USING WEB 2.0 TOOL PODCAST IN TEACHING FOREIGN LANGUAGES

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Web 2.0 has become slowly but surely a part of the teaching and learning process. It is a social network that includes tools such as Facebook, Twitter, blogs, podcasts, wiki, etc. We see the podcast as one of the ways how to motivate students to learn and improve their language skills. The paper analyses the use of the Web 2.0 tool podcast in teaching English and German languages and the impact of using podcasts on the considerable improvement of respondents' listening skills. In academic research, we intentionally used the quantitative method like controlled experiments and questionnaires. 218 respondents who studied the English language and 196 respondents who studied the German language attended the experiment. Respondents were randomly divided into experiment and control groups. The experiment was carried out during 13 weeks of the winter term. After analysing the input and output data achieved from the pre-tests, post-tests, and questionnaire, we reached the conclusion that podcasts that are used as the support of traditional educational processes in the classroom can help students to significantly improve listening skills.

Keywords: podcast; listening skills; Web 2.0; information and communication technologies.

Introduction

The podcast is the tool of Web 2.0 which can be used as a part of education. It can help students to improve their listening skills, critical thinking, and motivate them to bury their heads in listening, i.e. to develop the taste for listening. Research studies into using podcasts in education have shown that podcasts have the potential to help to improve not only listening skills but also speaking skills. However, based on the analysis of the literature, we can see that the research on the using podcasts in education is ongoing but it is not sufficient especially in researching the impact of podcasts on listening and speaking skills in English for specific purposes.

The key issue of any education system is training professionals in a respected field (Ghritchenko, Nesterenko, 2016). The present society is strongly influenced by communication and information technology and the process of computerisation of society (Hrdličková, 2018). Modern information and communication technology (ICT) brings new possibilities, approaches and the new concept of education. The web user is drowning in a tremendous amount of information and faces the problem of being overloaded with information due to the exponential growth for both the number of online available Web applications and the number of their users (Lotfy et al., 2016). ICT has proved vital in the transformation of modern society, of the way people live, work and learn (Stanca, Felea, 2014).

Given that ownership of computers and smartphones has become a common feature of young people, it is understandable that these means have become a normal part of the learning process. The use of computers and smartphones, including various applications, in the learning process, is endless. It is widely accepted that information and communication technology (ICT) is used in medicine, science, engineering or agriculture. However, ICT is also applicable to the teaching of social and humanitarian subjects.

There are various aspects of Internet resources that are aimed at practising and making improvements to lexical and grammatical knowledge for different levels of a foreign language. Attention is focused on good practice and the opportunity for live communication with native speakers that is more and more possible via the Internet. The importance of increasing the attention of universities to the development of foreign language communication skills of future specialists under the conditions of internationalisation and globalisation is inevitable. It will determine how competitive university graduates will be in the national and global markets. The burden of finding a solution on how to make a student better prepared for real life and increase their possibilities to find better-paid jobs is often on the teachers. This can be partly solved by using a task-based syllabus that is designed to make tasks meaningful, linked closely with real-life events and to stimulate spontaneous language use (Chen, Kent 2020, Chen, 2016). One of the options is to use Web 2.0

tools in education. Web 2.0, according to the current research, is defined as a platform created by the user, and more importantly, for the user (Heting & Chen, 2009).

In the paper, we want to present the result of the study aimed at, one of the tools of Web 2.0, podcast. Cebeci and Tekdal (2006) regard podcasts as a promising e-learning tool that could change mobile learning through simple implementation through digital devices. Podcasts are not CD or tape players and their use in the educational process requires the active participation of students, not passive. They are mainly used in education to improve the language skills of speaking and listening. As a complement to traditional teaching they provide not only additional authentic listening materials, but also allows students to practice language skills listening and speaking, i. e. they can themselves prepare, record and upload audio posts on the Internet and make them available to classmates, the teacher and possibly the general Internet audience. Carvalho et al. (2009) state that podcasts can be used for multiple purposes, such as "vocabulary revision, listening exercises, interviews with native speakers, key point summaries of a lecture or group of lectures, sharing announcements, describing homework assignment assessment, giving feedback, guidelines, reducing the effects of isolation and promoting inclusivity, developing students' study skills through collaborative learning, providing guidance on student practical work, etc.

