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Flow and Digital Storytelling in Classes of French as a FL

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KLJUČNE BESEDE: digitalna orodja pri pouku, digitalno pripovedovanje zgodb, pouk tujih jezikov, vživetost

POVZETEK – Prispevek raziskuje učno metodo digitalnega pripovedovanja zgodb in njen vpliv na možnost pojava vživetosti (ang. flow) pri učencih med poukom francoščine kot tujega jezika. Osnovne predpostavke so bile, da bodo učenci z uporabo digitalnega pripovedovanja doživeli vživetost in da se bodo razlike v doživljanju vživetosti pokazale glede na posameznikove osebnostne značilnosti. Raziskavo smo izvedli pri pouku francoščine na dveh gimnazijah v šolskem letu 2022/2023, v raziskavi pa je sodelovalo 51 dijakov. Podatke smo zbrali z anketnim vprašalnikom pred uporabo učne metode (izobraževalne izkušnje in osebni interesi), nato z anketnim vprašalnikom med izvajanjem dejavnosti (standardizirani vprašalnik o učenju tujega jezika po Egbert, 2003 in Almetev, 2018) in z metodo učiteljevega opazovanja. Rezultati kažejo, da so učenci med izvajanjem dejavnosti čutili vživetost. Manj vešči učenci so vživetost čutili enako kot vešči učenci, močnejše občutenje vživetosti pa so imeli učenci, ki jim je ljubše skupinsko delo. Nobena raziskovalna predpostavka o razmerju med osebnostnimi in izobrazbenimi lastnostmi posameznika ter doživljanjem občutka vživetosti ni bila statistično pomembna.

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ABSTRACT – This paper explores the teaching method of digital storytelling and its effect on the potential occurrence of flow in pupils in classes of French as a foreign language. The underlying hypotheses are that pupils will experience flow through digital storytelling and that there will be differences in the experience of flow with regard to an individual's personal characteristics. The research was conducted in French classes held at two Croatian grammar schools during the 2022/2023 school year, wherein 51 pupils took part. The data was collected via a questionnaire distributed prior to the implementation of the teaching method (educational experience and personal interests), a questionnaire distributed during the implementation of the activity (standardized questionnaire regarding the research of flow in FL learning; see Egbert, 2003; Almetev, 2018) and the teacher's observation method. The results show that pupils did feel flow during the performance of the activity. Less-skilled pupils felt as much flow as the skilled ones, with a stronger sense of flow evident in pupils who prefer working in a group. None of the research hypotheses related to the relationship between an individual's personal and education-related characteristics and the experience of flow proved to be statistically significant.

1 Introduction

While emotions in learning and teaching a foreign language have been represented in applied linguistics research for decades, interest in a clearer understanding of the role of positive and negative emotions in foreign language pupils and teachers did not arise until the turn of the millennium (see Dewaele & Chengchen, 2020). Dewaele et al. (2019) believe that 2016 was marked by an increase in the popularity of positive psychology in applied linguistics, which was reflected in the number of publications exploring the link between foreign language learning and psychological constructs

such as enthusiasm, hope, courage, well-being, optimism, creativity, happiness, determination, resilience, and laughter. Assuming, as previous research shows (Egbert, 2003; Dewaele & MacIntyre, 2022), that the experience of flow is the optimal state for learning, including foreign language learning, a better understanding of the individual and environmental factors associated with experiencing flow proves to be a relevant research topic, both in scientific and practical terms, especially in Croatia, where there is no recorded research studying this psychological construct in foreign language teaching.

At the same time, when it comes to the uses of technological tools in education, the results of the research conducted by Dubovicki and Balen (2018) demonstrate that students "show a *greater motivation* for a course if the contents were presented with the help of new technologies" and "*greater satisfaction* with the teaching" (Dubovicki & Balen, 2018, p. 168). Moreover, Maksimović et al. (2020, p. 74) consider that the innovations in teaching practices are a direct result of technological development, but lose their pedagogical purpose if teachers are not equipped with the digital skills necessary for teaching.

Furthermore, during the last ten years, there has been an increased interest in the application of digital storytelling in teaching and in the positive outcomes of its application (Wu & Chen, 2020). Digital storytelling in teaching has been shown to boost, inter alia, pupils' self-confidence (Hung et al., 2012) and affective motivation to learn (Sadik, 2008; Hung et al., 2012); teamwork, social skills, communication skills (Ribeiro, 2016; Lin et al., 2013); critical and creative thinking (Yang & Wu, 2012); as well as language skills, story structuring and multimodal expression skills (Liu et al., 2018).

Therefore, if we consider the fact that flow ultimately leads to more effective learning and more motivated pupils, just as the creation of digital artifacts in teaching encourages the pupils' creativity, critical thinking, use and awareness of semiotic means (Lim & Toh, 2020), exploring the relationship between flow and the pupils' creation of their own digital works in foreign language teaching is considered an important topic. During the teaching activity covered by the research, pupils created multimodal texts using written and spoken language, drawings, sound, environmental objects, etc., and then processed the content in the Stop Motion Studio digital tool. This was a way to intentionally move away from the "traditional" forms of oral and written expression in language teaching and verify whether the pupils' flow occurs during the moments when they are creating their own digital text.

