

DEVELOPING LISTENING COMPREHENSION IN ENGLISH FOR GRAPHIC ENGINEERING AND DESIGN

Jelisaveta Šafranjić , Vesna Bogdanović , Vesna Bulatović 

University of Novi Sad, Faculty of Technical Sciences,
Fundamental Disciplines in Engineering, Novi Sad, Serbia

Abstract: *When teaching English for Graphic Engineering and Design at the tertiary level, it is important to train students to follow professional lectures and presentations and grasp this speech genre. English language classes could be organised to develop this significant skill through systematic training, which includes both the preparation phase, crucial for the activity's success, and the active listening phase. Competence differentiates each phase by adopting and mastering specific strategies. The most crucial method involves anticipating the presentation's topic and key terms, while the next step involves listening to the presentation. The process includes the following steps: a. anticipating the content; b. separating relevant from irrelevant data; c. tolerating ambiguity in the listening data; d. mentally summarising the presented data; e. drawing conclusions about unknown facts based on context; and f. elaborating and connecting previous knowledge with new information. With competent instruction from the teacher and his guidance through the entire process of acquiring and mastering the skills of understanding lectures and presentations in English for Graphic Engineering and Design, the listed strategies can help students gain competence in this field of specific professional knowledge and advance their professional and academic careers.*

Key words: listening comprehension, listening preparation, active listening, approaches.

1. INTRODUCTION

The ability to observe is crucial for successful collaboration, and developing listening skills can lead to enhanced communication in professional environments, as proficient listening skills are essential for professional communication. Students' ability to understand lectures in English for Specific Purposes (ESP) at the tertiary level includes their individual abilities, prior language knowledge, and linguistic predisposition. The degree of previously acquired language competence, which is related to knowledge of written language, also influences the ability to understand lectures delivered in ESP. One can successfully extend and apply this ability when listening to lectures, where spoken language takes the place of written language. However, it also includes new approaches specifically designed for successful understanding of spoken discourse, such as following professional lectures and presentations as well as taking notes while listening to them.

According to Rost (2011), understanding spoken language is an internal process that is not directly observable, unlike other language skills. Assisting students in improving their listening skills can help them concentrate and increase their attention span. Educators can help students remember more of what they hear by encouraging them to pay attention with techniques so students are able to focus on what others are saying rather than being self-absorbed and only concerned with them. We usually measure the mastery of this skill by checking the understanding of the spoken language, which involves asking questions that allow us to determine the general and detailed understanding of the presented material.

According to the renowned American psychologist Anderson (2000), listening comprehension, which is the most important component of effective communication, is necessary for productive collaboration. It is critical for someone to learn effectively and unfolds in several stages.

1. Perception as the process of focusing on spoken or written language, enabling the selective retention of certain parts in short-term memory.
2. Breaking down the spoken text into its constituent parts and creating a mental image of the text
3. Mentally connecting the created representations with their meaning and storing them in long-term memory.

Moreover, Rahimi & Katal (2013) noted that when students fail to master the aforementioned stages, they only reach the level of language perception, meaning they are unable to integrate new information with

their existing knowledge and, consequently, cannot memorise the presented material. However, consistent and systematic application of various approaches is necessary to master the skill of understanding spoken language through listening. Therefore, different approaches are responsible for acquiring competence in understanding spoken language such as:

1. *Tolerating ambiguity in the lecture.* It involves accepting that many parts may be unclear and unknown at the time of listening. Using this approach helps to reduce the possible frustration of hearing words that we do not know the meaning of at that given moment or parts of the lecture being unclear due to the current language barrier.
2. *Summarising the presented and discussed material.* It entails mentally compiling information from the full presentation or a specific section of it.
3. *Drawing conclusions.* which may involve guessing the meaning when unknown words or assumptions about the contents of the missing information exist.
4. *Expounding on the subject matter.* It facilitates the reactivation of prior comprehension and results in connections between previously acquired knowledge and new data. Thus, it fosters thorough understanding and integration into the current knowledge framework.