The term *podcast* is a combination of the words which stands for two technologies IPod (a brand of a line of portable media players by Apple) and Broadcast. We understand this term as a series of audiovisual sequences that are disseminated via the Internet. They can be found on the Internet in various formats. Factors that affect the popularity of podcasts are, users, don't have to contend with the technical side, provide a real international audience, easy to use and are usually free. As the creating of podcasts is not complicated, it has now become a means used in the educational process. After accessing the podcasts' platform, and sometimes a short subscription where users are asked to fill their details for follow-ups and updates, the visitor/subscriber can listen to different or download podcast episodes. Since podcasts can usually be accessed via download at any time, it can be described as a form of radio on demand (Berry, 2006, Samuel-Azran, Laor & Tal, 2019, Naidionova & Ponomarenko, 2018, Abdulrahman, Basalama, & Widodo, 2018).

The beginnings of podcasts can be dated to the beginning of the 21st century; they are even more popular today because we do not need a computer to listen to them, just a smartphone or tablet. A characteristic feature of podcasts, similar to weblogs, is that podcast producers are trying to search for and then process new topics (Bernick & Hoheisel, 2008). Given those young people today use podcasts as an important source of information, we consider this platform useful in the educational process. Namely, the teacher uses a tool that young people use regularly in their daily lives. Teaching can be more efficient than using traditional teaching aids.

The use of the podcast is quite wide. The podcast is created by human-voice but that does not mean that there cannot be some text. It depends who is the owner of the podcast. If the owner is a teacher, then there can be in addition to listening exercises to fill in missing words, sentences, questions about audio recording, etc. In this way, we can provide students with a lecture in both spoken and written forms, which can be of great benefit to students, especially in foreign language lectures (Wall, 2019).

The advantage of the podcast is the ability to provide the student with additional opportunities to listen in a foreign language and thereby improve the listening skills and this is also the possibility to motivate the younger generation to listen to posts or episodes in their free time, as it differs from traditional forms of improving the listening skills through CD or audiotape.

Literature review

Effective computing is an important research area that includes the use of educational software, including e-books, podcasts, and online modules, in learning environments. It is a convenient way to discover and access information resources to prepare learners for future life. Especially suited for the current generation of learners, who have become accustomed to using electronic devices. Podcasting is expanding rapidly as a popular cultural phenomenon, connecting listeners to audio content created by professionals, radio stations, and amateur hobbyists (Sullivan, 2019; Lotfian & Busso, 2017; Naidionova & Ponomarenko, 2018).

It is a media that transmit messages from the brain of the programmers to the audience (Nozari & Siamian, 2015; Lee et al., 2018). Podcasts are episodic digital audio files made available on the Internet for downloading to a computer or mobile device (Taylor & Blevins, 2020; Winn, 2018; Fish Hatfield, 2018) and in education, we see the use of any digital media file or series of files distributed over the Internet to deliver course content as a way how to supplement and enhance content delivery (Lonn & Teasley, 2009; Blum, 2018). The concept of implementation of innovative methods and approaches in education is one of the most important issues the teachers need to master as technology expands in many directions. At the beginning of the 2000s, educators started to pay increasing attention to the use of podcasts in the classroom (Dmytriieva, 2018).

It is extremely important to create a computer-mediated learning environment that will encourage students' success and ensure the accessibility and effectiveness of future professionals' education. It should be a priority for the Ministry of Education to introduce modern information technology into educational institutions (Akilli, Konoplianyk, & Pryshupa, 2019).

Using a computer should not be artificial. It has to become an integral part of the educational process. The use of computer technologies in education is expanding horizons, enables to learn the discipline better, promotes students' interest in learning, generates creativity, spatial and logical thinking, imagination, observation, and certain scientific skills.

The ability to communicate in foreign languages, especially in English is considered very important in the process of recruitment. Therefore, during classroom activities, teachers want to develop their students reading, writing and speaking skills. According to Abdulrahman, Basalama, and Widodo (2018), listening skill is a fundamental skill that needs to be mastered at first before students master other skills. To make students master listening skills, teaching listening must be done in an environment where students are exposed to as real situations as it is possible. Moreover, many foreign language teachers are more concerned not only with classroom instruction but also with preparing students to be responsible for their learning outside the classroom. This approach makes students responsible for their learning that will consequently result in the development of life-long learning skills, including high-level thinking skills: the ability to analyse information, synthesise knowledge and evaluate results (Krasnokutska & Kovalchuk, 2017).