The next chapter presents the concept of flow and its research in foreign language teaching, and offers an overview of fundamental research and its results on the use of digital storytelling in teaching. The third chapter presents the methodology and research steps, while the fourth chapter presents the analysis and discussion of the results. The last part of the paper presents final remarks.

2 Theoretical framework

Flow – a prerequisite for optimal learning

Flow is considered one of the optimal states of internal experience in which a person's attention is devoted to the current activity to such an extent that the person feels that they are "immersed in the activity itself" (Križanić, 2015, p. 325). The concept was introduced by Csíkszentmihályi (1990, 1994, 1997), describing it as an experience characterized by intense focus and involvement, which leads to optimal learning, which in turn can lead to improved skill employed in a task. Nakamura and Csíkszentmihályi (2009) define nine components of flow:

- an individual's balance between skill and challenge in accomplishing a specific task,
- a clear goal,
- unequivocal feedback,
- merging of activity and awareness thereof,
- complete concentration,
- a sense of control,
- perception of the faster passage of time,
- lack of self-awareness, and
- intrinsically motivating activity.

All previous research has shown that the balance of skills and challenges is one of the key predictors of flow, together with clear goals and a sense of control (Križanić, 2015).

Flow can be considered an extremely useful tool in education due to the tendency of pupils to repeatedly perform activities in which they experience flow that results "from high challenge combined with high skill" (Shernoff & Csikszentmihalyi, 2009, p. 132). That is, this tool can contribute to increasing motivation and other positive emotions, and, indirectly, to the development of skills. One of the first studies of flow in foreign language teaching (Egbert, 2003) showed that activities interesting to pupils, with a clear purpose and goals, in which the emphasis is on meaning instead of language, and for which they are provided enough time and receive clear feedback, contribute to the occurrence of flow. For example, it has been shown that flow is enhanced by interaction with a native speaker, i.e., authentic and meaningful communication, as well as the application of new tools and activities instead of routine ones. Such activities seem to cause satisfaction, boost motivation, contribute to an increase in time spent on the task, and increase risk readiness, which in turn can lead to changes in the pupils' foreign language skills. Ultimately, the research pointed to a two-way relationship between flow and skill: the balance between challenge and skill can lead to flow, which may result in improved performance. On the other hand, Egbert (2003) stated that there are also factors that make it difficult to achieve a state of flow, namely: low-level foreign language skills, teacher-oriented teaching methods, and lack of feedback.

Building on previous research, a study conducted by Czimmermann and Piniel (2016) confirmed that the prerequisites for flow are sufficiently motivating tasks that are difficult but feasible, and ample time for pupils to perform them independently,

without the teacher's interference. Therefore, an effective teacher should be aware of the level of their pupils' skill and continuously provide them with clear and sufficiently challenging tasks that they will be able to perform independently, with minimal support from the teacher. Research conducted by Rubio (2011) among pupils of Spanish as a foreign language indicated a higher probability of occurrence of flow in groupwork activities. With regard to groupwork, Ibrahim and Al-Hoorie (2019) recently proposed the notion of a continuous common connection that occurs "when groupwork is coupled with flow over a period of time, potentially making learning both effective and highly enjoyable" (p. 52). In this context, it is also interesting to note that the findings of research outside the framework of foreign language teaching show a high frequency of the flow between teachers and pupils "intersecting". The teachers stated that the high engagement of their pupils induced their own flow, while pupils often reported that their flow was caused by the flow of their teachers (cf. Basom & Frase, 2004; Bakker, 2005). In a study conducted by Dewaele and MacIntyre (2022) with 232 learners of Spanish as a foreign language from around the world, it was found that the proportion of time in the state of flow was positively associated with a higher degree of multilingualism, a high relative position in the group, age, and the number of years of learning a foreign language. Dewaele and MacIntyre (2022) also compared the proportion of time spent in a state of flow among learners of English as a foreign language and those learning non-English foreign languages. Pupils from the second group reported that they spent a significantly higher proportion of time in a state of flow than the first group, which was interpreted as evidence of stronger emotional engagement in classes of non-English foreign languages where pupils often already spoke English. At the same time, Dewaele et al. (2022) came to a very interesting and currently relevant finding regarding foreign language teaching, wherein the flow experienced in in-person classes lasted longer than in those taking place in a digital environment. Finally, summarizing recent research in foreign language teaching, Dewaele et al. (2022) state that the occurrence of flow in foreign language teaching is gradual and increases as pupils become more advanced and skilled, and that it has positive long-term effects on motivation.

New media storytelling

New media storytelling or digital storytelling (hereinafter "DS") is a personal digital narrative in the form of a short film created by amateurs, often containing personal and emotional elements (Castañeda, 2013a). These are clips or vignettes (Rossiter and Garcia, 2010) edited using a digital tool. At least two of the following modes are most commonly represented in DS: written text, oral narration, graphic elements, photographs, video and music (Robin, 2006; Rossiter & Garcia, 2010; Ohler, 2006).

