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FOREIGN LANGUAGE TEACHING IN A HIGHER TECHNICAL EDUCATIONAL INSTITUTION : MODULE ORGANIZATION

Abstract. This article aims to explore the perspectives of utilizing a modular system in English language learning at a technical university, including its benefits, challenges, and potential outcomes. The article explores the concept of modular learning and its effectiveness in the educational process. The modular approach, which emerged as an alternative to traditional approaches, aims to individualize learning and activate students' cognitive skills. Different definitions of module learning are discussed, highlighting its role as an instructional package or a closed autonomous unit. The essence of modular learning in teaching foreign languages is described as independent or self-directed learning, where students work with individual educational programs. The main goals and principles of modular learning are outlined, emphasizing modularity, structuring content, dynamism, reality-based methods, flexibility, perspective awareness, diverse methodological guidance, and parity. The implementation of the modular approach in teaching foreign languages in higher technical educational institutions is discussed in relation to the goals of language teaching in such institutions. In addition to the thematic modules, the importance of the modules sequencing in the curriculum is considered in the line of significant impact on the effectiveness of learning. The guiding and supporting role of the teacher as a facilitator in creating a learning environment that encourages active students' engagement and critical thinking is another key aspect of modular learning studied in the article. Traditional and alternative forms of students' understanding and application of knowledge assessment as an integral part of evaluating modular learning are discussed. The numerous benefits, challenges and the potential outcomes of a modular system implementation in English language learning at a technical university are offered. The perspectives of utilizing a modular system in English language learning at a technical university are clarified. Overall, it is concluded that modular learning offers a flexible and personalized approach to education.

Keywords: modular learning; instructional content units; individualization; cognitive activity; foreign language teaching; higher technical education.

The importance of learning the English language in Ukraine nowadays is conditioned by global communication, economic growth, European integration and multicultural society. It highlights the significance of English proficiency in today's globalized world and the benefits it brings to individuals and the country as a whole. The decision to prioritize English language learning reflects the recognition of the language's role in enhancing international communication, attracting foreign investment, and fostering economic growth.

The various reasons why learning English is necessary in Ukraine areas follows. Firstly, English is the most widely spoken language in the world, serving as a lingua franca in many fields such as business, science, technology, and diplomacy. Proficiency in English opens up opportunities for Ukrainians to engage with the global community, participate in international collaborations, and access a wider range of educational and career prospects. Secondly, English language skills are crucial for Ukraine's integration into the European Union and other international organizations. As Ukraine seeks closer ties with European countries, English proficiency becomes essential for effective communication, negotiation, and collaboration with EU member states. Furthermore, learning English contributes to the development of a multicultural and tolerant society. It enables Ukrainians to connect with people from different cultures, fostering understanding, empathy, and respect for diversity. This linguistic competence promotes cultural exchange and facilitates the sharing of ideas and knowledge on a global scale.

Modern requirements for higher institution face the need for a comprehensive and effective English language education system in Ukraine. It calls for investment in language training programs, qualified teachers, and modern teaching materials to ensure that students receive quality instruction. The decision also highlights the importance of creating immersive language learning environments, where students have ample opportunities to practice their English skills through interactive activities, real-life simulations, and exposure to authentic language materials.

The decision to prioritize English language learning in Ukraine recognizes the vital role of English proficiency in the country's development and integration into the global community. By investing in English language education, Ukraine can equip its citizens with the necessary skills to thrive in an increasingly interconnected world, fostering economic growth, cultural exchange, and international cooperation.

Ukrainian higher educational institutions are the best springboard for implementing educational ideas.

