, astrophysics and other

sciences. Astrophysics, which is the part of astronomy that studies celestial bodies, their systems, and phenomena in space, is of particular importance today. The importance of astrophysics is currently determined by the fact that in relativistic cosmology the main focus is on the physics of the universe, the study of the state of matter and physical processes occurring in various forms, including the early stages of cosmic expansion.

One of the most ancient and fundamental sciences is physics. SCIENTIFIC LANGUAGE is a special linguistic system through which researchers disseminate and disseminate the knowledge they have acquired in a professional environment. At the same time, the linguistic tools used by experts are not a specific form of appearance, in which the content of human ideas about the aspects and features of the object and phenomena being studied is simply expressed, the outside world ... On the contrary, the very structure and type of linguistic expressions used in different fields of scientific research determine not only the nature of the knowledge produced, but also the direction of the search activity, resulting in that knowledge. The emergence of science as a specialized type of cognitive activity was simultaneously a process of formalization of professional Ya.N. The original source of the means by which this process took place was the natural language of everyday interpersonal communication. However, by taking some words and phrases from it, scientists have significantly changed their semantics in accordance with the context of the research tasks being solved. Such a change always occurs due to the difference in the level of reflection of the truth in the minds of the people. Every day, however, the practitioner's interaction with the world around him is based on the emotional perception of such parts of reality given to man in the local context of "here and now" and therefore presented in the form of visual images of objects and events in the realm of mental reality. , then scientific knowledge is abstract in nature, built using conceptual structures[1]. It is therefors able to bypass the narrow boundaries of the present. Abstract categoricalconceptual structures allow thinking to create universal ways of describing and explaining reality that reflects certain stable, unchanging things, rather than individual specific situations in a person's interactions with the outside world, schemes represent many



special cases that take place in different contexts of general human practice. The objects that the researcher conducts do not exist in objective reality, but only in a particular disciplinary (or interdisciplinary) language. These are called "Buildings", or "ideal objects". Their description and the various intellectual operations performed by researchers can be formalized in the form of fragments of natural language associated with certain structures of artificial languages; or they can be fully expressed using official languages. Mathematical and disciplinary symbols (e.g., symbols used in chemistry or astronomy), graphics, and diagrams are all tools in which different languages are constructed to form a common scientific language. Its elementary forms are special terms that express theoretical ideas about the most fundamental connections and interdependencies of the properties and phenomena of physical reality[2]. Terms can be highly specialized or general scientific. But their simple set is not yet a language, for the content of human knowledge is manifested in the organized linguistic structures that connect the terms, their relationship being a reflection of the relationship between the objects and phenomena of objective reality being studied. lib comes out. I. n. it is used to construct a whole system of human knowledge about the surrounding reality (which is its "methodological" function), as well as a means of communication between specialists (a communicative function).

The information presented in a linguistic form has an objective nature and therefore, being part of the individual consciousness, serves as a subjective basis for the professional activity of scientists, their mutual understanding and interaction allows you to do. To do this, J. n. should be structured in such a way that different professionals working on the same problem can understand and interpret the information they pass on to each other. This is due to the fact that scientists strive for the highest possible accuracy and clear logical accuracy of the forms in which the data obtained by them are presented. The less ambiguous the content of scientific language forms, the more effective their application in the field of knowledge. This feature is an important feature of y.n., which distinguishes it from the means of natural interpersonal communication, or from the languages of art, in which the uncertainty of information simply remains their advantage. In this sense, the field of humanities is a peculiar "intermediate link" between non-scientific forms of expression of knowledge about the world and norms and standards focused on the natural sciences. The need to present the knowledge of the world produced by scientists clearly defines the widespread use of different artificial languages in scientific knowledge and the use of logical analysis tools that allow targeted management of the processes of constructing and using different language structures used in scientific research practice. Unlike the natural languages in which people communicate on a daily basis, the introduction of formalized Ya are governed by certain rules to ensure the necessary uniformity of their application. First, the alphabet of the given language is clearly indicated, viz. all the characters included in it are listed. Then the rules for constructing various expressions from the original characters are created. After that, the rules of transition from one symbolic construction to another (rules of consideration) and the semantic rules related to the meaningful interpretation of the resulting phrases were established[3]. A language constructed in this way allows scientists to understand each other to a greater extent than natural languages. In this regard, there have been several attempts to create such a language system only for the needs of the scientific community, in which all meanings of key terms and methods of constructing a set of phrases from them must be