Furthermore, educational digital storytelling (hereinafter "EDS"), according to Wu and Chen (2020) is a technology-aided approach to learning that is meant to develop the pupils', the students' (Ohler, 2006; Wu & Chen, 2020; Robin, 2006), and the teachers' (Simsek, 2020) contemporary (digital) literacy while they are designing, creating and presenting their digital story. Skills acquired by creating their own artifacts using EDS include writing and expression skills; research, organizational, presentation, interpersonal, digital skills (Ohler, 2006; Robin, 2006; Chan et al., 2017); creative and

practical skills (Simsek, 2020); as well as visual and multimodal literacy (Liu et al., 2018). The development of joint group creativity and cooperation is also extremely important (Schmoelz, 2018), encouraging also the development of awareness of oneself and other social groups (Benmayor, 2008). In addition to the aforementioned characteristics, Rossiter and Garcia (2010) indicate that DS also fosters so-called autobiographical learning, i.e., self-direction and self-authorship. These are practices in which students express their own identities, and recount and evoke their own lives (especially in personal narratives).

EDS research in the context of foreign language learning has also been on the rise in recent years (cf. Castañeda, 2013b; Kim & Lee, 2017; Rahimi & Yadollahy, 2017; Tsigani & Nikolakopoulou, 2018; Mirza, 2020; Sauro et al., 2020; Reyes Torres et al., 2012, and others). Many authors emphasize the importance of applying DS in foreign language teaching (Gregori Signes, 2008), the need for further research on the results and outcomes of this method in teaching (Barrett, 2005), as well as the necessity of introducing technology and digital tools in curricula (Sadik, 2008), and training on the use of EDS for (future) foreign language teachers (Mirza, 2020). The latter aspect is especially important in the context of teacher education. Blažič and Rončević (2009, p. 154, 155) point out the negative side of the use of new technologies in teaching if the teacher has not developed professional competences related to the didactic criteria for using multimedia in teaching. In other words, as Florjančič and Koselj (2017, p. 95) emphasize, we need digitally literate teachers, since the development of pupils' digital skills starts in primary school.

Furthermore, Kim and Lee (2017) highlight the development of language and narrative skills as one of the fundamental outcomes of using EDS. By using EDS, we practice oral and written expression, text structuring, and learn about the characteristics of the genre (Liu et al., 2014). What is more, if our goal is to encourage the aforementioned skills in pupils and students, Ohler (2006) and Tsigani and Nikolakopoulou (2018) emphasize that, within the framework of EDS, we should first focus on creating a story (writing and pronunciation skills, text structure), and only afterwards on the media and technology, since technology itself does not guarantee a good digital story (Tsigani & Nikolakopoulou, 2018, p. 71).

In her research, Castañeda (2013b) points out that, at the start of the implementation of DS activities, pupils were concerned about grammar and the use of technology, but later showed that they could master the phase of drafting the story and processing the recording, and that they were able to create "a compelling, emotional and in-depth story" (Castañeda, 2013b, p. 56). Furthermore, given that storytelling in teaching boosts pupils' self-confidence (Hung et al., 2012), Ohler (2006, p. 2) points out that it gives voice to less active and quieter students and those who do not fit the usual academic mould. In researching DS as a tool for designing a didactic unit, Castañeda (2013a) also concludes that EDS draws the attention of pupils possessing different learning styles and promotes groupwork and a sense of achievement.

Therefore, a review of the research shows that, by using EDS, pupils and students develop a number of skills necessary for the development of modern multiliteracy (Cope & Kalantzis, 2000, 2015). At the same time, some research conducted in non-foreign language teaching (Andersen, 2005) has shown that pupils are more likely to experience flow when teachers apply innovative pupil-oriented techniques. In this regard,

it has also been shown that there is a greater presence of flow in foreign language teaching during teaching activities conducted in a digital environment (see Trevino & Webster, 1992; Ghani & Deshpande, 1994). In light thereof, the aforementioned findings have encouraged us to explore flow in French language classes using the DS teaching method.

3 Research methodology

This paper explores flow in classes of French as a foreign language when creating a multimodal text using a digital tool in a group. Moreover, we are also interested in whether there are differences in the experience of flow with regard to individual pupil characteristics.

A review of flow research in applied linguistics showed that questionnaires and interviews are prevalent, with qualitative and quantitative approaches being used in equal measure (Almetev, 2018). The data are mainly collected on the basis of an individual's experiential memory shortly after completing the task or using devices, reminding participants during the activity to complete a questionnaire that examines their current psychological state (experience sampling method). Csíkszentmihályi (1992) and Jackson and Marsh (1996) believe that the use of solely quantitative instruments, such as questionnaires and scales, is not sufficient to measure flow, nor can the participants' memory be used as sufficient evidence to determine the presence of flow; therefore, this research involved two questionnaires and an interview.

The first questionnaire was prepared for the purposes of this research. Prior to the start of the main part of the research, this questionnaire collected basic demographic data and specific data on pupils related to research questions, such as previous educational and language experiences, and personal interests. The second questionnaire collected pupil impressions related to the flow experienced during the activity. A customized and translated standardized questionnaire used in previous studies of infatuation in foreign language learning (Egbert, 2003; Almetev, 2018) was used, with a 7-point Likert-type assessment scale in which respondents assessed the measure or frequency in which the research aspects applied to them personally. This questionnaire was completed online during the activities at the solicitation of the teacher. Upon completion of the activity, a semi-structured interview was conducted with the French teacher, obtaining qualitative data related to her experience of pupil involvement in the activity. Finally, some of the materials produced by the pupils during the activity enabled us to better understand the activities and their commitment thereto.