The idea of modular learning is not new. It arose when S. Postlethwait and Russel Postlethwait proposed the concept of units of instructional content (the instructional content units), according to which a small portion (unit) of instructional material can be considered an autonomous topic and freely integrated into the curriculum [1]. This type of learning was called "micro-courses" or "mini-courses". Their content and scope were determined by didactic tasks. Mini-courses were quickly implemented in many universities in the United States, Canada, and later in Europe. With the emergence of the first pedagogical experience in applying the concept of units of instructional content, the concepts of "module" and "modular learning" were formulated. Different researchers propose different definitions of a module. It is called an instructional package that includes one conceptual unit of instructional material [2] a closed autonomous unit planned in a series of instructional activities, constructed in such a way as to help the student achieve a specific well-defined goal, a homogeneous instructional block that performs a relatively independent function or covers a specific sphere of activity [3]. Some modern researchers believe that a module is the integration of different types and forms of learning, united by a common theme of the educational course [4].

The essence of modular learning in terms of teaching foreign languages can be defined as a type of learning where the learner works more independently or completely independently, can work with an individual educational program offered to him, which includes a target action program, an information bank, and methodological instructions to achieve specific didactic goals. At the same time, the functions of the teacher can vary from informational control to consultative coordinating.

Modular learning has two main goals: the extraction of meaningful separate units of instructional material and individualized learning. The main principles of modular learning, which determine its general direction, organization methodology, goals, and content, were formulated by P. Yutsavichene [5]. They are as follows: 1. Modularity. 2. Structuring the content of learning into separate elements. 3. Dynamism. 4. Reality-based method. 5. Flexibility. 6. Awareness of perspective. 7. Diverse methodological guidance. 8. Parity.

The implementation of the modular approach in teaching foreign languages in a higher technical educational institution requires its alignment, first and foremost, with the goals of language teaching in such educational institutions. From this perspective, the goals that students face when acquiring a foreign language in higher technical educational institutions have been analyzed.

Defining the goals of foreign language teaching in higher technical educational institutions is important to recognize that the significance of foreign languages now has a more specific character. It is no longer considered solely as a subject for all-round personal development. The demands of the present require the creation of a specific model for developing the language skills of specialists in any field of science or technology, who can use the foreign language to obtain and transmit professionally relevant information in their professional and labor activities.

According to O. Tarnopolsky definition [6], the goal of teaching foreign languages in higher technical educational institutions under current conditions (limited class hours, low level of student preparation, etc.) can only be to achieve a minimal level of foreign language communicative competence. This level can be defined as communicative sufficiency, which allows for communication in real but limited situations. These limitations are determined by the thematic content and sphere of communication.

As a communicator, future specialists should be able to realize their communicative intentions during oral communication (speaking and listening) and written communication (reading and writing). Therefore, all four types of language activities are necessary for graduates of higher technical educational institutions, and the learning process should be based on clearly formulated goals. The specification of these goals, based on the requirement to develop only a minimum level of foreign language communicative competence, depends on the list of situations and topics for oral and written communication in the foreign language that are absolutely necessary for graduates of a specific institution. The necessity of certain situations or topics is determined by the need to ensure: 1) effective professional activity and the most likely and typical oral or written contacts with foreign colleagues; 2) effective processing of typical oral or written foreign language sources related to the profession (reading professional literature, listening to presentations and reports, etc.); 3) one's own life activities during international business trips.

If we consider a module as an autonomous unit of planned series of educational activities that performs a relatively independent function, is based on the educational program, and is united by a common theme of the educational course, then it is evident that modular learning corresponds to the goals of teaching foreign languages in higher technical educational institutions. In turn, the goals related to mastering oral communication on various topics – from general everyday to general scientific-technical and general professional to narrow professional and narrowly specialized – are what determine the need for thematic modules.

The full compliance of the modular approach to the target component of the foreign language teaching process is also determined by the principle of conscious perspective, which requires students to understand and be aware of both immediate and distant learning perspectives. The task of dividing learning into thematic modules, the goals of mastering a foreign language become qualitatively significant characteristics of students' activities as future specialists. This contributes to the development of positive motivation for students in learning foreign languages and, therefore, ensures correspondence between the target and effective components of the learning process through creating conditions for motivated learning and speech activities.