Following the practical experience of foreign language teachers in educational institutions, the majority of students work on improving their communicative skills and tries to learn how to communicate fluently in English (Gryshchenko & Sydorenko, 2014). It should be noted that information technology is developing at a breakneck pace, so teachers need to keep pace with the latest advances to use them in the foreign language classroom. Undoubtedly, the teacher must be able to use resources on the Internet and stimulate the cognitive activity of students in this direction, as Internet technologies are helping to save time both in the classroom and during individual work of students (Nurkhamitov & Gerkina, 2017).

According to Berry (2016), podcasts are presented by people from within a listener's community of interest or by people she/he may already have a relationship with via social media and are frequently recorded in a podcaster's own personal or domestic space.

The success of podcasts, however, depends on the teachers' competence with the use of such e-tool and the appropriate selection of the materials in a way that guides the learners to meet the learning objectives (Abdulrahman, Basalama, & Widodo, 2018).

Information technology should become a common part of the educational process and should be given more space to research their use in teaching at all types of schools, as applied research can greatly help to make it as effective as possible in the educational process. We know from practice that it is not enough to have ICT in classes or homes. This is just the first step. The second step is that we can also use them effectively in the educational process, and to do this we need the already mentioned applied research, which is focused on the research of specific information technology, in our case the web application podcast. However, research specific to podcasting remains a young and relatively undeveloped area consisting of reports on pilot studies and investigations of student perceptions (Naidionova & Ponomarenko, 2018). From the literature review, it is obvious that there has been a lack of empirical research aimed at using Web 2.0 tools in education. In the paper, we want to broaden existing research on the use of podcasting in teaching and learning foreign languages at the university and confirm the belief that podcasting can help to improve listening skills.

Methods
Research Model

The study employed quantitative methods (experiment, questionnaire) to collect and analyse the gathered data. The experiment was aimed at proving that using podcasts in the teaching helps students to improve their listening skills.

The survey questionnaire was used to collect information about the knowledge, opinions, and attitudes of respondents about using podcasts in the educational process. The questionnaire was anonymous, and consisted of 9 questions: Do you have the Internet at home? If you answered no, then indicate where you connect to the Internet. Do you think a podcast can help students improve their language skills? Was listening to episodes on the podcast motivating? On average, how much time did it take you to listen to one episode and answer the questions? Did you listen to episodes online or do you download episodes and listen to them offline? How many times did you listen to each episode (give average)? Did you find a selection of

published episodes appropriate? Were the published episodes interesting for you? What you liked/disliked on the podcast?

The objective of the study was to investigate the impact of using the web-based Web 2.0 tool podcast on developing language skills of listening, speaking and motivating students to study a foreign language at an increased rate as a result of using the podcast in their learning.

Two hypotheses were set: H0 (null hypothesis): Podcast-supported teaching does not affect the listening skills of selected respondents; H1 (alternative hypothesis): Podcast supported teaching improves listening skills of selected respondents.

In the research of podcast-supported teaching, the listening skill is the dependent variable.

Research Sample

218 first-year students of the University of Economics in Bratislava attended the experiment. Their language level according to the Common European Framework of Reference for Languages was B2, i.e. a student should understand the basic ideas of a more complex text, either on specific or abstract topics, including discussions within their specialisation. Respondents were divided into 6 experimental and 6 control groups. In addition to the respondents studying the English language, 196 second-year students studying German language attended the experiment. They studied German as a second foreign language and their language level according to the Common European Framework of Reference for Languages was B1, i.e. a student should understand the main points of clear standard input on familiar matters regularly encountered in work, school, leisure, etc. Respondents were divided into 5 experimental and 5 control groups. The numbers of students in each group are given in tables 1,2,4,5. Students were assigned to the experimental and control groups by random selection.

Before we carried out the experiment, the participants were informed about it so that we ensure that the research was genuinely based on ethical standards and principles. They were informed of the possibility of withdrawing from the experiment at any time and with no consequences on their status if they decided to withdraw from it. The respondents were asked to participate on a voluntary basis, i.e. they were asked if they wanted to take part in the research. All of the participants agreed to take part in the research and gave their informed consent to participate in the study.

Research Instruments and Procedure

We used a quantitative research method experiment in the study and questionnaire survey. We consider this type of research to be the most relevant to the study whose objective is to analyse podcasts and their impact on the development of the language skills listening.