The listed approaches refer to the understanding lectures from a profession or academic discipline, with the indication that this type of lecture represents a specific oral genre that abounds not only in professional terminology but also special structural organisation that reflects the type of profession or science to which it belongs (Ahmadi & Motaghi, 2021; Bozorgian & Shamsi, 2023).

2. UNDERSTANDING PROFESSIONAL LECTURES IN ENGLISH FOR GRAPHIC ENGINEERING AND DESIGN

It is possible to successfully implement the practice of understanding professional lectures in English for Graphic Engineering and Design at the university level, provided that the teacher collaborates with an expert in the field the students are studying who actively uses the English language and with students who are motivated to improve their language skills. Such an expert's engagement is based solely on his enthusiasm, which is valuable for the design of this language teaching segment. Also, students should be continually encouraged to frequently listen to audio-visual recordings of professional presentations from the Internet, both during the process of acquiring the competence to understand spoken material and after completing this type of training. This type of material is highly suitable as a basis for acquiring the relevant competence, as it allows students to listen to the material as many times as necessary and to revisit any parts that were not entirely clear. Focused practice can facilitate the learning of primary context comprehension, vocabulary expansion with new words, phrases, and idioms, and familiarization with a variety of accents. Consequently, learners' comprehension increases as they engage in more active listening. Listening to a recording multiple times, as opposed to once, will significantly enhance its comprehension.

Furthermore, the professional materials will motivate and encourage students to continue listening. Learners should be aware that if they are unable to comprehend all of the information they are hearing, they should not become frightened. Translating into Serbian will be of no assistance to them. In order to enhance their ability to listen effectively, learners should be encouraged to engage more with their colleagues and native speakers. Also, in order to prevent monotony, learners should participate in a variety of challenging activities (Chang, Millett, & Renandya, 2019), including professional collaboration through the internet and social media. It would be desirable to provide students with the opportunity to hear from real lecturers, enabling them to assess their own progress in acquiring competence in understanding English lectures, based on a comparison of their level of competence in understanding professional English (Chang, 2022).

3. GETTING READY TO LISTEN TO PROFESSIONAL LECTURES

It is a well-known fact that improving language skills requires a meticulously planned preparatory phase, just as crucial as improving the ability to comprehend spoken language from professionals in certain academic disciplines. In addition to the fact that this phase is mandatory before listening to any spoken

language, it provides the opportunity to establish beneficial communication between the foreign language teacher and his students, who, on the same task, easily become aware of the importance of mutual cooperation. The teacher's role in the preparatory phase of the mentioned activities involves collaborating with the students to conceptualise the upcoming lecture, thereby guiding them to employ strategies that are pertinent to this phase (Dalman & Plonsky, 2022). We can divide the approaches used in the stage of preparation for listening to lectures into two groups: 1. those that predict presentation concept and subject matter, and 2. those that anticipate the main words or concepts in the lecture. These approaches encourage students to actively contemplate the lecture's topic, thereby focusing their attention during the lecture. Specifically, discussing the presented content with their preconceived notions and assumptions can encourage students to attentively follow the presentation (Wallace, 2020). Furthermore, students may prepare and discuss some general questions on the topic, as their answers consistently align with the fundamental concepts discussed in the lecture. By precisely focusing on the fundamental elements of the presentation, students can better follow and comprehend the lecture. Additionally, it will enhance their ability to distinguish between important and less important ideas, a crucial skill for comprehending each spoken material holistically. It is known that concentrating attention on less important details in spoken material results in a poor understanding of the entire material (Mahdavi & Miri, 2017).

To anticipate the concepts and words related to the subject matter in the lecture, it is beneficial to discuss them beforehand with the students. If they are unfamiliar with some words, they may consult a bilingual dictionary on graphic engineering and design and take notes before the lecture begins. The most common spoken discourse in English for Graphic Engineering and Design, like most engineering sciences, falls into the following categories (Chang, 2022):

1. presentation of procedure and its sequences;
2. comparing or contrasting procedures, phases, stages, or results;
3. defining cause and effect stages or phenomena;
4. listing results, effects, procedures, elements, etc.