established once and for all (at least G. Suffice it to recall Leibniz's views on the possibility of solving such a problem.). In the first stage of the formation of science, Latin was a peculiar prototype of such a system. Called the "dead language," which does not lead to change on its own, Latin has long played the role of an international means of communication for scholars, different countries ... However, certain expectations are associated with mathematical tools, in which many scientists have seen the standard of structural regulation. The failure of such attempts has forced scientists to realize the fundamental homogeneity of nuclear science, the existence of many different levels in which the absolute image in it cannot be diminished. The fact that cognitive activity takes place at the same time, at least on two different levels - empirical and theoretical - allows different experts to ask themselves about the importance of the relationship between these levels and the languages in which the knowledge gained is presented, made it possible. For example, representatives of such an influential trend in twentieth-century philosophy are logical empiricism, which for a long time hoped to use only empirical-level language as a basis. Based on the idea that the only source of all human knowledge about the world could only be the researcher's direct interaction with the objects he studied, they hoped to create methods that reduced the content of theoretical knowledge to what it called.

In this sense, the meaning of the terms that constitute the structure of theoretical language had to be determined by their relation to the 'conditions of observation'. In solving this problem, it was possible to create a special "neutral" language, using which it was possible to clearly determine which of the competing theoretical systems should be discarded. Eventually, the researchers were forced to admit that terms unrelated to any theoretical buildings simply did not exist, and so the program of logical empiricism was initially recognized as unrealizable in the form in which it was proposed. Today, it is clear that J. It is a complex hierarchical system that can be effectively applied in different cognitive contexts at different levels[3].

Today, foreign language skills are becoming an integral part of vocational education. Experts in various fields have a high level of cooperation with foreign partners, so they have a high demand for language learning. In modern society, foreign languages are becoming an important part of vocational education. Such knowledge is first acquired by people in schools, colleges, high schools, and later in institutes, training courses, or by familiarizing themselves with basic information sets that help them learn a foreign language independently. Today there is a large collection of teaching materials for people with different levels of language skills. Success in achieving this goal depends on the practical methods and skills of teachers. The ability to use information technology and modern teaching methods helps to quickly understand new materials[4].

1 By combining different methods, a teacher is able to solve specific curricula. In this regard, teachers and students need to become familiar with modern methods of teaching foreign languages. As a result, they develop the skills to choose the most effective ways to achieve their goals. Using a variety of teaching and learning methods can be effective. Teaching takes place in small steps and is based on the student's existing knowledge system.

2 As time goes on, innovation in every field increases. There are also different styles of language teaching. When teaching English, it is best to use step-by-step instructions, depending on the age and level of the learner. Students are divided into groups based on



elementary education, intermediate education, and advanced education. A special program will be developed by the teacher for each stage[5].

At the initial stage, the emphasis is on pronunciation. According to Harmer, the first requirement for those who know the native language during the conversation is pronunciation. At the beginning of the learning process, the teacher should focus on the student's pronunciation. Although grammar and vocabulary are important, it is useless if the speaker mispronounces them. Native speakers can also understand speech with grammatical errors if the speaker pronounces the words correctly.3 Therefore, in teaching, the main focus is on pronunciation. In this case, the use of different audios of native speakers gives good results. The teacher should teach the correct pronunciation of letters and words during the lesson. There is also a strong emphasis on oral and reading skills in the early stages. If we look at the types of speech activities of foreign language teaching, the following tasks should be performed in their teaching:

- a) Create a reading mechanism;
- b) Improving oral reading techniques;
- c) Teach them to understand what they are reading.

At the elementary level, the emphasis is on reading aloud. Reading texts are also becoming more and more complex, from the simplest to the simplest. However, it should be noted that although the work in the early stages is mainly focused on the development of oral skills, it does not solve the problem of developing oral speech in English. She is only in the process of preparing for a real oral presentation. In addition, reading words beautifully and fluently will increase a student's love of learning the language.