The modular approach also corresponds to the requirements for teaching foreign languages in higher technical educational institutions at the level of the content component of the educational process if we set the task of developing only a minimal (communicatively sufficient) level of foreign language proficiency in students [7; 8]. This requires consistent systematic minimization of the content of learning and ensuring a comprehensive system both in terms of content and learning as a whole. These principles are also implemented in the aforementioned principles of the modular approach, such as modularity and structuring the content of learning into separate elements, where one rule is the finite nature of the blocks of learning material.

This allows for the construction of a comprehensive content of learning from individual modules in accordance with a complex didactic goal.

The basic language skills that students of higher technical educational institutions should master, which constitute the main component of the content of foreign language teaching, are as follows:

1. In the reading sphere – skills in skimming, scanning, searching, and detailed reading of scientific-technical texts in general and specific fields.

2. In the listening sphere – skills in superficial/gist, global/general, and detailed/comprehensive understanding of dialogues and monologues that are used in practice both in situations of everyday personal communication and professionally significant situations of scientific-technical communication.

3. In the speaking sphere – skills in unprepared dialogues, unprepared and prepared monologues that are used in practice both in situations of everyday personal communication and professionally significant situations of scientific-technical communication.

4. In the writing sphere – skills in business correspondence, annotation, summarizing, and creating plans for creative work that are used in practice in professionally significant situations of scientific-technical communication.

Even in a simple list of basic language skills, it is evident how closely they are related to the defined thematic communication base and spheres of communication. This confirms the feasibility of teaching these skills in broad or narrow thematic modules. For example, in a module for teaching reading, speaking, listening, and writing skills in general scientific-technical or narrow thematic fields, or in the most specific module for teaching reading, listening, speaking, and writing skills within a specific scientific-technical field. This interpretation again confirms the necessity of a modular approach to the content component of foreign language teaching in higher technical educational institutions.

Thematic modules, due to their clear framework, will contribute to a more precise and justified professional-oriented construction of the content of learning, as well as a clearer selection of language material. The latter, selected depending on the theme of the module and communication related to this theme, will inevitably be comprehensive, meaning that each module will implement learning in all aspects of language as a whole. The teaching of language aspects will be fully subordinated to communicative activities since communication on a specific theme is the main focus of work in any thematic module.

The full compliance of the modular approach to the target component of the foreign language teaching process is also determined by the principle of conscious perspective, which requires students to understand and be aware of both immediate and distant learning perspectives. The task of dividing learning into thematic modules, the goals of mastering a foreign language become qualitatively significant characteristics of students' activities as future specialists. This contributes to the development of positive motivation for students in learning foreign languages and, therefore, ensures correspondence between the target and effective components of the learning process through creating conditions for motivated learning and speech activities.

The successful implementation of the modular approach in foreign language teaching relies on the principle of conscious perspective, which requires students to understand and be aware of both immediate and distant learning perspectives. By dividing learning into thematic modules, the goals of mastering a foreign language become significant characteristics of students' activities as future specialists. The role of motivation in second language acquisition cannot be overestimated [9]. This approach fosters positive motivation for students, ensuring alignment between the target and effective components of the learning process through creating conditions for motivated learning and speech activities. The modular approach also aligns with the requirements for teaching foreign languages in higher technical educational institutions, particularly in terms of content. If the goal is to develop only a minimal level of foreign language proficiency in students, the content of learning needs to be systematically minimized while still maintaining a comprehensive system. The principles of modularity and structuring the content into separate elements, with finite blocks of learning material, facilitate the construction of a comprehensive content from individual modules in line with complex didactic goals. The main language skills that students in higher technical educational institutions should master are reading, listening, speaking, and writing. In the reading sphere, students should be skilled in skimming, scanning, searching, and detailed reading of scientific-technical texts. In the listening sphere, they should have skills in superficial/gist, global/general, and detailed/comprehensive understanding of dialogues and monologues used in everyday personal communication and scientifically significant situations. In the speaking sphere, students should be adept at unprepared dialogues and monologues used in personal and scientific-technical communication. In the writing sphere, skills in business correspondence, annotation, summarizing, and creating plans for creative work are necessary for professionally significant situations of scientific-technical communication.

