

THE IMPACT OF INTERACTIVE SPEAKING ACTIVITIES ON ELEMENTARY EFL LEARNERS' FLUENCY

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<https://doi.org/10.5281/zenodo.19681316>

Annotation. *This article analyzes the potential of neural network technologies for implementing speech practice aimed at developing communicative mobility. It presents a tested system of exercises that facilitates complex forms of oral communication in a digital environment.*

The advantages and disadvantages of the multimodal AI tools used are also described.

Keywords: *communicative mobility, neural network technologies, multimodal model, communicative competence, speech skills, oral communication skills.*

The modern communication environment is characterized by a high degree of uncertainty, intense information flows, and increased demands on the adaptability of speech behavior.

In such conditions, an individual's ability to maintain verbal activity and effective communication when faced with stress-inducing factors becomes particularly relevant, which underscores the need to develop communicative mobility during the professional training of specialists.

Since developing communicative mobility is a labor-intensive process that cannot always be fully realized within the limited number of classroom hours, an arsenal of tools is required to enable active training of speech skills and the development of relevant abilities outside the classroom as part of independent study.

At the current stage of technological development, the optimal tool is multimodal neural network technologies, which have reached a sufficient level of adaptability to implement complex forms of oral communication. The aim of the study is to analyze the functional capabilities of multimodal neural network technologies for implementing complex speech practice aimed at developing communicative mobility.

Theoretical significance: The content of the concept of "communicative mobility" is analyzed, and its key characteristic components are presented.

Practical significance: A system of exercises is proposed to facilitate the development of communicative mobility in a multimodal digital environment.

Integrating the described set of exercises into educational practice makes it possible to optimize language training at universities through a more rational distribution of classroom and extracurricular workloads. Empirical methods include user testing of multimodal neural network tools and questionnaires (online surveys). Theoretical methods include the analysis of relevant scientific literature and empirical data. The development of communicative mobility using neural network technologies is a new area of research.

At present, there are no scientific publications dedicated directly to this topic. However, there are works in related fields that allow for the consideration of important factors influencing the characteristic being studied.

A proper examination of the topic requires referring to scientific articles that present the concept of "communicative mobility," as well as analyzing scientific publications related to the development of speech skills and abilities using neural network technologies (or artificial intelligence technologies), since communicative mobility is realized through speech interaction. In scientific publications, communicative mobility is defined as a specialist's ability to engage in high-quality communication in diverse, including unforeseen, situations that require sensitivity and tolerance to communicative uncertainty and involve proactivity, efficiency, and personal reflexivity[4]; as an integrative characteristic reflecting a specialist's ability and readiness to adapt to effective communication with participants in professional relationships[1]; as personality qualities that characterize an individual as capable of responding quickly and adequately in any speech situation[2]; and as knowledge and mastery of various types of discourse and their organization, which implies the ability to evaluate and analyze the communication situation, consider the context of the interaction, and select appropriate verbal and non-verbal means of communication [3]. Taking into account the main aspects of the term's meaning presented in research, this paper considers communicative mobility as an integrative characteristic expressed in the readiness to engage in flexible and effective interaction within a dynamic communicative context. This requires not only the classic range of speech skills and abilities but also the development of cognitive flexibility and psycho-emotional self-regulation, as communicative mobility must ensure the preservation of speech productivity, semantic accuracy, and emotional stability in tense or conflict-ridden interactions. When distinguishing between communicative mobility and communicative competence, the key criterion is the emphasis on dynamic speech management under pressure. Flexibility in selecting speech strategies, intonational expressiveness, and the lexico-grammatical and phonetic correctness of speech in complex communicative situations are important. Cognitive flexibility is manifested in the rapid analysis of a communicative situation, logical evaluation of the communicative context, and prompt information processing. It determines the optimal speed and adequacy of a speech response. Psycho-emotional self-regulation involves controlling affective reactions, maintaining psychological stability, and reducing anxiety and aggression during communication. Among the advantages of developing speech skills using neural network technologies, researchers [7; 12–13; 15] note high effectiveness in developing speech fluency, reducing anxiety levels, increasing motivation and communicative confidence, and the ability to provide feedback (error correction and comments). The disadvantages mentioned [9–11; 14] include occasional technical glitches, speech recognition problems, and academic dishonesty. There are empirical studies [5; 8] that statistically prove the high effectiveness of developing speech skills using neural network models. Both the advantages of using neural network models for developing speaking skills and the positive impact of neural network technologies on specific linguistic aspects (lexicon, grammar, etc.) are described [6], emphasizing the importance of a high degree of autonomy in speech practice. In our view, the most effective AI tool for developing speech skills at the moment is the ChatGPT-4o model, which, in addition to the standard voice mode, offers an advanced (extended) mode. Both modes ensure high-quality oral communicative practice, including complex scenarios (with elements of conflict, problem-solving, and immersion in content ambiguity). Unfortunately, however, OpenAI restricts the use of this model in our country.

