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The effectiveness of the Storyline approach in teaching English as a first foreign language in secondary vocational school

Abstract: The article presents Storyline, an internationally recognised pedagogical approach to English language teaching. Storyline is used in developing a curriculum as an integrated whole. In the introduction, this paper summarises the theoretical background of the field of foreign language teaching and the Storyline approach. This is followed by a description of the empirical research, in which the researchers investigate (1) whether the use of Storyline in English language teaching contributes to higher achievement in English language proficiency; (2) whether Storyline influences students' motivation to learn English; (3) the elements of Storyline in which students are most likely to perform well; and (4) the relationship between the popularity of particular elements of Storyline and performance in English language tests. The answers were obtained by conducting quantitative research involving first-year students in vocational secondary schools of different educational programmes who were taking English classes as a first foreign language. The study confirms that the Storyline approach leads to higher achievement in English language skills and motivates students to learn English as a foreign language.

Keywords: Storyline approach, learners' motivation to learn a foreign language, English for specific purposes, secondary school

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Introduction

The landscape of English education has been marked by a shift from traditional learning towards more interactive, student-centred approaches. This transition has necessitated innovations to curricula, which are nowadays orientated towards practical application and include, in addition to the acquisition of knowledge and understanding, the formation of attitudes and values (Budimir Ninković and Sučević 2013, p. 171). The 20th century witnessed many ups and downs in numerous approaches to teaching English as a foreign language (EFL), and it is impossible to speak of a single 'legitimised' approach (Skela 2008, p. 13). Experts and national EFL policy strategies recommend several dominant teaching approaches. One such predominant approach is communicative (Skela 2011, p. 114). Content and language integrated learning (CLIL) is an approach proven to be beneficial due to the use of language as a tool to achieve content goals (Coyle et al. 2013). Similarly, task-based teaching has also played an important role in curriculum design (Skela 2011, p. 121). The characteristics of all these approaches can also be found in the internationally recognised pedagogical approach called Storyline.

Storyline is an approach based on teaching through the creation of a story. The name *Storyline* symbolises the *story*, represented by the learner, and the *line* drawn by the teacher (Lander 2011, p. 104). It also emphasises that the teacher plans and holds the threads of the learning process while the learners take credit for the story itself (Bell and Harkness 2016, p. 19). In Storyline, the teacher sets the learning objectives, and with the help of the students, a meaningful context is created in the form of a story in such a way that it incorporates the language knowledge and skills of the curriculum content. In addition, Storyline is a response to a world in which access to information is relatively easy and new knowledge is accumulating at an alarming rate, so it is imperative that curricula move away from fact-based education and begin to emphasise the importance of teaching abilities and problem-solving skills as well as verifying solutions and encouraging meta-cognitive and meta-linguistic skills (Bell 2008, p. 61). This has led to a new pedagogical approach using key questions as the basis for learners' mental development, identifying and solving problems through the invention of characters in

a story and interweaving emotions with factual knowledge rather than traditional knowledge transfer (Bell and Harkness 2016, p. 17). Although initially created as a teaching philosophy in response to the demand for new teaching approaches in primary education in Scotland in 1965, Storyline is appropriate for all age groups (Bell and Harkness 2016, p. 15). Storyline is, therefore, a learner-centred and socio-structural approach in which learning takes place through activities and discovery methods, differentiated group work, cross-curricular integration and teaching skills and concepts (Mitchell 2016, p. 31). In addition to contextualisation, stories also present an effective model of foreign language use for learners (Ur 1999, p. 89) and show the actual language in use (Winch 2002, p. 365). Storyline also relies heavily on group work. The heterogeneous grouping of more and less proficient students is a very important feature of Storyline. Studies have found that students belonging to different groups of external learning differentiation also differ in their level of motivation, as the students attending the highest level of difficulty are the most motivated and those attending the easiest level of difficulty are the least motivated (Štemberger et al. 2009). Organising Storyline tasks so that these students work together increases the motivation of the weaker students to learn, as they will feel less pressure because they know that more advanced students can help them solve problems related to the use of the foreign language and that they can help the more advanced students by contributing to the part of the task that involves using their strengths.

Although Storyline is an internationally recognised teaching approach, there is still a lack of scientific research on its effectiveness in EFL teaching and in teaching specific target groups, such as secondary vocational students learning English for specific purposes. The impact of Storyline on students' intrinsic motivation to learn English is also under-researched. To date, studies have recommended further research on the elements of Storyline and their effects on teaching (Mitchell-Barrett 2010, p. 15).