The data were collected during the 2022/2023 school year in two grammar schools, i.e., "II. gimnazija" in Osijek and "Gimnazija A. G. Matoša" in Đakovo, in which French is taught as a first, second and third foreign language. A total of 51 French language pupils, 11 boys and 40 girls, participated in the research, of whom a total of 10 pupils were in the 1st grade of secondary school, 9 pupils in the 3rd grade of secondary school and 32 pupils in the 4th grade of secondary school. A total of 39 students assessed their level of French language proficiency to be at the A1 level, 17 students at the A2 level and 8 students at the B1 level. Most students, namely 32 of them, had been learning French

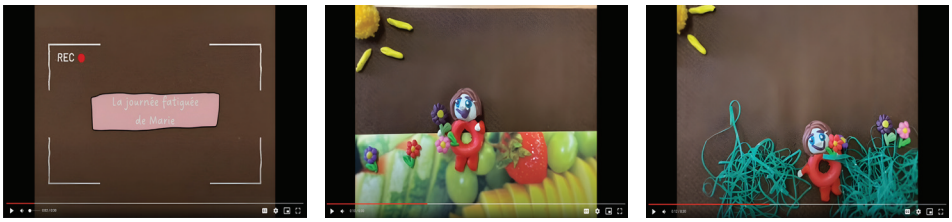
because they had no other choice; 27 had been learning it for various affective reasons; only 5 students cited practical reasons as an incentive to learn French. Participation was completely anonymous and voluntary.

The analysis included the procedures normally used in research of this type, namely: basic mathematical and statistical procedures of descriptive statistics in order to clearly summarize and present the data, followed by the method of calculating the statistical significance of differences by a t-test between different groups of respondents and the Pearson correlation coefficient. The quantitative processing of the collected data was performed using JASP, a statistical data processing program. Qualitative data analysis involved a simultaneous analysis of data from all sources individually for each participant.

The teaching activity involved the creation of an animation closely related to the teaching content, and the students used a simple tool – Stop Motion Studio – to create a stop-motion video. Stop motion is a technique of making videos where objects/things are manually operated, and subsequently photographed and merged (or edited) into shorter sequences. Merging photos into video gives the impression that objects are moving around the space. Video quality is considered higher if objects move in smaller increments and if there are more photos (scenes) in the video as this achieves motion flow on video. Two examples of screenshots of the pupils' works are shown below in Examples 1 and 2.

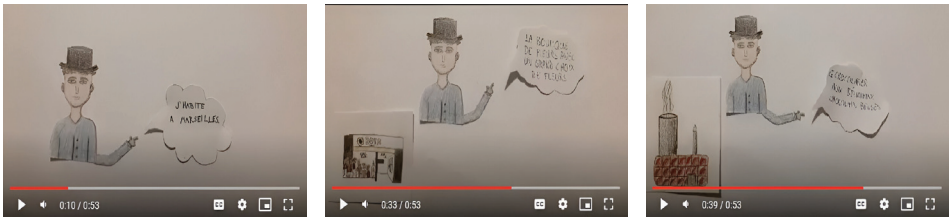
Example 1

Le journée fatiguée de Marie



Example 2

Je m'appelle Eugené



The topics covered by the pupils in their works were related to the regular teaching content in each class, and covered the following thematic areas: daily routine, "My Life", description of a city/town, and travelling. The working groups varied in number,

from three to four pupils, and their digital works were made during two school periods (some of the groups completed their work at home). They used items from their environment to create videos, creatively stacked and cut them, made different shapes, drew and wrote on paper, and used digital drawing and writing tools.

4 Results and discussion

In order to formulate more precise hypotheses, it seemed important to obtain information regarding the self-assessments of students with respect to the following variables: the skill of shaping texts in French, interest in participating in groupwork, digital literacy and creativity (see Table 1).

Table 1

Pupils' Self-Assessments regarding the Skill of Text Formatting in French Language Classes, Interest in Participating in Groupwork, Digital Literacy and Creativity

	Text formatting skill	*Interest in groupwork*	*Digital literacy*	*Creativity*
M	2.529	3	4.039	3.765

We also wanted to verify the connection between the experience of flow and the following individual characteristics: the level of proficiency in French, the reason for learning French, hobbies, and preferred forms of work in French language classes. Based on the results of the first questionnaire, as well as previous research on flow and digital storytelling in foreign language teaching, we have formed the following hypotheses:

- The experience of flow will be present in French language classes when creating multimodal texts in a group;
- More skilled pupils will experience greater flow than less skilled pupils;
- Pupils more intrinsically motivated to learn French will experience greater flow than less intrinsically motivated pupils;
- More creative pupils will experience greater flow than less creative pupils;
- More digitally literate pupils will experience greater flow than less digitally literate pupils;
- Pupils with greater interest in groupwork will experience greater flow than pupils with less interest in groupwork;
- Pupils who prefer working in a digital environment during foreign language classes will experience greater flow than other pupils;
- Pupils with hobbies in the digital environment will experience greater flow than other pupils.