For this reason, in May 2024, we conducted a study using three other tools that do not have such restrictions (Perplexity, Qwen3, and Gliglish). The sample consisted of students from the Institute of Informatics and Cybernetics at Samara University (78 people).

As part of user testing, students spent a month practicing their spoken English using Perplexity, Qwen3, and Gliglish. After the testing period, they completed a questionnaire via Google Forms, rating each tool on a five-point scale, and also submitted an essay describing their experience with each system and analyzing its strengths and weaknesses. According to many students, Perplexity, which only recently added a voice mode, proved to be the most "advanced" tool for practicing oral skills. Nevertheless, several users rated its capabilities quite modestly, giving it scores of 1–3. The disadvantages noted included technical glitches when connecting to the voice mode and occasional instances of information overload: Perplexity sometimes provides overly detailed answers, which may be due to its hybrid architecture combining search engines with generative AI algorithms. Despite this, the speech interaction was generally perceived as being close to natural (Fig. 1). Qwen3 received mostly satisfactory ratings, as the model has a significant drawback: the voice mode must be restarted every three minutes, causing the bot to lose the dialogue history, which is not conducive to comfortable speech interaction. Students also noted that the model does not always "listen" attentively to its interlocutor, often interrupting and not allowing them to finish a sentence. In certain role-playing scenarios, it demonstrated rather low content adequacy (Fig. 2). The Gliglish* platform is specifically designed for developing oral skills and has a range of important integrated tools for learners with lower proficiency levels.

These include text support (a transcript of the user's recognized speech on the screen), speech prompts (suggested response options), and translation of utterances (when needed). The effectiveness of Gliglish was rated highly by most students (Fig. 3 on p. 67). The noted disadvantages were the limited time allowance (10 minutes per day in the free version) and the platform's "simplicity." The development of communicative mobility is typically carried out in a natural (classroom) communicative environment. This involves problem-oriented exercises, tasks focused on argumentation and counter-argumentation, justification, comparison, evaluation, and reflection. Role-playing games are used, and project defenses are practiced with added complications, such as unexpected questions or simulated conflict. However, at the current stage of technological development, this kind of practice can also be implemented using neural networks. The table below presents types of exercises that, in our opinion, are optimal for developing communicative mobility using neural network technologies (see Table). Multimodal neural network models can reproduce complex communicative scenarios that help develop cognitive flexibility, reaction speed, and adaptability while training the classic range of speech skills. The bot can provide feedback by analyzing the quality of users' spoken responses, the soundness of their arguments, and their linguistic errors. It can also offer optimal answer options (in terms of the task) if the user is struggling. The user's speech strategies are analyzed (how they handle misunderstandings, rephrase thoughts, and find compromises), and advice is given for improvement. The learner can interact with the bot in various roles, such as a teacher, classmate, supervisor, colleague, client, or examiner. This helps them adapt to different communication styles and improve their tactical flexibility. Of course, one should not expect conceptual depth or originality in the analysis of a user's speech practice.

Not all models provide a sufficiently thorough breakdown of linguistic errors. The recommendations offered by neural networks for improving speech quality are often quite standard and generic, but this does not diminish their practical value. Neural network technologies can significantly increase the effectiveness of independent study by optimizing many processes and reducing labor. The exercise types presented in the table were tested in the voice modes of four AI tools: ChatGPT-4o, Perplexity, Gliglish, and Qwen3. The functionality of ChatGPT and Perplexity provides high-quality, comfortable, and, in our view, very engaging oral practice for all the exercise types listed. The level of interaction can be varied, so practicing with these tools can be interesting even for very demanding students with a high level of language proficiency.