From the literature, the key features of Storyline can be summarised into seven key elements of the approach in EFL: (1) key questions, (2) story, (3) hypothesising and researching, (4) inventiveness and creativity, (5) visualisation, (6) group work and (7) acquisition of language structures. The first element is the discovery of prior knowledge by formulating key questions. Within this approach, teachers show learners that one of the best sources of knowledge is already within the learners themselves. Therefore, key questions facilitate the construction of the basis on which learners can build their own learning processes. Another element is the story, providing structure, meaning and playfulness to the learning process, further establishing this approach as particularly universal, distinctive and practical (Bell and Harkness 2016, pp. 21–22). Mitchell (2016, p. 40) noted that in the Storyline approach, the narrative plays a major role in the mental organisation of information, supporting comprehension and memorisation, as well as encouraging logical, creative and divergent thinking. The next element of Storyline is hypothesising and researching, in which students attempt to provide an optimal solution to a problem or problems in the story. Students develop their own research skills by formulating hypotheses to prove or disprove the predicted re-

sults (Nakrst 2015, p. 9). Inventiveness and creativity are also important elements of Storyline. In the Storyline classroom, students participate in the planning and decision-making process, which gives them freedom of thought and expression and opens the door to different perspectives (McNaughton 2007, p. 152). The next element is visualisation, which represents the new world that learners have built together, provides orientation in the story, emphasises what has already been learned and anticipates the future course of the story that learners are looking forward to (Ahlquist 2013, p. 52). To a large extent, Storyline is characterised by students working in groups or pairs, which is another element of this approach. Creative and self-initiated learning tends to develop excellent group dynamics in which ethical principles and leadership skills prevail, thus contributing to additional learning (Lander 2011). Storyline teachers design their teaching by skilfully weaving language structures into the story by constructing the story setting and its characters and sequencing events.

Research methods

Research questions

In addition to a theoretical definition of the elements of Storyline, this paper presents research that scientifically confirms the effectiveness of individual elements. It aims to develop a scientifically validated model of the effectiveness of the Storyline approach and to empirically test its effectiveness on a purposive sample. The following questions are addressed: (1) whether the use of Storyline in English language teaching contributes to higher achievement in English language proficiency; (2) whether Storyline influences students' motivation to learn English; (3) in which elements of Storyline are students most likely to perform well; and (4) what the relationship is between the popularity of each element of Storyline and performance on English language tests. To answer the above research questions, an empirical study based on a quantitative research paradigm was conducted. A causal quasi-experimental research method was used. Before starting the experiment, we obtained the consent of the students, parents and the principal of the school as well as approval for the research by the ethics committee.

Research instruments

The following research instruments were designed and/or used: (1) the standardised international English B1 Preliminary for Schools test (Cambridge English Language Assessment 2020), consisting of three parts: (1) testing reading and listening comprehension and language in use; (2) the standardised IMI-Intrinsic Motivation Inventory (Deci and Ryan 2018) to measure student's intrinsic motivation (Mitchell-Barrett 2010); (3) a valid and reliable knowledge test mea-

suring key elements of Storyline; and (4) a valid and reliable questionnaire about the students' attitudes towards the different elements of the Storyline approach.

Due to a lack of financial and human resources enabling the researchers to provide the students with reliable double ratings of their productive skills (speaking and writing), the researchers decided to test their receptive skills (reading and listening skills) and use of language.

All four research instruments were reliable. The English B1 Preliminary for Schools test (Cambridge English Language Assessment 2020) and the IMI-Intrinsic Motivation Inventory (Deci and Ryan 2018) are standardised instruments. For the purpose of this research, two additional instruments were created: a knowledge test measuring key elements of Storyline and a questionnaire about the students' attitudes towards the different elements of the Storyline approach. The reliability of these instruments was tested by calculating their reliability coefficients using Cronbach's alpha equation. The results indicated a Cronbach's alpha of 0.830 for the English B1 Preliminary for Schools test, 0.802 for IMI-Intrinsic Motivation Inventory, 0.677 for the knowledge test and 0.717 for the questionnaire. Therefore, the research instruments may be considered reliable.

Sample description

The experimental and control groups consisted of first-year students from a vocational secondary school who attended classes in English as a first foreign language. We included five classes, consisting of 150 first-year students in the experimental group and the same number of students in the control group. To ensure that the experimental and control groups were equal or at least not statistically significantly different and to measure the effect of Storyline, both groups took the standardised English proficiency test before and after the experiment and a standardised scale measuring learners' motivation to study the foreign language. We also checked external influences on English proficiency in terms of extra-curricular or after-school activities that could impact students' English proficiency and found that none of the students attended such activities. We also enquired about the student's out-of-school exposure to English (e.g. watching television, using social media and listening to music in English) and found that both groups reported a similar amount of exposure to English (91.3% of the experimental group students reported being exposed to English more than 3 hours per day, while 92.6% of the control group students reported the same amount of exposure). We used a non-randomised sampling design and purposive sampling to obtain the data, as we were looking at the knowledge and intrinsic motivation of students exposed to Storyline in the English classroom. The students in the control group were taught by English teachers using conventional pedagogical approaches, while one of the authors of this paper taught the students in the experimental group using the principles of Storyline. The students in the experimental group received Storyline lessons three times a week for 57 hours of Storyline out of 105 foreign language lessons during the school year.

To compare the differences between the experimental and the control groups before the start of the experiment, the standardised international English B1 Preliminary for Schools test was administered, while the non-parametric Mann–Whitney U test presented in Table 1 was used for a comparison between the groups due to the non-normal distribution of the data.