The second questionnaire, filled in during the performance of the activity, showed that the mean value of the experience of flow during the preparation of the multimodal text was M = 4.451. Considering that the pupils' flow was measured on a 7-point assess-

ment scale, it can be concluded that pupils did experience flow in French classes. This can also be supported by the teacher's own words:

- T: "You could see that they were carried away … you could just tell that they were focused, you could see the pleasure … they were present … in the moment."
- T: "Intrinsic motivation was clearly visible; it was evident that when they started, they did not feel like doing it, but once they got going, they could not stop."

We were also interested in individual values of the questionnaire items that measured flow in the classes during which students formed a multimodal text (see Table 2).

Table 2

Individual Values of Questionnaire Items that Measured Flow in the Classes during Which Students Formed a Multimodal Text

Item	*Curiosity*	*Interest*	*Immersion*	*Excitement*	*Entertainment*
M	4.275	4.784	4.353	4.471	4.882

Item	*Control*	*Absorption*	*Autonomy*	*Imagination*
M	4.059	4.157	5.549	4.706

The item "autonomy" stands out, having been formulated in the following manner in the questionnaire: "During this activity, I make decisions about what I will draw, say and write." Such a high result corresponds to the results of previous research of flow (cf. Keller & Landhäußer, 2012). In order to achieve a sense of flow, it is crucial, among other things, to offer pupils sufficiently challenging tasks that they will be able to perform independently with minimal support from the teacher, which the teacher confirmed in the interview:

- I: "How much did you support the pupils during the activity?"
- T: "I went around, answered questions, observed … I didn't interfere too much, it wasn't too hard."

Our hypothesis that more skilled pupils would experience greater flow than less skilled pupils has not proved to be correct. In fact, there was no statistically significant difference in the overall result of flow between beginners and continuers. However, the results show that beginner learners found this activity significantly more exciting than continuer learners (see Table 3). In that regard, we would like to emphasize that we have defined skill not only as the level of mastery of communicative language competence that depends on the pupil's age, i.e., the class they attend (1st grade of secondary school vs. 3rd and 4th grade of secondary school), but we have also considered the differences within individual grades and the differences between all participants based on the self-assessment of communicative language competence.

Table 3

Differences According to Language Skill

Item	*Language skill*	*N*	*M*	*SD*	*t*	*p*
The activity is exciting	Beginners	22	4.500	2.241	0.096	.924
	Continuers	29	4.448	1.594		

It is clear that these results do not support most of the results of the research to date, according to which more skilled pupils are more likely to experience a sense of flow than less skilled ones (Dewaele et al., 2022). However, such a result can be considered very encouraging, especially for the teaching of French in the Republic of Croatia, in the context of which, given the Croatian language education policy, a very small share of students has mastered B1-level communicative language competence.

Furthermore, given that it was confirmed that less skilled pupils feel the same level of flow as more skilled ones by participating in DS activities, this result can be compared with the conclusions which indicate that less active pupils and those who do not fit into the usual academic mould can stand out in such activities (Ohler, 2006), since those activities prove interesting to pupils of different learning styles (Castañeda, 2013b).

Regarding other research hypotheses related to the individual's characteristics (intrinsic motivation, creativity, digital literacy, hobbies in the digital environment, preference of working in the digital environment), none proved statistically significant. This result was confirmed by their teacher in the interview:

- I: "Did you perhaps notice any difference between the pupils with regard to their level of French or some other characteristic, for example, age, or their interests?"
- T: "No, it has nothing to do with age, or skill … In Đakovo, they were more excited, more curious about the research … they found it more interesting and rousing … they were more interested in doing animation than a typical activity. It is different from person to person … some enjoy expressing themselves while others find it a drag. Also, they often don't perceive anything as new, because, to them, everything has become commonplace."

From a pedagogical perspective, such a result can be considered very positive because it indicates with certainty that the individual's characteristics are not the only thing that prevents the occurrence of the experience of flow, but that environmental factors also play a part, which teachers can manage in most cases. In this regard, it is interesting that this research revealed only one statistically significant correlation. It has been shown that the pupils who prefer working in a group experienced a stronger sense of flow when shaping a multimodal text in a group than those who do not prefer such a form of classwork (see Table 4).

Table 4

Pearson Correlation Coefficient between the Feeling of Flow and Interest in Groupwork

		r	p
Flow – total	Groupwork – interest	0.400**	0.004

Note: ** Correlation is significant at the 0.01 level (2-tailed)

This result confirms that, by choosing appropriate teaching techniques and approaches tailored to particular pupil groups, the teacher can contribute to the occurrence of the experience of flow. The teacher also confirmed that working in a group can have an impact on the occurrence of the experience of flow:

- I: "Do you think their involvement was influenced by the fact that they participated in groupwork? Or was that a disruptive factor?"
- T: "It depends on the group; some were not that happy to be together, so I let them switch groups so that they were content… other than that, it seems to me that the flow is more frequent within a group … ideas roll in … from one idea to the next."