These basic language skills are closely related to thematic communication bases and spheres of communication which supports the teaching of these skills in broad or narrow thematic modules, such as modules focused on reading, speaking, listening, and writing skills in general scientific, technical or narrow thematic fields, or even within specific scientific and technical fields. This further emphasizes the need for a modular approach to the content component of foreign language teaching in higher technical educational institutions.

Thematic modules provide a clear framework for a more precise and justified professional-oriented construction of the content of learning, as well as a clearer selection of language material. The chosen language material, based on the theme of the module and related communication, will comprehensively cover all aspects of the foreign language. The teaching of language aspects will be fully subordinated to communicative activities, as communication on a specific topic is the main focus of work in any thematic module.

The adequacy of the modular approach to the requirements of the organizational and activity component of foreign language teaching is no less than its adequacy to the target components. The prioritization of language communication over theoretical information about it in foreign language teaching is achieved through the modular approach, which emphasizes the principle of activity-based modular learning method, favoring practical activities in the pedagogical process. The principle of dynamism in modular learning ensures the change of module content and learning activities within them. This contributes to the dynamism of the foreign language learning process, namely the implementation of such requirements as systematic and regular changes in types of learning activities and types of speech activities, changes in goals and content of learning according to changes in its conditions and social demand. Thus, opportunities for continuous optimization of the learning process are created.

The requirement for individualization of the foreign language learning process can be ensured through the principle of flexibility in the modular approach, which requires designing modular programs and individual modules in a way that allows adapting the content of learning and ways of mastering it to individual needs and abilities of students. The fact that the implementation of the flexibility principle in modular learning requires conducting an initial diagnostic assessment of knowledge fulfills the requirement to determine basic attention and skills. The modular form itself, consisting of self-contained elements or groups of interconnected elements, creates favorable conditions for students to omit certain elements of a module if necessary or, conversely, to include additional learning elements.

The most important requirement in this regard is to provide the most favorable conditions for independent creative work of students with a foreign language. In modular learning, this requirement is realized through the principle of modularity, as well as the principle of diverse methodological counseling. In this regard, the parity principle is very important, which requires modular programs and individual modules to provide opportunities for independent knowledge acquisition up to a certain level, while the teacher transforms some functions of managing the modular program. The requirement for student independence in the pedagogical process is also realized through the flexibility principle, which emphasizes the need to provide individual learning technologies. The same flexibility principle corresponds to the requirement of ensuring regular feedback and timely correction of the learning process. Finally, the parity principle realizes the requirement of close contact between the teacher and the student, with an increase in the consulting and corrective functions of the teacher at the expense of the informative function. It should also be noted that the implementation of the principles of modularity, flexibility, and parity leads to the requirement of extensive use of ICT, especially in independent work. Introduction:

English language proficiency is crucial for students studying in technical universities as it provides them with the necessary skills and knowledge to excel in their respective fields. To enhance the efficiency and effectiveness of English language learning, the implementation of a modular system has gained significant attention.

Benefits of a Modular System:

1. Flexibility: A modular system allows students to customize their learning experience according to their individual needs and interests. By selecting modules that align with their technical field, students can acquire language skills that are directly applicable to their future careers.

2. Targeted learning: Modular system enables students to focus on specific language skills or areas of expertise. For instance, engineering students may choose modules that emphasize technical vocabulary, while computer science students may opt for modules that enhance programming language proficiency. This targeted approach ensures that students acquire language skills that are directly relevant to their chosen disciplines.

