PECULIARITIES OF FORMING LISTENING COMPETENCE OF TECHNICAL STUDENTS WHEN STUDYING FOREIGN LANGUAGES

ОСОБЛИВОСТІ ФОРМУВАННЯ АУДИТИВНОЇ КОМПЕТЕНЦІЇ ПРИ ВИВЧЕННІ ІНОЗЕМНИХ МОВ У СТУДЕНТІВ ТЕХНІЧНИХ СПЕЦІАЛЬНОСТЕЙ

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The authors of the article consider the peculiarities of the development of listening competence of students of technical specialities when studying foreign languages. The emphasis is placed on the fact that teaching foreign languages is of great importance for professional education. Students should develop language skills in order to communicate effectively in the sphere of their profession and to apply their knowledge in practice. The article emphasises the importance of teaching listening skills in the process of teaching a foreign language, especially in the context of learning English for technical students in higher education. It points out that it is an active and complex process, which is linked to speaking and reading. Background knowledge, including professional vocabulary and an understanding of the structure of technical language, is essential for listening comprehension. Technical communication requires accurate, logical and unambiguous discourse. It is underlined that it is necessary to develop the mechanisms of listening comprehension as the complexity of incoming information in a foreign language increases. A brief overview of authentic materials such as podcasts is given, which allow the creation of a natural language environment and increase the motivation of students. It is noted that the use of authentic materials in the teaching of listening skills can improve students' abilities for active language activity, which is a stable basis for foreign language communication. Three stages of work with authentic materials for the development of listening skills are recommended. The authors of the article point out that a variety of tasks and the use of effective teaching methods can increase the effectiveness of the process. The teacher should understand how to make the work more effective by selecting useful exercises and tasks. A classification of means to control the comprehension of audio texts, both verbal and non-verbal, is given. The difficulties faced by students when listening to authentic materials in a foreign language are considered. Three groups of exercises aimed at overcoming these difficulties are listed.
Key words: authentic materials, foreign language, higher education, listening competence, teaching methods, technical students.

Автори статті розглядають особливості розвитку аудитивної компетенції студентів технічних спеціальностей під час вивчення іноземної мови. Акцентується увага на тому, що викладання іноземних мов має велике значення для професійної освіти. Студенти повинні розвивати мовні навички для того, щоб ефективно спілкуватися у сфері своєї професії та застосовувати свої знання на практиці. У статті підкреслюється важливість розвитку навичок аудіювання в процесі викладання іноземної мови, особливо в контексті вивчення англійської мови студентами технічних спеціальностей у вищих навчальних закладах. Зазначається, що це активний і складний процес, який пов'язаний з говорінням і читанням. Фонові знання, включаючи професійну лексику та розуміння структури технічної мови, є важливими для розуміння мови на слух. Комунікація у сфері технічних питань вимагає точного, логічного та недвозначного дискурсу. Наголошується на необхідності розвитку механізмів сприйняття на слух, оскільки складність інформації, що надходить іноземною мовою, зростає. Наведено короткий огляд автентичних матеріалів, таких як подкасти, завдяки яким створюється природне мовне середовище та підвищується мотивація студентів. Зазначено, що використання автентичних матеріалів у навчанні аудіювання дозволяє покращити здібності студентів щодо активної мовленнєвої діяльності, яка є стійкою основою для іншомовного спілкування. Рекомендовано три етапи роботи з автентичними матеріалами для вдосконалення навичок аудіювання. Автори статті зазначають, що різноманітність завдань і використання ефективних методів навчання можуть підвищити результативність процесу. Викладач повинен розуміти, як зробити роботу роботу ефективнішою, добираючи відповідні вправи та завдання. Наведено класифікацію засобів контролю розуміння аудіотекстів. Розглянуто труднощі, які з'являються у студентів під час прослуховування автентичних матеріалів іноземною мовою. Перераховано три групи вправ, спрямованих на подолання таких труднощів.
Ключові слова: автентичні матеріали, аудіювання, вища освіта, іноземна мова, методика викладання, студенти технічних спеціальностей.

Problem statement. Teaching a foreign language is considered a crucial component of professional training at all levels of education. In today's world, knowledge of a foreign language is widely regarded as essential. Vainagii, T. claims that professionally oriented foreign language teaching is now recognised as a priority direction of education modernization [5, p. 22]. When teaching foreign languages at a technical university, it is important to develop specific professional and general cultural competencies of students. Students should master one of the foreign languages at the level of professional and socio-cultural communication. Later, they should be able to apply the acquired knowledge in practice. This includes the ability to comprehend written and spoken information related to their field, present research articles in a foreign language, and discuss projects with foreign partners in a professional manner. In professional foreign language communication, the speaker must convey accurate and complete information to the listener. As such, it is imperative to teach technical university students effective methods

for understanding foreign language speech by ear. Teaching listening is a significant issue that has gained increasing attention. The focus is on how to effectively teach listening skills to students.