One of the reasons why we decided to research the impact of the use of podcasts on the development of students' language listening skills is the fact that there is usually not enough time to practice listening in the traditional teaching in the classroom. We consider listening as one of the most important language skills. If we want to help the students to get a considerable advantage over the other applicants looking for jobs in the future they have to be confident in listening and speaking.

In the preparatory phase of the study, we focused on the research of materials related to the use of podcasts, creating podcasts, familiarising teachers with podcasts. In this phase, the questionnaire, pre-tests, and post-tests were prepared and were pilot tested to identify any errors that might occur before the experiment that could affect their reliability and validity.

At the beginning of the experiment, the respondents were randomly divided into experimental and control groups. The pre-tests were used to get the information about students' initial level of knowledge before the experimental activity and post-tests which were carried out after completion of the experiment to measure students' achievement and the effectiveness of the experiment.

In the implementation phase, the pre-tests were given, as it was mentioned, to the control and experimental groups to get information about their listening skills. Collected data from the pre-tests were subsequently analysed and evaluated. The respondents were familiarised with the podcast and how to work on it.

The audio materials for listening comprehension and the tasks, which the respondents were supposed to carry out, were prepared. Audio posts were uploaded on the podcast. The experiment was carried out for 13 weeks. In the first and the last week, the pre-tests and post-tests aimed at assessing listening skills were administered. During the remaining 11 weeks of the semester, an experiment was in progress. The audio materials were selected with a focus on the curriculum. The listening time ranged from 5 to 15 minutes, but most of the listening tasks took about 5 minutes. We opted for shorter recordings because longer recordings could demotivate respondents. The respondents could listen to the recordings as many times as they needed to complete the tasks.

At the end of the implementation phase, the post-tests were given to the experimental and control groups. The data obtained from the pre-tests and post-tests were analysed and compared. The achieved results showed to what extent the language skills of the respondents of the experimental groups had improved. It also answered to what extent the use of podcasts in education had an impact on listening skills. The motivation of students to study a foreign language was examined by a survey questionnaire.

Data analysis tools

We implemented for data analysis the statistical program SPSS to objectively analyse quantitative data and the survey questionnaire. Using the t-test, we scientifically verified whether the observed difference in averages could be random or statistically significant and tested H0 (null hypothesis): Podcast supported teaching does not affect the listening skills of selected respondents which according to the results from the t-test was rejected. The hypothesis H1 (alternative hypothesis): Podcast supported teaching improves listening skills of selected respondents was confirmed.

In addition to the statistical evaluation of the data, we also used a one-dimensional questionnaire, which we compiled in such a way that the selection of the research set corresponded to the research objectives. Respondents who studied English as the first foreign language represented students of the first year of their studies at university and respondents who studied German as the second foreign language were students of the second year of their studies at university. With this selection, we pursued a more significant degree of objectivity of responses. For designing correctly the questionnaire, we used professional literature, experience, and similar empirical research. We prepared the questionnaire in two distinct phases. The first phase served to test the individual questions. At this stage, we meaningfully addressed randomly selected 20 respondents from the experimental groups and prepared the final form of the questionnaire according to individual testimonies. We withdrew questions, in which the answers were unclear or inconsistent, from the first version of the questionnaire. With this approach, we were capable to simplify the questions based on answers from the pilot survey questionnaire, therefore making the questions more understandable to the respondents. The return rate of the questionnaire was 56%.

Results

Collected data achieved from the pre-tests and post-tests are shown in tables 1-6. Categories in the tables are marked as follows: L1 - first foreign language, EG_n – order number of the experimental group, EG – the number of students of the experimental group, WR_e - the worst result from listening in points in the experimental group, BR_e – the best result from the listening in points in the experimental group, M_e - mean value achieved by the experimental group, CG_n – order number of the control group, CG - number of students of the control group, WR_c – the worst result achieved in the control group points, BR_c – the best result achieved in the control group in points, M_c - mean value achieved by the control group, and D_{EG-CG} – the difference between the experimental and control groups calculated from the mean.

Tables 1 and 2 show the results of respondents who studied English as the first language. For each group, we report the mean value calculated from the achieved results in the pre-tests and post-tests, the worst and best result achieved in the points, and the difference between the experimental and control groups.