	Cambridge pre-test – December 2019
Mann–Whitney U	11206.000
Wilcoxon W	2253.000
Z	–0.059
Sig.	0.953

Table 1: Mann–Whitney U test for overall achievement in the December 2019 Cambridge test

Data collection process

During the research, we presented the material in the form of two Storylines about the creation of a business. The first Storyline, consisting of nine episodes, was called Let's Open Our Own Business, and the second Storyline, consisting of 10 episodes, was a continuation called New Business Opportunities. Each episode focused on one of the elements of the Storyline. Each episode lasted 1 week for 3 school hours. Although it was a different teaching approach, we followed the national curriculum objectives. To monitor the effectiveness of Storyline at the beginning and end of the school year, students from both groups took a standardised English proficiency test. The experimental group also completed a language knowledge test at the end of the school year with different types of tasks that measured which elements of Storyline had the greatest impact on their English language proficiency. These students also completed a questionnaire measuring the elements of Storyline that motivated them most in English lessons.

Data processing procedure

The data collected were statistically processed using SPSS software and the following individual statistical procedures: the Mann–Whitney test, descriptive statistics, means, measures of dispersion and correlation coefficients, as well as Cronbach's coefficient to calculate reliability.

Results

The data described in this section refer to the results obtained by administering the knowledge tests and motivation questionnaires after the experimental

group had received Storyline instruction and the control group had been taught using traditional teaching methods.

The impact of Storyline on English knowledge

Research question 1 explores whether students receiving English as a foreign language instruction in a secondary vocational school using the Storyline approach achieve higher results in English language proficiency than students in the control group.

The proficiency of the students in both the experimental and control groups was measured at the beginning and at the end of the experiment using the Cambridge Proficiency Test, monitoring reading and listening comprehension, language in use and overall performance on the test. The two groups were evenly matched in terms of knowledge at the start of the survey.

Reading comprehension

Table 2 shows the mean ranks and rank sums for reading comprehension at the end of the experiment in June 2020 for the experimental and control groups. For reading comprehension, the students in the experimental group scored, on average, higher than the students in the control group. The Mann–Whitney U test was used because the data did not satisfy the normal distribution assumption, as tested using the Shapiro–Wilk and Kolmogorov–Smirnov tests ($p < 0.05$). The results of the Mann–Whitney test showed statistically significant differences in the scores on reading comprehension between the experimental and control groups ($U = 8180.000$, sig. $= 0.000$). According to Cohen (1988), the effect size was small ($d = -0.236$).

	Group	N	Mean rank	Sum of ranks
Reading comprehension	Experimental group	150	170.97	25645.00
	Control group	150	130.03	19505.00
	Total	300		

Table 2: Mean ranks and rank sums for reading comprehension in June 2020 for the experimental and control groups

Listening comprehension

Table 3 shows the mean ranks and rank sums for listening comprehension at the end of the experiment in June 2020 for the experimental and control groups. The Mann–Whitney U test was used because the data did not satisfy the nor-

mal distribution assumption, as tested using the Shapiro–Wilk and Kolmogorov–Smirnov tests (p < 0.05). For listening comprehension, the students in the experimental group scored, on average, higher than the students in the control group; however, there were no statistically significant differences (U = 10881.000, sig. = 0.622). According to Cohen (1988), the effect size was small (d = -0.029).

	Group	N	Mean rank	Sum of ranks
Listening comprehension	Experimental group	150	152.96	22944.00
	Control group	150	148.04	22206.00
	Total	300		

Table 3: Mean ranks and rank sums for listening comprehension in June 2020 for the experimental and control groups

Language in use

Table 4 shows the mean ranks and rank sums for language in use at the end of the experiment in June 2020 for the experimental and control groups. For language in use, the students in the experimental group scored, on average, higher than the students in the control group. The Mann–Whitney U test was used because the data did not satisfy the normal distribution assumption, as tested using the Shapiro–Wilk and Kolmogorov–Smirnov tests (p < 0.05). There were statistically significant differences in the scores for language in use between the experimental and control groups (U = 9745.500, sig. = 0.043). According to Cohen (1988), the effect size was small (d = -0.117).

	Group	N	Mean rank	Sum of ranks
Language in use	Experimental group	150	160.53	24079.50
	Control group	150	140.47	21070.50
	Total	300		

Table 4: Mean ranks and rank sums for language in use in June 2020 for the experimental and control groups

Overall achievement on the test

Table 5 shows the mean ranks and rank sums for overall achievement on the June 2020 test for the experimental and control groups. For overall achievement on the test, the students in the experimental group scored, on average, higher than the students in the control group. The Mann–Whitney U test was used because the data did not satisfy the normal distribution assumption, as tested using

the Shapiro–Wilk and Kolmogorov–Smirnov tests ($p < 0.05$). It was found that the students in the experimental group scored, on average, higher than the students in the control group and that there were statistically significant differences in the total achievement scores between the experimental and control groups (U = 9976.500, sig. = 0.030). According to Cohen (1988), the effect size was small (d = -0.098).

	Group	N	Mean rank	Sum of ranks
Overall achievement on the test	Experimental group	150	158.99	23848.50
	Control group	150	142.01	21301.50
	Total	300		

Table 5: Mean ranks and rank sums for overall achievement on the June 2020 test for the experimental and control groups

The impact of Storyline on students' motivation to learn a foreign language

Research question 2 explores whether students receiving English as a foreign language instruction in a secondary vocational school with a story-based approach are more motivated to learn a foreign language than students in the control group.