4. LISTENING VIGOROUSLY TO PROFESSIONAL LECTURES

Many students of Graphic Engineering and Design aspire to successfully understand the conference lecture and participate in conference activities, as this requires interactive listening skills. This is a very advanced stage of listening comprehension because it entails social interaction in small groups, which is a true listening test. In interactive listening, learners receive new information and identify it continuously, either in pairs or in groups. In addition, they should resolve communication issues and respond quickly. This phase, which involves both comprehension and production, directly promotes speaking skills.

Understanding a conference lecture requires focusing on the introduction. The introductory portion of the spoken material serves as a guide for further listening. The introductory parts of academic and professional lectures, regardless of the diversity of the scientific discipline they deal with, are characterised by a uniform structure, which means that their constitutive parts are almost identical. A successful introduction should include the following steps:

1. emphasising the importance of the topic and stating prior knowledge on the topic,
2. overview of previous research work,
3. establishing the starting point which involves highlighting the gap in knowledge and shedding light on the problem,
4. highlighting the goal of the work or research and presenting its structure.

The introduction, which gains the attention of the listener, has two clearly defined functions. Firstly, it presents the lecture's framework by providing essential details about the topic, form, structure, and objective. Secondly, it creates a context for the lecture's content by linking the discussed topic to the listener's prior knowledge while also highlighting its importance and significance within a specific scientific field of expertise. Students should be aware of this and practice understanding it.

Also, in order to be successful and understand the speaker, each student should make his own concise interpretation of the main spoken message during the lecture. Given that this is a cognitively demanding process, it is crucial to gradually guide the student through the process of listening to lectures, emphasizing the key aspects of this process. Video lectures from the internet are suitable for practicing the skill of

understanding presentations, and students could do them individually depending on their own interest or specialized field of expertise. All these approaches, with the exception of the one that focuses on the introductory part of the lecture, offer students practical examples and guidance for their implementation. A teacher can demonstrate each approach individually by presenting the entire recorded lecture to the students, then breaking it down part by part (Zeng & Goh, 2018). Returning parts of the recorded lecture and listening to it together with the students allows the teacher to direct the attention of the students and to organise the listening process in a way that is necessary to acquire this language skill. In order to enable students to understand lectures in English, the teacher should encourage students to use the following approaches during listening (Zeng & Goh, 2018):

1. separating relevant material from irrelevant material,
2. drawing conclusions about the meaning of unknown words based on the context,
3. elaborating and connecting previous knowledge with new information.

Another important approach to apply while listening to a lecture is to separate the very important from the less important material in the lecture. Modern electronic devices, commonly used in modern lectures, can successfully accomplish this task (Chamundeshwari, 2023). Power Point (PP) presentations, when expertly and skilfully designed, represent a good guide through an academic lecture. This kind of presentation helps to emphasise the most relevant elements in the presentation of the material, and the cognitive effect of this kind of presentation is far greater than in a lecture that is reduced to only the spoken word because it connects the senses of sight and hearing and thus helps to remember the presented material better. The use of PP presentation is often conditioned by the type of scientific or academic discipline, so they are very common in the field of graphic engineering and design.

Making inferences about the meaning of unknown words based on context is a general approach that applies to any type of listening material. This implies that mastering this skill through frequent exposure to spoken material in English for Graphic Engineering and Design can only improve it. In practice, it has been shown that experts from a certain field, even when they are not extremely successful speakers of a foreign language, will understand words and expressions from their profession much more successfully, even than native speakers who do not know that profession (Bozorgian & Shamsi, 2022). It makes sense that the listeners can only retain the material if it aligns with their existing knowledge about the presented subject. To make this easier, they should be encouraged to take effective and purposeful notes when listening to professional lectures in a foreign language (Bozorgian, Yaqubi & Muhammadpour, 2022).

