УДК 009.004 TO THE ISSUE OF SPEECH SYNTHESIS EFFECTIVENESS IN TEACHING A FOREIGN LANGUAGE (THE CASE OF TEACHING ENGLISH TO JAPANESE STUDENTS) Trofimova D.D. (Far Eastern Federal University, Vladivostok) Research Advisor – Zavyalova V.L., Doctor of Sciences (Philology), Docent (Far Eastern Federal University, Vladivostok)

Abstract. The article is devoted to the issue of the effectiveness of the implementation of programs based on speech synthesis in the process of teaching a foreign language on the example of teaching English to native Japanese speakers. It examines the reasons for using speech synthesis in teaching a foreign language, as well as the efficiency of this approach.

Introduction. It is impossible to imagine modern society without digital technologies and resources that have an impact on almost every area of our life, including the field of the humanities. The use of computer technologies in teaching a foreign language, in particular English, is the subject of many studies in Digital Humanities and in particular in the field of speech technologies (A.V. Black, G.V. Mozhaeva, B.M. Lobanov, D. Klatt, S.V. Rybin, A.A. Puchkovskaya, etc.). This is primarily due to the trends of globalization, in which mass language contacts take place, and which require more detailed consideration. In the situation of contact between languages as dissimilar in terms of origin as English and Japanese, interference inevitably occurs, entailing violations, mainly, at the prosodic level of the speech production. Regarding the causes of prosodic distortions in the English speech of Japanese speakers, we can mention some shortcomings in the teaching of English in Japan. The fact is that Japanese textbooks of English for senior secondary school (grades 10-12) contain little material for the practice of oral communication, most of which is aimed at teaching reading, grammar, and vocabulary. Another reason for prosodic interference can be considered the widespread use of English loanwords, given their place in Japanese culture as a whole. Due to the imposition of one pronunciation pattern (when borrowing English words) on another (when producing English speech), distortions in pronunciation occur. The resulting violations require more careful study and correction, which is the task of teaching a foreign language. At the same time, correction of these violations, aimed at increasing the accuracy of speech production, can be provided by programs and training platforms based on speech synthesis systems. Also, schools and universities can focus on a learnercentered approach to learning by choosing to use various electronic resources in teaching a foreign language. This approach gives each student the opportunity to express themselves in different types of educational process, which allows them to develop different skills and abilities of the student, as well as to maintain their motivation to learn the language and involvement in the educational process. Also, e-learning resources, platforms, applications, or websites are an accessible, mobile, and userfriendly learning tool. Accessibility is provided by a wide range of users without any restrictions. Mobility consists in the possibility to remotely use electronic resources, for example, using your personal computer, smartphone, or tablet. Personal devices also provide the opportunity to self-study at any convenient time, almost continuously. The convenience of e-learning consists not only in the above aspects, but also in the ability to take into account the user's preferences and automatically adapt the entire training course to a specific user, his/her individual characteristics and success, sometimes better than a teacher as a human can do.

The main part. Our research is aimed at introducing the use of programs based on speech synthesis in teaching a foreign language (using the example of teaching English to native Japanese speakers). This proposal is due to a number of reasons and inconveniences when learning a foreign language, which can be neutralized using a program or a training platform like an electronic assistant in correcting pronunciation. For example, by practicing your pronunciation with the app, it is possible to get rid of the fear of making mistakes or interfering with someone. Also, this application or resource will always be freely available if it is impossible to practice with a foreigner or native speaker. Thus,

the accessibility, mobility, and convenience of learning a foreign language, as well as the accuracy of the correction of input speech, will be realized.

Conclusions. The high accuracy of computers, phones, applications, and electronic educational resources based on speech synthesis can help in the study of a foreign language, and especially in the acquisition of pronunciation and the prosodic system of the language. Taking into consideration all these factors, it can be concluded that a program or application based on speech synthesis systems can help, for example, Japanese people overcome most of the causes of their problems with learning English. The use of programs based on speech synthesis in teaching a foreign language can help to remove difficulties that arise when learning a foreign language and improve the accuracy of the formation and correction of students' skills and abilities.

Trofimova D.D. (author)

Zavyalova V.L. (research advisor)