3. Progress monitoring: With a modular system, students can track their progress more effectively. Each module has clear learning objectives and assessment criteria, allowing students to gauge their proficiency level in specific language skills. This promotes self-awareness and motivates students to improve their language abilities.

Challenges in Implementing a Modular System:

1. Curriculum Design: Developing a comprehensive modular curriculum requires careful planning and coordination among language teachers and technical institutions. The curriculum should strike a balance between general language skills and technical language proficiency, ensuring that students receive a well-rounded education.

2. Resource allocation: Implementing a modular system may require additional resources, such as specialized language materials and qualified instructors. Adequate funding and support from the university administration are essential to ensure the successful implementation of the modular system.

Potential outcomes:

1. Enhanced Employability: By acquiring specialized language skills through the modular system, graduates from technical universities can differentiate themselves in the job market. Employers value candidates who possess both technical expertise and strong communication skills, making modular-based English language learning a valuable asset.

2. Increased Academic Performance: The targeted approach of a modular system can lead to improved academic performance. When students are able to focus on specific language skills that are directly applicable to their coursework, they can better understand and communicate complex technical concepts.

Conclusion:

The implementation of a modular system in English language learning at a technical university offers numerous benefits, including flexibility, targeted learning, and progress monitoring. However, it also presents challenges related to curriculum design and resource allocation. Despite these challenges, the potential outcomes, such as enhanced employability and increased academic performance, make the modular system a promising approach for English language learning in technical universities. With careful planning and support, the integration of a modular system can significantly contribute to the overall success of students in their academic and professional endeavors.

Therefore, the modular approach fully meets the fundamental requirements for the target content and organizational activity components of foreign language teaching, creating more opportunities for optimizing the learning process as a whole.

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ІНОЗЕМНА МОВА У ВИЩОМУ ТЕХНІЧНОМУ НАВЧАЛЬНОМУ ЗАКЛАДІ: МОДУЛЬНИЙ ПІДХІД

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Анотація. У статті досліджуємо концепцію модульного навчання та його ефективність у навчальному процесі. Модульний підхід, який з'явився як альтернатива традиційним підходам, спрямований на індивідуалізацію навчання та активізацію когнітивних навичок студентів. Розглядаємо різні визначення модульного навчання, виокремлюючи його роль як навчального пакета або закритої автономної одиниці. Описуємо сутність модульного навчання у викладанні іноземних мов як самостійного або самонавчального процесу, де студенти працюють з індивідуальними освітніми програмами. Наводимо основні цілі та принципи модульного навчання, з зосередженням на модульності, структуруванні змісту, динамічності, методах, заснованих на реальних ситуаціях, гнучкості, усвідомленні перспективи результатів навчання, різноманітному методичному керівництві та паритетності. Обговорюємо впровадження модульного підходу у викладанні іноземних мов у вищих технічних навчальних закладах з огляду на цілі та кінцеву мету викладання мов у таких закладах. Крім тематичних модулів, розглядаємо важливість послідовності модулів у навчальному плані, що має значний вплив на ефективність навчання. Ще одним ключовим аспектом, що досліджується, є роль вчителя як керівника освітнім процесом, координатора у створенні навчального середовища для сприяння активному залученню до здобування знань, умінь, компетентностей та розвитку навичок критичного мислення студентів. Обговорюємо традиційні та альтернативні форми визначення рівня розуміння та застосування знань студентами як невід'ємної частини оцінювання модульного навчання. Пропонуємо численні переваги, виклики та потенційні результати впровадження модульної системи в навчанні англійської мови в технічному університеті. Окреслюємо перспективи використання модульної системи. В цілому, приходимо до висновку, що модульне навчання пропонує гнучкий та індивідуальний підхід до освіти.

Ключові слова: модульне навчання; послідовність модулів; навчальні одиниці; індивідуалізація; когнітивна активність; викладання іноземних мов; вища технічна освіта.

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