The Intrinsic Motivation Inventory was used to assess students' motivation to learn a foreign language in a secondary vocational school at the end of the experiment for both the experimental and control groups. This questionnaire was used to monitor interest and satisfaction, perception of one's own ability, perception of choice, pressure and strain and the total score on the measurement of intrinsic motivation.

Interest and enjoyment

Table 6 shows the mean ranks and rank sums for the interest and enjoyment category in June 2020 for the experimental and control groups. It can be seen that the students in the experimental group scored, on average, higher in this category than the students in the control group. The Mann–Whitney U test was used because the data did not satisfy the normal distribution assumption, as tested using the Shapiro–Wilk and Kolmogorov–Smirnov tests ($p < 0.05$). There were statistically significant differences in the scores for the interest and enjoyment category between the experimental and control groups (U = 8058.500, sig. = 0.000). According to Cohen (1988), the effect size was small (d = -0.245).

	Group	N	Mean rank	Sum of ranks
Interest and enjoyment	Experimental group	150	171.78	25766.50
	Control group	150	129.22	19383.50
	Total	300		

Table 6: Mean ranks and sum of ranks for the interest and satisfaction category for the experimental and control groups

Perceived competence

Table 7 shows the mean ranks and sum of ranks for the category of perceived competence in June 2020 for the experimental and control groups. It can be seen that the students in the experimental group scored, on average, lower in this category than the students in the control group. The Mann–Whitney U test was used because the data did not satisfy the normal distribution assumption, as tested using the Shapiro–Wilk and Kolmogorov–Smirnov tests ($p < 0.05$). There were no statistically significant differences in the scores for the category of perceived competence between the experimental and control groups (U = 10976.500, sig. = 0.715). According to Cohen (1988), the effect size was small (d = -0.021).

	Group	N	Mean rank	Sum of ranks
Perceived competence	Experimental group	150	148.68	22301.50
	Control group	150	152.32	22848.50
	Total	300		

Table 7: Mean ranks and sum of ranks for the category of perceived competence for the experimental and control group

Perceived choice

Table 8 shows the mean ranks and sum of the ranks for the category of perceived choice in June 2020 for the experimental and control groups. It can be seen that the students in the experimental group scored, on average, higher in this category than the students in the control group. The Mann–Whitney U test was used because the data did not satisfy the normal distribution assumption, as tested using the Shapiro–Wilk and Kolmogorov–Smirnov tests ($p < 0.05$). There were statistically significant differences in the scores for the perceived choice category between the experimental and control groups (U = 9431.000, sig. = 0.015). According to Cohen (1988), the effect size was small (d = -0.140).

	Group	N	Mean rank	Sum of ranks
Perceived choice	Experimental group	150	162.63	24394.00
	Control group	150	138.37	20756.00
	Total	300		

Table 8: Mean ranks and sum of ranks for the category of perceived choice for the experimental and control groups

Pressure and tension

Table 9 shows the mean ranks and sum of ranks for the category of pressure and tension in June 2020 for the experimental and control groups. It can be seen that the students in the control group scored, on average, higher in this category than the students in the experimental group. The Mann–Whitney U test was used because the data did not satisfy the normal distribution assumption, as tested using the Shapiro–Wilk and Kolmogorov–Smirnov tests ($p < 0.05$). There were statistically significant differences in the scores for the pressure and tension category between the experimental and control groups (U = 9393.000, sig. = 0.013). According to Cohen (1988), the effect size was small (d = -0.143).

	Group	N	Mean rank	Sum of ranks
Pressure and tension	Experimental group	150	138.12	20718.00
	Control group	150	162.88	24432.00
	Total	300		

Table 9: Mean ranks and sum of ranks for the category of pressure and tension for the experimental and control groups

The impact of the individual Storyline elements

Research question 3 explores which elements of the Storyline approach students are most successful at in English.

The performance of the experimental group students was measured at the end of the experiment using the final language knowledge test (FLKT). The test was structured in such a way that it could monitor performance on the individual elements of the Storyline approach.

Table 10 shows which elements of the Storyline approach in FLKT for the experimental group students scored the highest, on average. The lowest scores were achieved in the acquisition of language structures (M = 5.67; SD = 2.20), key questions (M = 6.77; SD = 1.75) and hypothesising and researching (M = 6.87; SD = 2.07). The highest scores were achieved in visualisation (M = 9.09;

SD = 0.93), group work (M = 8.25; SD = 1.39), inventiveness/creativity (M=8.18; SD=1.60) and story (M = 7.82; SD = 1.71).

	Mean	Standard deviation	Minimum	Maximum
Key questions_ FLKT	6.77	1.75	1.00	10.00
Story_ FLKT	7.82	1.71	3.00	10.00
Hypothesising and researching _ FLKT	6.87	2.07	1.00	10.00
Acquisition of language structures_ FLKT	5.67	2.20	1.00	10.00
Group work _ FLKT	8.25	1.39	5.00	10.00
Visualisation _ FLKT	9.09	0.93	7.00	10.00
Inventiveness/creativity _ FLKT	8.18	1.60	3.00	10.00

Table 10: Descriptive statistics for the elements of the Storyline approach in the final knowledge test for the experimental group

The third research question was examined using the results of the Wilcoxon signed-ranks test for one sample on the elements of the Storyline approach in FLKT for the experimental group. The values of the Wilcoxon one-sample signed-ranks test were statistically significant (sig. < 0.05), which means that the null hypothesis is rejected; that is, the median was statistically significantly greater than 5. A value of 5 was chosen because 50% of the scores is defined as half of the score. It was found that for all elements of the Storyline approach in FLKT for the experimental group, students scored at least 50%.