Table 1 presents the evaluation of pre-tests. It shows that there are relatively small differences between the experimental and control groups. Only one experimental group (2A) achieved better results than the control group (2B) and respondents in the remaining four experimental groups had achieved on average worse results in the listening.

Table 1. Pre-test

L1	EG_n	EG	M_e	WR_e	BR_e	CG_n	CG	M_c	WR_c	BR_c	D_{EG-CG}
English	1A	20	**73.94**	44	90	1B	20	**74.65**	59	85	**-0.71**
English	2A	17	**79.69**	68	88	2B	17	**77.24**	67	88	**+2.45**
English	3A	18	**73**	31	84	3B	18	**73.01**	57	83	**-0.01**
English	4A	17	**75.05**	61	90	4B	17	**79.35**	67	93	**-4.25**
English	5A	19	**69.77**	54	82	5B	19	**72.89**	54	79	**-3.12**
English	6A	18	**74.27**	65	91	6B	18	**75.22**	61	83	**-0.95**

Table 2 shows the evaluation of post-tests. The respondents from the experimental groups achieved better results in five groups in comparison to five control groups. In one case the result was negative and the difference between mean values of the experimental and control group was -0.2. We do not consider this difference to be significant because, although the experimental group did not perform better than the control

group, there was still a significant improvement when we compare the results achieved in the pre-test to the results achieved in the post-test. The mean value of group 5A, calculated from the results achieved in the pre-test, is 69.77 and the mean value of the results achieved in the post-test is 75.94, i.e. the difference between mean values is 6.17 and this indicates improvement.

Table 2. Post-test

L1	EG_n	EG	M_e	WR_e	BR_e	CG_n	CG	M_c	WR_c	BR_c	D_{EG-CG}
English	1A	20	**81**	64	90	1B	20	**75**	63	89	**+6**
English	2A	17	**79**	68	89	2B	17	**74**	57	86	**+5**
English	3A	18	**79.36**	66	89	3B	18	**77**	72	90	**+2.36**
English	4A	17	**76.89**	63	90	4B	17	**74**	67	80	**+2.89**
English	5A	19	**75.94**	65	85	5B	19	**76.14**	64	84	**-0.2**
English	6A	18	**77.18**	62	86	6B	18	**76.66**	66	87	**+0.52**

As it is shown in table 3, all experimental groups achieved a better result in the post-test in comparison to the pre-tests. The experimental groups 1A, 3A, and 5A achieved significantly better results. The experimental groups 2A, 4A, and 6A achieved improvement but not substantial. However, if we compare the results achieved by the experimental groups with the results achieved by the control groups we can see the effect of using the podcast on the listening skills of the experimental groups.

Table 3. The difference in individual scores in the pre-tests and post-tests

Experimental Group	**Pre-test**	**Post-test**	**Control Group**	**Pre-test**	**Post-test**
Group 1A	73.94	81	Group 1B	74.65	75
Difference	**+7.06**		**Difference**	**+0.35**	
Group 2A	76.69	79	Group 2B	77.24	74
Difference	**+2.31**		**Difference**	**-3.24**	
Group 3A	73	79.36	Group 3B	73.01	77
Difference	**+6.36**		**Difference**	**+3.99**	
Group 4A	75.05	76.89	Group 4B	79.35	74
Difference	**+1.84**		**Difference**	**-5.35**	
Group 5A	69.77	75.94	Group 5B	72.89	76.14
Difference	**+6.17**		**Difference**	**+3.25**	
Group 6A	74.27	77.18	Group 6B	75.22	76.66
Difference	**+2.91**		**Difference**	**+1.44**	

Research into the use of podcasts to support traditional education was also conducted in a second foreign language. Table no. 4 shows that the differences between the experimental and control groups were not significant in the case of groups 2, 4 and 5. The difference between the experimental and control group 1 was significant. The control group 1D achieved a 9.38 better result than the experimental group. The mean value of the experiment group 3C was 5.93 better than the control group (Table 4).