Therefore, it has been demonstrated that working in a group contributes to the feeling of flow in pupils who prefer groupwork; however, the teacher's reply also shows that the groupwork does not contribute to the occurrence of the experience of flow itself, nor is it an exclusive factor, but rather, the composition of the members of the group is key. Finally, it is worth mentioning that, in the questionnaire distributed before the activity, the pupils assessed their interest in working in a group and their creativity with a medium score (see Table 1). However, during the implementation of the activities, they assessed the instigation of autonomy and imagination with a high score. Considering that the pupils worked in a group, this also lends itself to the conclusion that this form of work stimulated the pupils' autonomy. Likewise, although creativity is considered a skill, it requires imagination. Given that the activity greatly stimulated the pupils' imagination, it is also possible to confirm that DS encourages the pupils' creative practices.

5 Conclusion

The aim of this research was to examine the presence of flow in the classes of French as a foreign language using the teaching method of digital storytelling, during which pupils, divided into groups, designed and shaped their own multimodal digital works. It has been shown that pupils did experience flow in classwork based on the design of a multimodal text using a digital tool in a group. Moreover, we were also interested in whether there are differences in the experience of flow with regard to the characteristics of an individual pupil. The results show that none of the research hypotheses related to the relationship between the individual's personal and educational characteristics (intrinsic motivation, creativity, digital literacy, hobbies in the digital environment, preference to work in the digital environment) and the experience of flow proved statistically significant. For example, our hypothesis that more skilled pupils

would experience greater flow than less skilled ones did not prove true regardless of the way we defined skill. However, it has been shown that the pupils who preferred working in a group experienced a stronger sense of flow when shaping a multimodal text in a group than those who did not prefer such a form of classwork. This result confirms that, although flow is an individual experience, it is largely dependent on environmental factors. Furthermore, there was another interesting finding where pupils expressed a medium-level interest in groupwork through self-assessment, while during the implementation of activities in groups they assessed their own autonomy with a high score, which shows that working in a group using DS fosters their autonomy. Likewise, they gave a high score to DS arousing their imagination, as opposed to the medium score by which they assessed their own creativity prior to performing the activity, which is another positive indicator of the use of this method in teaching.

Finally, one of the key prerequisites for achieving flow by using digital tools in foreign language classes, attended by pupils with different levels of communicative language competence, is that the tasks are not too difficult, but challenging enough for the pupils. Digital storytelling not "only" encourages practising the use of digital tools, but also written and oral expression, text structuring and presentation, among other important aspects outlined in the theory chapter. Digital practices, both the consumption of other people's and the creation of one's own texts, are still mostly represented in the pupils' extracurricular activities (private life). Therefore, if we include digital practices in the teaching practice (i.e., in the curricula) and accept them as methods equal to other, "traditional" teaching methods, it is believed that we will attract greater attention and interest of pupils in learning. At the same time, pupils will be provided with critical and multimodal approaches to digital technologies and texts, and will be encouraged to be aware of the use of semiotic means and the meanings created by different texts (cf. Lim & Toh, 2020). However, above all, it is important for teachers to familiarize themselves with modern teaching methods and e-tools (Müller & Svalina, 2020, p. 174). To facilitate this, it is necessary to develop a metalanguage and to offer teachers and teacher trainees frequent training that will allow them to learn about these new methods and digital tools in the (foreign language) classroom.

The findings of this research were bound by several methodological limitations. Firstly, the possibility of generalizing the findings of this study is limited, given the size and selection of the sample. In this regard, future studies could take into account other participant samples, more representative samples of secondary and primary school pupils, as well as pupils studying other foreign languages. In addition, it is important to point out that the teacher in whose classes this research was conducted is otherwise exemplary in her application of modern approaches to the organization of classes, which also include digital tools. As pointed out previously in the text, given that previous research has revealed an "intersecting" flow between teachers and pupils, it is possible that the results were also influenced by the teacher's characteristics. Furthermore, since some psychology research indicates that individuals with a high level of autonomy, an internal locus of control, and a focus on action are more likely to experience flow (see Keller & Landhäußer, 2012), it should be taken into account that this research has not verified the links of the experience of flow with personality traits, and it would be interesting to explore these aspects in future research. Lastly, is it possible for all pupils

to achieve flow and what could be done in the case of those who do not experience it during a DS activity?

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Vživetost in digitalno pripovedovanje zgodb pri poučevanju francoščine kot tujega jezika

Prispevek raziskuje učno metodo digitalnega pripovedovanja zgodb in njen vpliv na možnost pojava vživetosti (ang. flow) pri učencih med poukom francoščine kot tujega jezika. Temeljne predpostavke raziskave so, da bodo učenci z uporabo digitalnega pripovedovanja zgodb doživeli vživetost, kakor tudi, da se bodo razlike v doživljanju vživetosti pokazale glede na posameznikove osebnostne značilnosti. Med izvajanjem pedagoške dejavnosti na dveh gimnazijah so dijaki ustvarjali multimodalna besedila s pomočjo pisnega in govorjenega jezika, risb, zvoka, predmetov iz okolja itd., nato so vsebino obdelali z digitalnim orodjem Stop Motion Studio ter jo potem zmontirali v krajše video sekvence. S to tehniko smo se skušali odmakniti od "tradicionalnih" oblik ustnega in pisnega izražanja pri jezikovnem pouku in preveriti, ali se pri učencih med ustvarjanjem lastnega digitalnega besedila pojavlja vživetost.