The aim was to find out which elements of the Storyline approach the students were most successful at in English. They were most successful in visualisation (90.93 %), group work (82.47%), inventiveness and creativity (81.80 %) and story (78.20 %) but least successful in the acquisition of language structures (56.73 %), key questions (67.67 %) and hypothesising and researching (68.67 %).

Correlation between the popularity of the Storyline elements and language knowledge

Research question 4 explored 'what the correlation is between the popularity of each element of the Storyline approach and performance in the language knowledge test'.

For the students in the experimental group, the popularity of the individual Storyline elements was measured at the end of the experiment using the questionnaire on the popularity of the elements (QPE) of the Storyline approach, and the performance was measured using the FLKT. Both instruments were designed in such a way that popularity and performance across the different elements of the Storyline approach could be tracked.

Table 11 shows how the elements of the Storyline approach were rated, on average, by the students using the QPE. The lowest scores were given for the acquisition of language structures (M = 4.65; SD = 1.59), hypothesising and researching (M = 4.73; SD = 1.66) and key questions (M = 5.06; SD = 1.42), while the highest scores were given for visualisation (M = 9.51; SD = 1.15), inventiveness and creativity (M = 9.36; SD = 1.30), group work (M = 9.23; SD = 1.16) and story (M = 8.92; SD = 0.99).

	Mean	Standard deviation	Minimum	Maximum
Key questions _ QPE	5.06	1.42	2.00	10.00
Story _ QPE	8.92	0.99	4.00	10.00
Hypothesising and researching _ QPE	4.73	1.66	2.00	10.00
Acquisition of language structures _ QPE	4.65	1.59	2.00	10.00
Group work _ QPE	9.23	1.16	5.00	10.00
Visualisation _ QPE	9.51	1.15	5.00	10.00
Inventiveness and creativity _ QPE	9.36	1.30	4.00	10.00

Table 11: Descriptive statistics for the elements of the Storyline approach from the questionnaire on the popularity of the elements of the Storyline approach for the experimental group

Table 12 compares the values of the elements of the Storyline approach from the FLKT and the QPE for the experimental group. It can be seen that the scores that the students achieved in the FLKT (75.21 %) were higher than those that the students gave to the individual items in the QPE (73.51 %). In the FLKT, students performed better on the items of key questions (67.67 %), hypothesising and researching (68.67 %) and acquisition of language structures (56.73 %). In the QPE, students scored better on the items of story (89.20 %), group work (92.33 %), visualisation (95.07 %) and inventiveness and creativity (93.60 %).

	Statistics for the FLKT	Statistic for the QPE
Key questions	67.67 %	50.60 %
Story	78.20 %	89.20 %
Hypothesising and researching	68.67 %	47.27 %
Acquisition of language structures	56.73 %	46.53 %
Group work	82.47 %	92.33 %
Visualisation	90.93 %	95.07 %
Inventiveness and creativity	81.80 %	93.60 %
Total	75.21 %	73.51 %

Table 12: Performance of the elements of the Storyline approach from the FLKT for the experimental group and from the QPE

Relationship between the popularity of each element of the Storyline approach and performance in the language knowledge test

The aim was to investigate the correlation between the popularity of the different elements of the Storyline approach and performance on the English language knowledge test. Since it was found that the elements of the Storyline approach are not normally distributed, Spearman's rank correlation coefficient was used.

Table 13 shows that there were statistically significant differences (sig. < 0.05) between all elements of the Storyline approach and performance in the English test. All correlations are positive, which means that as the popularity of each element of the Storyline approach increases, so does performance in the language knowledge test.

			Points
Spearman's rho	Key questions	Correlation Coefficient	0.569**
		Sig.	0.000
		N	150
	Story	Correlation Coefficient	0.557**
		Sig.	0.000
		N	150
	Hypothesising and researching	Correlation Coefficient	0.775**
		Sig.	0.000
		N	150
	Acquisition of language structures	Correlation Coefficient	0.651**
		Sig.	0.000
		N	150
	Group work	Correlation Coefficient	0.506**
		Sig.	0.000
		N	150
	Visualisation	Correlation Coefficient	0.183*
		Sig.	0.025
		N	150
	Inventiveness and creativity	Correlation Coefficient	0.627**
		Sig.	0.000
		N	150
Note: **Correlation is statistically significant at the 1% level of significance; *Correlation is statistically significant at the 5% level of significance.			

Table 13: Spearman's rho for the popularity of each element of the Storyline approach and performance on the language knowledge test

Discussion

An experiment was conducted to measure the knowledge and motivation of the experimental group, which was taught with the help of the Storyline principles, and to compare them with the control group, which was taught using traditional EFL teaching methods. The data obtained showed that Storyline was a more effective pedagogical approach that had a positive impact on foreign language learning. Other research has produced similar results concerning the effectiveness of the Storyline approach in terms of an increase in knowledge acquired and students' motivation. This section comments on the results of this research and compares the findings with other known research papers on Storyline.