Table 4. Pre-test

L2	EG_n	EG	M_e	WR_e	BR_e	CG_n	CG	M_c	WR_c	BR_c	D_{EG-CG}
German	1C	20	**57.81**	12	26	1D	20	**67.19**	8	28	**-9.38**
German	2C	19	**61.18**	12	30	2D	19	**59.61**	8	26	**+1.57**
German	3C	19	**70.07**	12	30	3D	19	**64.14**	0	28	**+5.93**
German	4C	20	**61.22**	8	24	4D	20	**61.25**	12	28	**-0.03**
German	5C	20	**63.99**	14	28	5D	20	**64.69**	12	28	**-0.70**

By comparing the results from the pre-test and the post-test, we can conclude that Group 1A, despite a significant difference from the control group 1D, improved and achieved a 4.38 better result in comparison to the result achieved in the pre-test. Control group 1D improved only by 1.62. Experimental Groups 2C, 3C,

and 4C improved significantly. The group 2C made particularly significant improvement in the listening skills in comparison to the pre-test. The respondents of this experimental group had shown interest in listening to uploaded audio posts during the experiment. They were motivated, and the teacher did not have to force them to listen to the published recordings. These students showed a high level of autonomous education during the experiment, which was also reflected in the achieved outcome (Table 5, Table 6).

Table 5. Post-test

L2	EG_n	EG	M_e	WR_e	BR_e	CG_n	CG	M_c	WR_c	BR_c	D_{EG-CG}
German	1C	20	**62.19**	12	28	1D	20	**68.81**	0	28	**-6.62**
German	2C	19	**78.45**	22	32	2D	19	**61.18**	10	28	**+17.27**
German	3C	19	**78.49**	12	30	3D	19	**70.39**	14	28	**+8.06**
German	4C	20	**69.67**	14	30	4D	20	**59.06**	0	27	**+10.61**
German	5C	20	**69.05**	8	30	5D	20	**64.06**	14	28	**+4.99**

Table 6. The difference in individual scores in the pre-tests and post-tests

Experimental Group	Pre-test	Post-test	Control Group	Pre-test	Post-test
Group 1C	57.81	62.19	Group 1D	67.19	68.81
Difference	**+4.38**			**+1.62**	
Group 2C	61.18	78.45	Group 2D	59.61	61.18
Difference	**+17.27**			**+1.57**	
Group 3C	70.07	78.49	Group 3D	64.14	70.39
Difference	**+8.42**			**+6.25**	
Group 4C	61.22	69.67	Group 4D	61.25	59.06
Difference	**+8.45**			**-2.19**	
Group 5C	63.99	69.05	Group 5D	64.69	64.06
Difference	**+5.51**			**+0.63**	

The study showed that using podcasts in education helps students to improve their listening skills. In the study, we wanted to prove that podcasts can play an important part in teaching listening skills as support of traditional teaching. We decided to use a quantitative method such as experiment and questionnaire because the aim of quantitative research is to obtain accurate and objectively verifiable data on the subject of the study. As we can see from the data analysis the respondents from experimental groups have improved their listening skills in comparison with the control groups.

We used for data analysis Student t-test to analyse quantitative data. 218 respondents, who studied the English language, took part in the experiment (109 respondents of the experimental group (ES) and 109 respondents of the control group (KS)). The maximum number of points the respondents could achieve in the pre-tests and post-tests was 100p. The respondents in the experimental groups achieved in the pre-tests the highest score 91p and the lowest score 31p. The point range was 60p. The respondents of the control groups achieved in the pre-tests the highest score 88p and the lowest score 54p. The point range was 34p. The mean of experimental groups minus control groups equals -1.2682. Intermediate values used in calculations were t = 1.1504, df = 216 and the standard error of difference = 1.102. The two-tailed P value equals 0.2513. This difference is not considered to be statistically significant.

The respondents in the experimental groups achieved in the post-tests the highest score 90p and the lowest score 62p. The point range was 28p. The respondents of the control groups achieved in the post-tests the highest score 90p and the lowest score 57p. The point range was 33p.

The mean of experimental groups minus control groups equals 6.2481. Intermediate values used in calculations were t = 7.1452, df = 216 and standard error of difference = 0.874. The two-tailed P value is less than 0.0001 and this difference is considered to be statistically significant.

196 second-year students studying German as a second foreign language took part in the experiment. The maximum number of points the respondents could achieve was 32p. The respondents in the experimental groups achieved in the pre-tests the highest score 30p and the lowest score 8p. The point range was 22p. The respondents of the control group achieved in the pre-tests the highest score 28p and

the lowest score 0p. The point range was 28p. The mean of experimental groups minus control groups equals -0.71. Intermediate values used in calculations were $t = 0.9261$, $df = 190$ and standard error of difference $= 0.765$. The two-tailed P value equals 0.3556. This difference is not considered to be statistically significant.