In addition to focusing the students' attention on the lecture as a whole, it is also crucial to focus their attention on specific groups of words that are typical of both oral and written academic discourse. Discourse markers serve as linguistic signals, drawing the listener's attention to significant moments in the lecture and enhancing its coherence (Chang, 2018). Discourse markers regulate the logical relationships between ideas and play a role in managing the flow and structure of discourse. In English, students should practice and successfully apply the most common discourse markers that connect the subject and clearly point to its important elements while listening to the presentation. The following discourse markers should be practiced:

1. cause - Effect (as a result, since, consequently, accordingly, therefore, ...),
2. explanation (namely, for instance, ...),
3. expansion (in addition, beyond this, furthermore, ...),
4. recognition (still, yet, rather, though, ...),
5. contrast (to the contrary, in comparison with, however, despite, nevertheless...),
6. conclusion (hence, thus, therefore, after all, ...).

Additionally, an effective lecture will guide the audience by reminding them of previous points (as we have seen...), announcing what will be discussed in the next section (well, the following point...), and drawing their attention to specific sections of the lecture (Let's see...). In a concluding statement at the end of the lecture, the previous points should be summarised (Pan et al., 2018). Therefore, students should be aware of all this when they listen to a professional lecture.

5. KEEPING NOTES DURING THE LECTURE

Students should be constantly encouraged to take notes during conference lectures, just as they would in their professional or academic disciplines. According to Pan et al. (2018), students utilise this approach more effectively when they receive training and experience, and they should leverage the positive transfer from their mother tongue to effectively memorise the oral material presented in a foreign language. Rather than interfering with the listening process, taking notes should encourage the listener to fully concentrate on the presentation. It is important to note that the introductory part of the lecture serves as the starting point for writing down the information. Specifically, writing down information from the introduction provides a framework on which the student can rely during the lecture itself, and not knowing such a framework makes it difficult to follow and understand the entire presentation (Mahdavi & Miri, 2017). While listening to a lecture, it is crucial to accurately record and communicate the presented ideas, ensuring they align with the speaker's intended meaning. Giving a secondary idea a central place in the notes, or vice versa, can completely destroy the original intention and meaning of a lecture, potentially leading to misinterpretation.

When using this approach, students should immediately review, rewrite, and supplement their lecture notes. Thus, students will complete the outline of the lectures they listened to and organise their notes into a meaningful and coherent whole. Furthermore, frequent practice of this approach and ongoing professional language vocabulary enrichment improve note accuracy and precision. It is known that not all note-taking is equally effective; it depends on the listener's personal abilities and training in this skill in the native language. An ESP teacher could significantly improve its quality by providing systematic instructions on how to use this approach. One such instruction is to never write entire sentences when taking notes, but rather write down their elements and key words, use abbreviations, and use the native language as little as possible.

6. CONCLUSION

Although they are seldom given the recognition they deserve, listening skills are essential for the acquisition of a foreign language. Some individuals consider listening to be a passive activity. However, it encompasses much more than simply assimilating information from another individual. Learning to observe in the target language facilitates the development of the other three skills - speaking, reading, and writing.

This paper aimed to highlight the importance of enhancing listening comprehension in the English teaching for Graphic Engineering and Design at the university level, given the increasing need for students to comprehend professional lectures in English these days. The current need for students to actively follow English-language lectures in graphic engineering and design highlights the need to enhance their knowledge in this area. This entails connecting to the European higher education network and creating conditions for student mobility within the European academic space. It is a very complex and demanding language skill that necessitates a high level of both linguistic and professional competence. Numerous factors contribute to the mastery of this skill and its success, including the students' individual abilities, language aptitude, and prior language knowledge. Furthermore, it relies on adequate training and practice of other language skills. Despite the complexity of acquiring competence in understanding English lectures, students can still master it with individual commitment and persistence.

7. ACKNOWLEDGMENTS

The article is written within the project "Improving the teaching process in the English language in fundamental disciplines" developed at the Department for Fundamental Disciplines in Engineering, Faculty of Technical Sciences, University of Novi Sad, Serbia.