After the experiment, the students in the experimental group scored, on average, higher in reading comprehension than the students in the control group, and the differences between them were statistically significant. This result can be attributed to the use of the Storyline approach, which by definition involves the acquisition of new knowledge through reading. That reading comprehension can be improved if it is performed with engaging texts, such as those used in Storyline, was also demonstrated by Sharon Ahlquist (2011, p. 153) in her research for her PhD thesis. The same is true for listening comprehension. Statistically significant differences between the experimental and control groups in reading comprehension were expected because research has shown that Storyline offers linguistic tools for developing reading skills; namely, Storyline transfers already acquired reading strategies into a foreign language; offers a large input of different types of sources and authentic materials that go beyond the boundaries of a textbook and the classroom; and, through group work, enables the comprehension of even difficult texts that weaker students would otherwise not be able to process on their own (Brandford 2007, p. 73).

Students in the experimental group outperformed the control group based on the measurement of listening skills, but the difference was not statistically significant. Nevertheless, better results can be attributed to the use of the Storyline approach, which motivated the students in the listening comprehension tasks. Research has shown that listening comprehension is made more fun through Storyline, which has a significant impact on the motivation to solve tasks (Ahlquist 2011, p. 153).

Storyline is also effective in acquiring language in use. The experimental group scored, on average, higher than the control group on the language-in-use tasks, and the difference in performance was statistically significant. Grammar and vocabulary learning is perceived as more popular when using Storyline compared to traditional methods, as shown by the findings of the other studies mentioned below, so it is not surprising that the experimental group's performance on this part of the test was statistically significantly different from that of the control group. A study on Storyline in the teaching of English as a foreign language at a military academy confirmed that Storyline improved all four language skills and that cadets themselves saw their own improvement in language use (Mitchell, 2016, p. 162). Many other studies have reported an increase in all language

skills taught with the help of Storyline. One such study of primary school children in grade 5 also showed that on a post-Storyline knowledge test, the experimental group scored statistically significantly better than the control group, which had not been taught using this pedagogical approach (Demir 2013, p. 177).

Using Storyline is not only positive for the acquisition of knowledge. This research found that Storyline contributes significantly to students' motivation to learn a foreign language. This was confirmed in this study, as well as in other scientific studies. In this study, intrinsic motivation was measured in general and in relation to four different areas of motivation: interest and enjoyment, perceived competence, perceived choice and pressure and tension. The group of questions measuring motivation concerned a self-assessment of the level of interest in and enjoyment of foreign language teaching. Here, the experimental group rated these factors through Storyline much better than the control group, and the differences between the groups were statistically significant. Most studies on the pedagogical approach of Storyline have found that learners find Storyline very entertaining. This was confirmed in a PhD thesis on a primary school population in a foreign language (Ahlquist 2011, p. 152). Interest and enjoyment in Storyline are increased by pupils creating their own products, of which they are proud and from which they are more motivated to attend lessons (Materniak 2011, p. 159). The increase in interest in and enjoyment of learning is perceived by the children themselves (Richards 2012, p. 10) and is also observed by teachers in their pupils (Nuttall 2016, p. 163). A doctoral thesis systematically addressing this subcategory of intrinsic motivation perceived an increase in interest and satisfaction in learning through Storyline (Mitchell-Barrett 2010, p. 125). That self-selection is key in motivating students to learn in Storyline was suggested by an international study, which also found that children with disabilities like the fact that their ideas are never rejected in Storyline (Kommnick and de Buhr 2009, p. 28). It is the unpredictability of Storyline resulting from the choices students make that makes it exciting for students to work with (Ahlquist 2011, p. 102).

Part of intrinsic motivation is the assessment of students' own learning abilities through storytelling. Students in the experimental group rated themselves lower than students in the control group, but these differences were not statistically significant. This means that students in the experimental group felt that they knew or could do less than they actually did and therefore rated their ability to communicate in a foreign language lower. Such a result is not unusual, and research on Storyline often mentions reservations in the self-assessment of knowledge. While the vast majority of learners find Storyline highly entertaining, they are not sure how much they will actually gain from it (Mitchell-Barrett 2010, p. 155). Although Storyline actively involves students and shows that they can do much more than they think, they are less aware of it. One reason is that active learning makes Storyline more challenging than traditional teaching, and as a result, students feel that they know less (Richards 2012, p. 10). A similar misconception about the effectiveness of learning is characterised by students believing that their knowledge will improve only if they do many repetition and drill exercises (Ahlquist 2011, p. 152) and, therefore, mistakenly feel Storyline may not

be an effective approach because language skills are not explicitly taught through exercises designed to practise them.

The results of the statistical analysis of the data showed that the students in the experimental group were more motivated to learn a foreign language than the students in the control group because of the possibility of making their own choices and having control over their learning. The difference between the two groups was statistically significant. This finding is in accordance with the pedagogical principles of Storyline, which are based on teaching being learner-centred, following the learner's pace and even offering the learner the possibility to choose the course of learning by creating unexpected events in the story. The results of doctoral research have confirmed that learners actively use a foreign language in Storyline, which helps facilitate perceived choices as they communicate with each other to solve problem-based tasks that motivate them to learn rather than to use it because the teacher tells them to (Ahlquist 2011, p. 152). Similarly, doctoral dissertations have shown that the acquisition of knowledge through one's own work and decision-making about the course of learning have a positive effect on motivation in Storyline (Mitchell-Barrett 2010, p. 163).