Koncept vživetosti velja za eno izmed optimalnih stanj notranjega doživljanja, v katerem človek svojo pozornost posveča trenutni dejavnosti tako zelo, da se mu zdi, da je vanjo "potopljen". Če v skladu s prejšnjimi raziskavami (Egbert, 2003; Dewaele in MacIntyre, 2022) domnevamo, da je izkušnja vživetosti optimalno stanje za učenje, potem je smiselno raziskovati temo boljšega razumevanja posameznikovih in okoljskih dejavnikov, ki so povezani z doživljanjem vživetosti tako v znanstvenem kot v praktičnem smislu, še posebej na Hrvaškem, kjer ne beležimo raziskav, ki bi proučevale ta psihološki konstrukt pri poučevanju tujih jezikov. Ena izmed prvih študij vživetosti pri pouku tujih jezikov (Egbert, 2003) je pokazala, da pojavi vživetosti prispevajo k dejavnostim z jasnim namenom in cilji, ki učence zanimajo in pri katerih je poudarek na pomenu, ne pa na jeziku. Obenem pa imajo za te dejavnosti na voljo dovolj časa in o njih prejemajo jasne povratne informacije. Pokazalo se je na primer, da k vživetosti prispeva interakcija z naravnim govorcem, torej pristna in smiselna komunikacija ter uporaba novih orodij in dejavnosti namesto rutinskih dejavnosti. V povzetku pregleda najnovejših raziskav o pouku tujih jezikov Dewaele idr. (2022) navajajo, da se vživetost pri pouku tujih jezikov pojavlja postopoma in naraščа, ko učenci napredujejo in postajajo bolj vešči, ter da ima pozitivne dolgoročne učinke na motivacijo.

Hkrati se v zadnjih desetih letih povečuje zanimanje za uporabo digitalnega pripovedovanja pri pouku (v nadaljevanju DPP ali DP) (Wu in Chen, 2020). Med drugim rezultati kažejo, da digitalno pripovedovanje pri pouku povečuje samozavest učencev (Hung idr., 2012) in afektivno motivacijo za učenje (Sadik, 2008; Hung idr., 2012), delo v skupini, socialne veščine, komunikacijske veščine (Ribeiro, 2016; Lin idr., 2013), kritično in ustvarjalno mišljenje (Yang in Wu, 2012), kot tudi jezikovne veščine, strukturiranje zgodbe in večmodalne veščine izražanja (Liu et al., 2018). Tudi Stanković in Blažič (2017) navajata, da je na ta način pri pouku mogoče izpostaviti manj aktivne in tihe študente ter

tiste, ki se ne vključujejo v običajne akademske prakse. Tudi Castañeda (2013) pri raziskovanju DP kot orodja za oblikovanje didaktične enote ugotavlja, da DP pritegne pozornost učencev z različnimi učnimi stili, spodbuja skupinsko delo in občutek dosežka. Zato številni avtorji poudarjajo pomen uporabe DP pri pouku tujih jezikov (Gregori Signes, 2008), potrebo po nadaljnjem raziskovanju izidov te metode (Barrett, 2005) ter nujnost uvajanja tehnologij in digitalnih orodij v pouk tujih jezikov in učne načrte (Sadik, 2008).

V tej raziskavi smo uporabili dva vprašalnika in intervju z učiteljico. Prvi vprašalnik smo sestavili za namene te raziskave. Pred začetkom glavnega dela raziskave smo s tem vprašalnikom zbrali osnovne demografske in specifične podatke o dijakih, ki so pomembni za raziskovalna vprašanja, kot so na primer prejšnje izobraževalne in jezikovne izkušnje ter osebni interesi. Z drugim vprašalnikom smo zbrali izkušnje dijakov, povezane z njihovim doživljanjem vživetosti med izvajanjem dejavnosti DP-ja. Prevedli in prilagodili smo standardiziran vprašalnik iz predhodnih raziskav vživetosti pri učenju tujega jezika (Egbert, 2003; Almetev, 2018) s 7-stopenjsko ocenjevalno lestvico Likertovega tipa, na kateri so anketiranci ocenjevali, v kakšnem obsegu ali kako pogosto so raziskovani vidiki veljali za njih osebno. Ta vprašalnik so dijaki na pobudo učiteljice reševali online med dejavnostjo. Po zaključku dejavnosti smo s polstrukturiranim intervjujem z učiteljico francoščine pridobili kvalitativne podatke o njeni izkušnji vključevanja dijakov v dejavnost.

Podatki so bili zbrani v šolskem letu 2022/2023 v II. Gimnaziji Osijek in Gimnaziji AG Matoš Đakovo, kjer se francoščina poučuje kot prvi, drugi ali tretji tuji jezik. V raziskavi je sodelovalo 51 učencev francoskega jezika (11 dijakov in 40 dijakinj), od tega skupaj 10 dijakov 1. letnika, 9 dijakov 3. letnika in 32 dijakov 4. letnika gimnazije. Svojo stopnjo obvladovanja francoskega jezika je na ravni A1 ocenilo 39 dijakov, na ravni A2 17 dijakov in na ravni B1 8 dijakov. Prvi vprašalnik je pokazal, da se večina dijakov, 32, uči francoščine, ker nimajo druge izbire, 27 se jih uči francoščine iz različnih afektivnih razlogov in le 5 učencev je kot spodbudo za učenje francoščine navedlo utilitarne razloge.