8. REFERENCES

- Ahmadi Safa, M. & Motaghi, F. (2021) Cognitive vs. meta-cognitive scaffolding strategies and EFL learners' listening comprehension development. *Language Teaching Research*. 28 (3), 1–24. Available from: doi: 10.1177/13621688211021821
- Anderson, J. R. (2000) *Learning and Memory: An Integrated Approach*. John Wiley & Sons
- Bozorgian, H. & Shamsi, E. (2022) Autonomous use of podcasts with meta-cognitive intervention: Foreign language listening development. *International Journal of Applied Linguistics*. 32 (3), 442–458. Available from: doi: 10.1111/ijal.12439
- Bozorgian, H. & Shamsi, E. (2023) A Review of Research on Meta-cognitive Instruction for Listening Development. *International Journal of Listening*. 1–16. Available from: doi: 10.1080/10904018.2023.2197008
- Bozorgian, H., Yaqubi, B., & Muhammadpour, M. (2022) Meta-cognitive intervention and awareness: Listeners with low working memory capacity. *International Journal of Listening*. 36 (3), 221–234. Available from: doi: 10.1080/10904018.2020.1857764
- Chamundeshwari, C. (2023) The Impact of Listening Skills to Enhance English Language Through Technology Among Computer Science Engineering Students. *Onomázein*. 61, 817–827. Available from: <http://www.onomazein.com/index.php/onom/article/view/194>
- Chang, C.S., Millett, S., & Renandya, A. W. (2019) Developing listening fluency through supported extensive listening practice. *RELC Journal*. 50 (3), 422–438. Available from: doi: 10.1177/0033688217751468
- Chang, C.S. (2018) Extensive listening. In: *The TESOL Encyclopedia of English Language Teaching*. John Wiley & Sons, 1–6. Available from: doi: 10.1002/9781118784235.eelt0564
- Chang, C.S. (2022) The Effect of Listening Instruction on the Development of L2 Learners' Listening Competence: a Meta-Analysis. *International Journal of Listening*. 38 (2), 131–149. Available from: doi: 10.1080/10904018.2022.2074851
- Dalman, M. & Plonsky, L. (2022) The effectiveness of second-language listening strategy instruction: A meta-analysis. *Language Teaching Research*. 1–30. Available from: doi: 10.1177/13621688211072981
- Mahdavi, N. & Miri, M. (2017) Co-shaping meta-cognitive awareness and developing listening comprehension through process-based instruction. *International Journal of Listening*. 33 (1), 1–18. Available from: doi: 10.1080/10904018.2016.1260454
- Moradi, K. (2012) The impact of listening strategy instruction on academic lecture comprehension: A case of Iranian EFL. *Procedia - Social and Behavioral Sciences*. 70 (25), 406–416. Available from: doi: 10.1016/j.sbspro.2013.01.078
- Pan, Y. C., Tsai, T. H., Huang, Y. K. & Liu, D. (2018) Effects of expanded vocabulary support on L2 listening comprehension. *Language Teaching Research*. 22 (2), 189–207. Available from: doi: 10.1177/1362168816668895
- Rahimi, M. & Katal, M. (2013) The impact of meta-cognitive instruction on EFL learners' listening comprehension and oral language proficiency. *The Journal of Teaching Language Skills*. 5 (2), 69–90. Available from: doi: 10.22099/jtls.2013.1555
- Rost, M. (2011) *Teaching and Researching Listening*. Routledge. Available from: doi: 10.4324/9781315833705

Wallace, M. (2020) Individual differences in second language listening: Examining the role of knowledge, meta-cognitive awareness, memory, and attention. *Language Learning*. 72 (1), 5–44. Available from: doi: 10.1111/lang.12424

Zeng, Y. & Goh, C. (2018) A self-regulated learning approach to extensive listening and its impact on listening achievement and meta-cognitive awareness. *Studies in Second Language Learning and Teaching*. 8 (2), 193–218. Available from: doi: 10.14746/ssllt.2018.8.2.2



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