In addition to increasing motivation, Storyline helps reduce pressure and tension in the classroom. During the Storyline lessons, the students in the experimental group felt much less pressure and tension than the students in the control group. The results of measuring this aspect of intrinsic motivation are statistically significant. One doctoral study argued that Storyline does not create pressure because, in Storyline, students absorb the learning content through the eyes of the characters in the story, thereby entering an imaginary world that takes place in a safe environment and under controlled conditions in the classroom (Mitchell-Barrett 2010, p. 1). A thesis in the field of foreign language teaching through Storyline stated that the teachers in the study observed that there was less pressure for students to use Storyline; in particular, the fear of using a foreign language decreased for linguistically weaker students (Banas 2018, p. 25).

From the study described in this article and the confirmed findings of several other studies examining the use of Storyline, it is possible to define Storyline as a very effective method of teaching a foreign language in terms of foreign language knowledge and motivation.

Conclusion

The contribution of this research to science is its confirmation of the positive impact of the Storyline approach on learning English as a first foreign language in vocational secondary school. This research found that Storyline leads to higher achievements in English language proficiency and motivates students to learn more. For the first research question, it was concluded that the Storyline approach contributes to higher achievements in English language proficiency. Similarly, for the second research question, Storyline contributed significantly to students' motivation to learn a foreign language. In answering the third research

question, it was found that students performed differently on the different elements of Storyline. On the final test, the elements of visualisation, group work, inventiveness and creativity and story were found to contribute most to the acquisition and quality of knowledge, as students performed best in these elements. They performed less well in the elements of forming key questions, hypothesising and researching and acquiring language structures. It can be concluded that these three elements have less impact on knowledge. For the final research question, we looked for a correlation between the popularity of the individual elements of Storyline and performance on the language knowledge test. The experimental data showed that the correlation was high for all elements. According to the results obtained, it can be argued with high probability that Storyline as a pedagogical approach has very high potential for use in EFL in a vocational secondary school and that it leads to higher achievement in English language proficiency and motivates students to learn more.

References

Ahlquist, S. (2011). *The impact of the Storyline approach on the young language learner classroom: A case study in Sweden* (the degree of Doctor of Education). University of Leicester. Retrieved from: http://hkr.diva-portal.org/smash/get/diva2:457424/FULL-TEXT01 (accessed on 11 December 2021).

Ahlquist, S. (2013). *Storyline: Developing communicative competence in English*. Lund: Studentlitteratur.

Banas, S. (2018). *The Potential of the Storyline Approach in Croatian ELT Classrooms* (Diploma Thesis). University of Zagreb, Zagreb. Retrieved from: http://darhiv.ffzg.unizg.hr/id/eprint/10578 (accessed on 11 December 2021).

Bell, S. (2008). Storyline–A Pedagogy Based on Respect and Feelings. *Tiltai*, 44, issue 4, pp. 61–68.

Bell, S. and Harkness, S. (2016). Storyline: From Small Beginnings to Storyline International. In: P. J. Mitchell and M. J. McNaughton (eds.). *Storyline: A Creative Approach to Learning and Teaching*. Newcastle: Cambridge Scholars Publishing, pp. 15–22.

Brandford, V. (2007). Use of Storylines to develop reading and writing skills in the modern foreign language. In: N. Pachler and A. Redondo (eds.). *Routledge teaching guides. Teaching modern foreign languages in the secondary school: A practical guide*. London, New York: Routledge, pp. 67–75.

Budimir Ninković, G. and Sučević, V. (2013). The new curriculum as part of high quality European education. *Pedagoška obzorja*, 28, issue 3, pp. 171–183.

Cambridge English Language Assessment: B1 Preliminary for Schools: Sample test. (2020). Retrieved from: https://www.cambridgeenglish.org/exams-and-tests/preliminary-for-schools/exam-format/ (accessed on 11 December 2021).

Cohen J. (1988). *Statistical Power Analysis for the Behavioral Sciences*. New York: Routledge Academic.

Coyle, D., Hood, P. and Marsh, D. (2013). *CLIL: Content and language integrated learning* (5th ed.). Cambridge: Cambridge University Press.

Deci, E. L. and Ryan, R. M. (2018). *Intrinsic Motivation Inventory*. Retrieved from: http://selfdeterminationtheory.org/intrinsic-motivation-inventory/ (accessed on 11 December 2021).

Demir, S. (2013). The effect of teaching "let's travel and learn the world of living creatures" unit by storyline on academic achievement. *European Journal of Educational Studies*, 5, issue 1, pp. 177–185.

Drašler Zorič, A. (2013). Pogostost pripovedovanja zgodb pri pouku angleščine na zgodnji stopnji. *Pedagoška obzorja*, 28, issue 1, pp. 57–70.

Kommnick, J. and de Buhr, B. (2009). *Storyline – A European Comenius School Project 2006–2009*. Retrieved from: www.Storyline.userboard.net (accessed on 11 December 2021).