The purpose of the article. Teaching listening, or listening comprehension, plays a crucial role in modern foreign language teaching methodology. The significance of this issue stems from the vital role that listening and understanding play in the process of speech communication, both in general and in foreign language teaching specifically. This study aims to determine the peculiarities of the development of students' listening skills when learning English at technical universities.

Previous publications on the topic. The teaching of listening skills in technical universities has been a topic of concern for educators and philologists. The field of research is known for its diversity and has been extensively covered by various authors in scientific works. A major contribution to this work has been made by Flowerdew J. & Miller L. (2001), Thompson K. et al. (2005), Rost M. (2013), Nor Hidayah (2015), Rauf Avci & Natela Doghonadze (2017), Goh, C. & Vandergrift, L. (2021), Umirzokova Fatima (2023), Volkova O. (2015), Salata, I. (2018), Stohnii, L. & I. Nykonorova (2018) and many others. It is widely acknowledged among researchers that training in listening skills is a crucial element in improving professional communicative competence. As noted by Renukadevi D. "listening skills are essential for language learning as communication is impossible without them" [2, p. 62].

Presentation of the main material. Foreign language is one of the compulsory subjects in higher education. The teaching of English in higher education follows a competence-based approach that takes into account the specificities of the discipline and faculty. Students are expected to develop skills in writing, reading, communication, and listening. According to researchers, listening is a difficult process to master and learn because it involves a whole range of mental processes. In their book, Ronald B. Adler, Lawrence B. Rosenfeld and Russell F. Proctor II identify five elements of listening as follows:

• hearing is the physiological aspect of listening;

• attending is the psychological process of listening and is part of the process of selection;

• understanding is composed of several elements: awareness of the rules of the language, knowledge of the source of the message, and mental ability;

• remembering is the ability to recall information;

• responding is the final step of the listening process and involves offering feedback to the speaker [3, p. 209].

Thus, listening, perception and understanding of sounding speech, is an active creative process, which is accompanied by complex thinking activity, and intensive work of memory. To successfully develop and improve listening skills, the teacher must be aware of the regularities and features of these processes.

Listening is closely related to other types of language activities such as speaking and reading. It can be considered a vital part of dialogue communication as a receptive component, with the listener and speaker periodically changing roles.

As Berezovska O. notes "Listening is not an isolated type of language activity; it is closely related to speaking – expressing thoughts using the language being studied" [1, p. 387].

Background knowledge is a significant factor in understanding a text through listening. This includes professional terminological vocabulary, as well as knowledge of the structure, syntax, and grammar of foreign professional-oriented speech. Technical communication has its unique characteristics, with speech information characterised by maximum accuracy, logic, and unambiguity. It is always strictly argued.

Improving speech understanding mechanisms of students of technical universities is of great importance, because in higher education the volume and complexity of the content of foreign language information perceived by the ear, concerning professionally oriented topics, increases. Therefore, students must engage in special thinking operations such as analyzing, selecting, and combining information to improve their listening mechanisms. This, in turn, helps to develop certain abilities and skills.

Regarding listening, as a result of studying this discipline, the student should be able to: perceive by ear and understand the main content of authentic, professionally oriented texts belonging to different types of speech (monologue or dialogue), as well as identify in them the essential information required. One of the practical tasks in teaching listening comprehension is to train students to perceive foreign language speech in conditions close to the natural language environment. This can be achieved through the use of authentic sources. According to many experts in the field of methodology, the use of authentic materials is the main factor in the successful mastering of a foreign language, contributes to the creation of a real situation of communication, which contributes to learning a natural, living language, and serves as a huge incentive to increase student motivation in learning a foreign language. We can recommend podcasts, i.e. digital audio files available online to help teachers in their work. Among the many thematic channels and podcast episodes available, you should pay attention to the following:

• The Engines of our Ingenuity https://engines.egr.uh.edu/about. The program uses the record of history to reveal the way technology and ideas have shaped us. Episode topics range from cable cars to the invention of the bar code.

• Relay FM https://www.relay.fm/about with podcasts covering technology and creativity.

• TWiT.tv https://twit.tv/shows?shows_active=1 podcasts keep you up-to-date with all that's happening in the world of technology.

• The Engineering Student Experience https://theengineeringstudentexperience.podbean.com/podcast explores topics relevant to current and future engineering students through conversations with practising engineers, engineering faculty, and engineering students.

• Engineering IRL https://www.engineeringinreal-life.com/podcast is an engineering podcast that finds parallels between engineering solutions and provides real tactics, mindsets, philosophies, ideas and tools to improve both your career and life with expert problem-solving skills.

• TechTalk Central https://techtalkscentral.com/podcasts/episodes focuses on a different technology, ranging from AI and machine learning to blockchain and cybersecurity.