The respondents in the experimental groups achieved in the post-tests the highest score 32p and the lowest score 8p. The point range was 24p. The respondents of the control groups achieved in the post-tests the highest score 28p and the lowest score 0p. The point range was 28p.

The mean of experimental groups minus control groups equals 2.96. Intermediate values used in calculations were $t = 4.2747$, $df = 190$ and standard error of difference $= 0.692$. The two-tailed P value is less than 0.0001 and this difference is considered to be statistically significant.

Discussion

The research was aimed at proving or disproving hypothesis H0 (null hypothesis): Podcast supported teaching does not affect the listening skills of selected respondents; H1 (alternative hypothesis): Podcast supported teaching improves listening skills of selected respondents. According to the stated results the hypothesis H0 (null hypothesis) was rejected: Podcast supported teaching does not affect the listening skills of selected respondents. Based on the analysis of data obtained from pre-tests and post-tests the hypothesis H1 (alternative hypothesis): Podcast supported teaching improves listening skills of selected respondents was confirmed.

At the end of the experiment, the respondents from the experimental groups were asked on the principle of voluntariness to fill in the questionnaire. It was an anonymous survey. The aim of the survey questionnaire was to prove that using a podcast in teaching had had a positive influence not only on developing students´ language skills, but it had also influenced their motivation to study harder. 115 respondents of the experimental groups completed the questionnaire, i.e. it is 56% of respondents who took part in the experiment. Most of the answers were not surprising. All respondents said they had access to the Internet at home. It was not surprising, because nowadays, most people have the Internet on their mobile phones. Most respondents perceived the podcast as a means of improving their language skill listening. Only 5 students did not consider the podcast as a tool that had helped them improve their listening skills. We were surprised that for two-thirds, 85 respondents, the work on the podcast was not motivating. We think that this resulted from the feeling of respondents that they had to do something extra, something that took time. The average time needed to complete the tasks varied depending on the listening skill level: 10 minutes (13 respondents), 20 minutes (19 respondents), 30 minutes (62 respondents), 45 minutes (1 respondent), 50 minutes (11 respondents), 60 minutes (6 respondents). All respondents said they had played the recordings online, i.e. they did not download the episodes. The average number of played recordings depended not only on the level of listening skills of the individual respondents but also on the recording itself, i.e. the quality of the recording. 66 respondents had to listen to the recording 4-5 times on average. 49 respondents had to listen to the recording 3-4 times. No respondent reported less than 3 times. The choice of recordings was considered appropriate by all respondents and two-thirds of respondents (79) considered the topics of the recordings to be interesting. The last question was open and the respondents were asked what they liked and disliked about the podcast. Most respondents perceived the podcast as interesting variegation of traditional teaching, thanks to which they could improve their listening skills. They appreciated that they could play the recordings via their mobile phones or tablets, i.e. they did not have to use a notebook or a computer. They didn't like recordings that were hard to understand. The respondents thought after three months of listening audio recordings and tasks uploaded on the podcast that these extra materials for listening helped them to improve listening skills, but they also improved and enriched vocabulary.

Our opinion confirmed a statement made by Serkan Şendağ et al. (2017) that repeated listening to English as a Foreign Language (EFL)/second language (L2) podcast has been recognised as cognitively beneficial, while it is usually perceived as boring by learners.

There are also some limitations such as using podcasts is time-consuming more for teachers than for students, because teachers have to prepare materials, upload them, control assignments, and send feedback to students. Therefore, if teachers want to help students to improve their listening skills than they should take podcasts into account. Using podcasts in education is beneficial not only for students who can improve their listening skills but also for educators who can make the process of teaching make more interesting.

After the literature review, we found that there is a gap in the research of using podcasts as a tool for improving speaking skills.

Conclusions

The findings of the study revealed the educators can use podcasts as a tool for improving listening skills which are very important for active applying language knowledge in the working environment. Podcasts also enable students to record their episodes in a foreign language as well as to listen to a foreign language. The choice of time and place for listening or recording the speech also belongs to the advantages of the podcasts.

Hitherto the podcast has not been in the centre of scientific researchers´ attention and it opens the space for research of this web application. We are convinced that the podcast has broad applicability in a teaching process and by researching podcast´s usability we can testify its significance and relevancy to the educational process in the era of advanced information and communication technologies.

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