Lander, B. W. (2011). Storyline. "An Approach to Effective Teaching and Learning.". *Studies in Language and Literature*, 30, issue 2, pp. 97–115.

Lemut Bajec, M. (2019). Razvijanje koncepta kulturne dediščine s pristopom CLIL. *Journal of Contemporary Educational Studies*, 70, issue 3, pp. 82–99.

Materniak, M. (2011). The Storyline Approach – Creative Teacher-Learner Cooperation in the Process of Early Foreign Language Learning. Наукові праці Педагогіка, 158, issue 146, pp. 59–64.

McNaughton, M. J. (2007). Stepping out of the picture: Using drama in Storyline topics. In: S. Bell, S. Harkness and G. White (eds.). *Storyline: Past, present & future*. Glasgow: Enterprising Careers–University of Strathclyde, pp. 150–158.

Mitchell, P. (2016). *The Impact of the Storyline Method on the Foreign Language Classroom: An Action Research Case Study with Military Linguist Cadets*. Retrieved from: https://derby.openrepository.com/derby/bitstream/10545/609884/1/Thesis%20-%20Mitchell%20FINAL.pdf (accessed on 11 December 2021).

Mitchell-Barrett, R. (2010). *An analysis of the Storyline method in primary school: Its theoretical underpinnings and its impact on pupils' intrinsic motivation* (Doctoral thesis). Durham University, Durham. Retrieved from: http://etheses.dur.ac.uk/487/ (accessed on 11 December 2021).

Nakrst, L. (2015). *Pedagoški pristop Storyline: Strategija za poučevanje in učenje na spodbuden, učinkovit in kreativen način*. Stockholm: self-published.

Nuttall, A. (2016). The 'curriculum challenge': Moving towards the 'Storyline' approach in a case study urban primary school. *Improving Schools*, 19, issue 2, pp. 154–166.

Richards, K. (2012). *Ein Krimi in Frankfurt: Using Technology to Enhance Storyline Approach in Intermediate German Foreign Language Instruction*. Retrieved from: https://www.academia.edu/6439530/Ein_Krimi_in_Frankfurt_Using_Technology_to_Enhance_Storyline_Approach_in_Intermediate_German_Foreign_Language_Instruction (accessed on 11 December 2021).

Rosenthal, R. (1994). Parametric measures of effect size. In: H. Cooper and L. V. Hedges (eds.), *The handbook of research synthesis*. New York: Russell Sage Foundation, pp. 231–244.

Skela, J. (2008). Uvod - Učenje in poučevanje tujih jezikov na Slovenskem. In: J. Skela, M. Dagarin Fojkar, K. Pižorn, U. Sešek and M. Zavašnik Arčnik (eds.). *Učenje in poučevanje tujih jezikov na Slovenskem: Pregled sodobne teorije in prakse*. Ljubljana: Tangram, pp. 11–15.

Skela, J. (2011). Opredelitev tujejezikovne sporazumevalne zmožnosti v Skupnem evropskem jezikovnem okviru. *Journal of Contemporary Educational Studies*, 62, issue 2, pp. 114–133.

Štemberger, T., Ivanuš Grmek, M. and Čagran, B. (2009). Zunanja učna diferenciacija in motivacija učencev v osnovni šoli. *Journal of Contemporary Educational Studies*, 60, issue 1, pp. 54–68.

Ur, P. (1999). *A course in language teaching: Trainee book: practice and theory*. Cambridge: Cambridge University Press.

Winch, G. (2002). *Literacy: Reading, writing and children's literature*. Oxford: Oxford University Press.

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UČINKOVITOST POUČEVANJA ANGLEŠČINE KOT PRVEGA TUJEGA JEZIKA V SREDNJI STROKOVNI ŠOLI S PRISTOPOM STORYLINE

Povzetek: Prispevek predstavlja mednarodno priznan pedagoški pristop Storyline pri pouku angleščine v srednji strokovni šoli. Storyline je pristop poučevanja, ki razvija kurikul kot integrirano celoto. V uvodu prispevek najprej povzame teoretična izhodišča s področja poučevanje tujega jezika in pristopa Storyline. Sledi opis poteka empirične raziskave, v kateri se z raziskovalnimi vprašanji sprašujemo o tem, (1) ali uporaba pristopa Storyline pri pouku angleščine prispeva k boljšim dosežkom v znanju angleškega jezika; (2) ali pristop Storyline vpliva na motiviranost dijakov za učenje angleškega jezika; (3) pri katerih elementih pristopa Storyline so dijaki najuspešnejši (4); kakšna je povezanost med priljubljenostjo posameznih elementov pristopa Storyline in uspešnostjo na preizkusu znanja iz angleščine. Odgovore smo pridobili z izvedbo kvantitativne raziskave, v katero so bili vključeni dijaki 1. letnika srednjih strokovnih šol različnih izobraževalnih programov, ki obiskujejo pouk angleščine kot prvi tuji jezik. Z raziskavo smo potrdili, da uporaba pristopa Storyline privede k boljšim dosežkom v znanju angleščine in bolj motivira dijake za učenje.

Ključne besede: pristop Storyline, motiviranost dijakov za učenje tujega jezika, jezik stroke, srednja šola

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