Postopek analize je vključeval osnovne matematično-statistične postopke deskriptivne statistike za povzemanje in pregledno prikazovanje podatkov, metodo izračuna statistične pomembnosti razlik med različnimi skupinami anketirancev s t-testom in Pearsonov koeficient korelacije. Za kvantitativno obdelavo zbranih podatkov smo uporabili JASP in program za statistično obdelavo podatkov. Kvalitativna analiza podatkov je vključevala simultano analizo podatkov iz vseh virov, za vsakega udeleženca posebej.

Za oblikovanje natančnejših predpostavk se je zdelo pomembno vedeti, kako se dijaki samoocenjujejo zaradi naslednjih spremenljivk: raven znanja francoskega jezika, razlog za učenje francoskega jezika, veščina oblikovanja besedil v francoskem jeziku, zanimanje za skupinsko delo, digitalna pismenost in ustvarjalnost, konjički ter naklonjenost oblikam dela pri pouku francoskega jezika. Na podlagi rezultatov, pridobljenih s prvim vprašalnikom, pa tudi na podlagi predhodnih raziskav o vživetosti in digitalnem pripovedovanju zgodb pri pouku tujega jezika, smo oblikovali dve glavni predpostavki:

- *izkušnja vživetosti bo prisotna pri pouku francoskega jezika med ustvarjanjem multimodalnih besedil v skupini; in*
- *osebnostne in izobrazbene značilnosti bodo vplivale na pojav vživetosti (kot so raven znanja, motivacija, ustvarjalnost, digitalna pismenost, naklonjenost skupinskemu delu itd.).*

Drugi vprašalnik, ki smo ga uporabili med izvajanjem dejavnosti, je pokazal, da je bila povprečna vrednost izkušnje vživetosti pri nastajanju multimodalnega besedila M = 4,451. Glede na to, da so dijaki vživetost merili na 7-stopenjski ocenjevalni lestvici, lahko sklepamo, da so dijaki pri pouku francoskega jezika izkusili vživetost. Zanimale so nas tudi posamezne vrednosti okenc iz vprašalnika, s katerim so merili vživetost pri učni uri, pri kateri so učenci ustvarjali večmodalno besedilo (glej tabelo 2). Izstopa okence "avtonomnost", ki se v vprašalniku glasi: Pri tej dejavnosti se odločam, kaj bom narisal, rekel in napisal. Tako visok rezultat ustreza prejšnjim rezultatom raziskav o vživetosti (Keller in Landhäußer, 2012). Za doseganje občutka vživetosti je namreč med drugim ključno, da učencem ponudimo dovolj zahtevne naloge, ki jih bodo ob minimalni podpori učitelja lahko opravili samostojno.

Naša domneva, da bodo bolj vešči učenci doživeli večjo vživetost kot manj vešči, se je izkazala za napačno. Med začetniki in tistimi na nadaljevalnih stopnjah namreč ni bilo statistično pomembne razlike v skupnem rezultatu vživetosti. Iz tega sledi, da naši rezultati ne podpirajo večine rezultatov prejšnjih raziskav, po katerih bolj vešči učenci pogosteje doživljajo občutek vživetosti kot manj vešči (Dewaele idr., 2022). Vendar pa naši rezultati kažejo, da se je učencem začetnikom ta dejavnost zdela bistveno bolj vznemirljiva kot učencem na višjih stopnjah (glej tabelo 3). Nobena izmed raziskovalnih predpostavk, povezanih z lastnostmi posameznika (notranja motivacija, ustvarjalnost, digitalna pismenost, konjički v digitalnem okolju, naklonjenost delu v digitalnem okolju), se ni izkazala za statistično pomembno. S pedagoškega vidika lahko takšen rezultat jemljemo kot zelo spodbuden, saj kaže, da pojava izkušnje vživetosti ne preprečujejo le lastnosti posameznika, ampak gotovo tudi okoljski dejavniki, ki jih lahko učitelj pogosteje obvlada. V povezavi s tem je bila v raziskavi ugotovljena le ena statistično pomembna korelacija. Izkazalo se je namreč, da so tisti učenci, ki jim je ljubše skupinsko delo, občutili močnejši občutek vživetosti pri ustvarjanju večmodalnega besedila v skupini kot tisti, ki jim je taka učna oblika dela manj ljuba (glej tabelo 4). Takšna ugotovitev potrjuje, da lahko učitelj z izbiro ustreznih učnih tehnik in pristopov, prilagojenih posamezni skupini učencev, prispeva k izkušnji vživetosti. Nenazadnje lahko glede na to, da smo dobili potrditev, da pri sodelovanju v dejavnostih DP manj vešči učenci čutijo enako vživetost kot bolj vešči učenci, ta rezultat povežemo z zaključki, da se lahko v takih dejavnostih izkažejo manj aktivni učenci in tisti, ki se ne vključujejo v običajne akademske prakse (Ohler, 2006), ker se je dejavnost izkazala zanimiva za učence z različnimi učnimi stili (Castañeda, 2013b).

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