Gliglish helps build the foundations of communicative mobility and is best suited for users at the beginner and intermediate levels. Qwen3 appears to be a promising model (due to its lack of regional restrictions), but the need to restart the dialogue every three minutes prevents the full implementation of speech practice aimed at developing communicative mobility. The model's "forgetfulness" is also a problem: Qwen3 not only loses the dialogue history every three minutes, but it also often fails to remember user errors even within the three-minute limit. Error correction is only possible if the learner warns the bot before each utterance that the next sentence needs to be analyzed for errors, which disrupts the natural flow of communication. Most likely, these are just temporary technical shortcomings that will be eliminated in the future. The main point is that technological solutions already exist (in the form of several AI tools) that can optimally (and with high efficiency) implement immersive speech practice with complicating elements. Thus, modern neural network technologies enable verbal communicative interaction that simulates conversational pressure, which helps to develop communicative mobility.

Elements of improvisation and role-playing model communicative conditions that demand a high degree of verbal and psycho-emotional adaptability. However, for the comprehensive development of communicative mobility, speech practice should not be limited solely to software tools, as direct, "live" contact remains fundamentally important. Within classroom-based speech practice, it is advisable to include modeling of communicative situations that contain elements of uncertainty, problems, and conflict in the range of tasks. * The Gliglish platform. [Electronic resource]. URL: <https://gliglish.com> (accessed: 16.06.2025). The bot is capable of providing feedback: it analyzes the quality of users' speech reactions, the validity of arguments, and linguistic errors; it offers optimal (from a task perspective) answer options to questions if the user is experiencing difficulties. The user's speech strategies are analyzed (how they cope with misunderstandings, how they reformulate thoughts, and how they find compromises), and recommendations are provided for their improvement. The trainee can interact with the bot in various roles: teacher, classmate, supervisor, colleague, client, examiner, etc. This helps adapt to different communication styles and improves tactical flexibility. of course, one should not rely on the conceptual depth and originality of the analysis of the user's speech practice results. Not all models provide a sufficiently complete analysis of linguistic errors. The recommendations offered by neural networks to improve speech quality are often quite standard and uniform, but this does not diminish their practical value. Neural network technologies are capable of significantly increasing the effectiveness of independent work, effectively optimizing many processes and labor costs. The exercise types presented in the table were tested in the voice modes of four AI tools:

ChatGPT-4o, Perplexity, Gliglish, and Qwen3. The functionality of ChatGPT and Perplexity provides high-quality, comfortable, and, in our opinion, very engaging oral speech training within all the listed types of exercises. The level of interaction can be varied, so speech practice using these tools can be interesting even for very demanding students with high language proficiency.

Gliglish allows for the formation of the foundations of communicative mobility and is optimal for users with primary and intermediate language proficiency. Qwen3 appears to be a promising model (due to the absence of regional restrictions), but the need to update the dialogue every three minutes does not allow for the full implementation of speech practice aimed at developing communicative mobility. The model's "forgetfulness" is also a problem: Qwen3 not only loses the dialogue history every three minutes, but the model often fails to remember user errors even within a three-minute limit. Correction of errors is possible if the trainee warns the bot before each remark that the next sentence must be analyzed for errors, which violates the naturalness of communicative interaction. Most likely, these are merely temporary technical deficiencies that will be rectified later. The main thing is that at this stage, there are already technological solutions (in variants of a number of AI tools) that optimally (with high efficiency) implement immersive speech practice with elements of complication. thus, modern neural network technologies allow for verbal communicative interaction with imitation of speech pressure, which contributes to the formation of communicative mobility. The elements of improvisation and role interaction model communicative conditions that require a high degree of verbal and psycho-emotional adaptability. However, for the full development of communicative mobility, speech practice should not be limited solely to software tools, as direct "live" contact remains of fundamental importance.

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