• Top Engineering Podcasts https://www.bornto-engineer.com/resources/top-engineering-podcasts-stem-podcast-list-top with so many inspiring engineering stories and podcasts.

• The Digital Human https://www.bbc.co.uk/programmes/b01n7094/episodes/player

• BBC Radio 4 podcast is a weekly series looking at big questions of technology and its impact on our society.

• TED Tech https://audiocollective.ted.com/ opens up about the world of technology and digs deep into various topics.

The use of these authentic materials will help to improve students' listening skills and encourage regular practice. Since the material presented to students through listening serves as a model of the real language environment, listening involves students in active language activity. Mastery of this type of language activity should form a linguistic base of knowledge, skills and abilities necessary for foreign language communication.

When considering the teaching of listening skills, it is often recommended that the teacher follow a three-stage process. This process typically involves the formulation of clear and concise instructions, the presentation of relevant audio material, and the checking of listening comprehension.

A well-planned lesson can help to solve listening comprehension problems effectively. To make this process successful, it is necessary to diversify the tasks and prepare different exercises, which will have a positive effect, as success depends largely on the teacher's knowledge and ability to use different teaching methods. The teacher should understand how to enhance the effectiveness of this type of work by identifying the most useful exercises and tasks and implementing them in the classroom.

It is recommended to differentiate between the following types of listening: 1) listening to comprehend the main idea of the message (to establish a general understanding); 2) listening to extract specific information (to establish a general and partially detailed understanding); 3) listening with a comprehensive coverage of the content (to establish a detailed understanding); 4) initial listening (to establish a critical understanding).

The tasks for checking text comprehension can be of three levels: tasks for understanding the content of the listened information; tasks for creative processing of the perceived information; tasks for using the received information in communication and other types of activity.

In his book "Teaching and Researching Listening", Michael Rost identifies the following effective strategies for listening: "(1) predicting information or ideas prior to listening (2) making inferences from incomplete information based on prior knowledge (3) monitoring one's own listening processes and relative success while listening (4) clarifying areas of confusion and (5) responding to what one has understood" [4, p. 202]. To be taught effectively, the strategies should be incorporated into listening tasks so that students can see how a combination of strategies can help them achieve listening success and confidence.

Consider the means of monitoring comprehension of the audio text being listened to. These can be verbal and non-verbal means. Non-verbal means include the use of figures, pictures, diagrams, and drawings. Verbal means, in turn, are divided into receptive and reproductive means. Receptive means include confirming or refuting statements, and multiple-choice tests. Tasks such as answering questions, retelling the content, making a plan, formulating questions about the text, and speaking on the basis of the content of the text – are reproductive means of controlling comprehension of the audio text being listened to.

Understanding authentic listening materials in a second language can present numerous challenges for students. Identifying difficulties in English listening is of primary importance when teaching listening comprehension. Let's consider why students have difficulty understanding authentic texts on their speciality. Experts in language and cultural training point to the following factors:

• Processing speed. When students learn a foreign language in class, they have time to understand, retrieve a word or even look it up. However, they do not have this opportunity when they are conversing in real-time or listening to native speakers. Spoken language is fast and fluent.

• Accents and dialects. Each language has its own accents and dialects. This adds an extra layer of complexity to the listening process.

• Intonation and accent. Languages have their unique rhythm, intonation and accent. Until the human ear is attuned to these nuances, it can be difficult to understand or even distinguish individual words in a stream of speech.

• Context clues. Listening comprehension involves more than just understanding words. It also requires the ability to interpret non-verbal cues, cultural context, and other implicit elements that native speakers intuitively comprehend. Non-native speakers may overlook these aspects, which can hinder their comprehension.

• Overlapping Sounds. When we are not familiar with a language, it can be challenging for the brain to differentiate between overlapping sounds or to distinguish background noise from the primary conversation. This can be particularly challenging in noisy environments or during group conversations [6, p. 1].

The gradual improvement of listening comprehension is achieved through a system of exercises, which can be categorized into three groups: preparatory, speech, and post-textual exercises. Preparatory exercises aim to identify and overcome difficulties hindering the comprehension of speech segments. Speech exercises, on the other hand, focus on the perception of the meaning of the text. The purpose of speech exercises is to comprehend the message and retain new information in memory. Therefore, it is necessary to use post-text exercises that provide comprehension control.

Conclusion. From these facts, one may conclude that in line with the objectives of teaching in a technical university, listening in English should be given its due place in the teaching process. When developing students' listening skills in a foreign language, it is important to remember that communicative listening aims to develop the ability to understand spoken language on the first attempt, which is applicable to real-life communication situations. Comprehension tasks can be categorised into three levels: tasks for understanding the content of the listened material, tasks for creatively processing the perceived information, and tasks for using the information in communication and other activities. To improve the effectiveness of the learning process, language teachers can creatively use various aspects of modern approaches to teaching listening comprehension.

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