In addition, students will be introduced to The Present indefinite Tense, The Past indefinite Tense. , Are required to be familiar with verb tenses such as The Future indefinite Tense and to be able to use verb forms vividly in these tenses. Students will learn that nouns are used in the singular and plural, that suffixes "s" or "es" are added to the third person singular form of a verb in the present indefinite tense, and that interrogative, negative, and imperative forms of sentences are also introduced at an early stage[6].

At the intermediate stage of teaching English, the focus should be on using techniques that help to increase thinking, speaking, and initiative in reading and understanding larger texts. Students will be given homework. Exercises to check comprehension of the text are given and can be expressed as follows:

Answer the question on the text Samarkand:

Why Samarkand is called like this?

Where is the ancient center of the city?

How many population is there?

Question-answer exercises are used to strengthen the student's speech, improve memory, and repeat. New words from the text are memorized. Questioning and answering will help you to memorize the words and use them in your speech. In addition, a variety of games in the classroom can increase a student's interest in language learning and speed up learning. In the Hot Ball game, students form a circle and say one of the new words to each other on the ball. Participants do not repeat each other's words, are expelled from the game if they repeat or stop speaking. That's the way to go.

In the middle stage, grammar is taught in more depth than in the first stage, and students are given exercises and tests based on the rules of grammar[7].



Computer and phone language learning programs are also great for elementary and middle school language learning. Examples include Talk (English speaking practice), Daily English, Learn English (English master), How to speak real English. These programs are designed to include all sections of reading, listening, and testing.

Recording new words on a phone dictaphone is another great way to listen in your spare time. Also, showing more English subtitles and cartoons is an effective way to teach the language.

At the higher level, independent work plays a special role, especially in a foreign language. The requirements for this course are different from those of the previous stages. The lesson is no longer based on oral speech, because at this stage most of the language material is studied passively (receptively). That is, reading comprehension plays a key role.4 Texts are also large in size and language material is complex. Reading, speaking, listening exercises are held regularly. When organizing a lesson, a separate day is set for Reading, a separate day for Speaking, and a special day for Listening. Homework is also more complex than previous steps. Speaking lessons include a 2-minute talk with a topic. Alternatively, text cards will be distributed to students. Each student gives their opinion on the topic on the card of their choice. The speech requires the use of previously used phrases, phrases, introductions, new words, synonyms.

Homework can be used to prepare additional text topics using the press, periodicals, media, and online materials. Students will be interested to learn about interesting research and scientific discoveries[8].

In conclusion, modern language teaching is aimed at shaping a more cultured individual who has the skills to self-analyze and systematize new knowledge. Innovative methods are an integral part of modernizing the entire system. With this in mind, teachers can become acquainted with the most advanced approaches and then combine them and use them in their work to achieve significant growth in the education system. Many organizations are moving to a new level, using multimedia capabilities to send and receive information. The use of computers and other devices determines the success of the whole educational process.

Adequate attention should be paid to the development of speaking skills and social resilience in educational training. In addition, the success of any lesson in education depends in many ways on the proper organization of the lesson. The lesson should be based on the creative collaboration of teacher and student. Only then will students be able to think independently and develop their will.

REFERENCES:

- 1. EI Passov. Sociable method of teaching foreign conversation. Moscow., 1985: 10
- 2. Johnson, K. E. The Sociocultural Turn and Its Challenges for Second Language Teacher Education. // TESOL Quarterly., London., 2006: 235- bet.
 - 3. Harmer J. The Practice of English Language Teaching. London., 2001:
 - 4. Jalolov J. Methods of teaching foreign languages. Tashkent., 2012: 48 pages.
 - 5. Valixonov M.N. "Modern concepts of natural science" T. 2003.
 - 6. Khaydarov A. "Fundamentals of Natural Sciences" T. Uzbekistan. 1992 y.
 - 7. Hamdamov I.H., Abilova S.A. The concept of natural sciences. T. 2007 y.
 - 8. Gorelov A.A. «Kontseptsii sovremennogo yestestvoznaniya» M. 1998 g.
 - 9. G'ofurov A.T. "Darwinism" 1991