

ATTITUDES OF SLOVENE FOURTH- GRADE ELEMENTARY SCHOOL STUDENTS ABOUT TEACHING AND LEARNING A FOREIGN LANGUAGE WITH THE SUPPORT OF INFORMATION AND COMMUNICATION TECHNOLOGY

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Abstract The paper presents the results of quantitative research into the attitudes of young Slovenian foreign language learners towards the learning of a foreign language with the help of information and communication technology (hereinafter ICT). Seven elementary schools agreed to participate, forming a 406-strong sample of 2nd to 4th graders. The students were specifically asked whether they used ICT during their English lessons and for homework. The results show that in the case of gender, the chi square test results showed a statistically significant difference in attitudes towards the use of mobile phones during English lessons and during homework. In the case of class, the regression showed a strong predictor for statistically significant difference. The results should encourage language teachers and policy-makers alike to adjust their teaching methods appropriately and allow for an aimed use of ICT in foreign language class.

Keywords:

attitudes,
early age,
foreign language
teaching and
learning,
ICT,
young learners

1 Introduction

Early language learning has attracted a great deal of attention from academics and practitioners alike, particularly because of the impact of age on the formation of attitudes towards the foreign language (hereinafter FL). The subject was already being addressed in the late 1960s and early 1970s (see Rivers, 1965; Jakobovits, 1970; Lambert, 1972). More recently, Cameron (2001, p. 1) claimed that “foreign language teaching for young foreign language learners differs from teaching for adults or young people.” Indeed, young learners are more enthusiastic and livelier than learners, they will often engage in an activity even if they do not fully understand the aims, and they are more concerned about pleasing the teacher than their peers. In the ideal case, effective learning will occur, if “a stimulating and rich linguistic environment is” provided (Winskel et al., 2017, p.142). Winskel et al. further state that “children need to be given many opportunities to be actively engaged and interact with others. This can be quite challenging in the FL classroom, as typically children learning in this context have little exposure to the language outside of the classroom.” (2017, *ibid.*). Young children may also be less self-conscious than older children and adolescents (Lightbown & Spada, 2006; Ellis, 1994). On the other hand, “young learners tend to lose interest quickly and find it difficult to stay motivated and focused” (*ibid.*). They also “have fewer resources than adults and are less able to analyse language in an abstract way” (Pinter, 2006, p. 17). Therefore, young learners are “not as free as adult learners to make hypotheses about the characteristics of another language” (Pinter, 2006, p. 18).

The early teaching of an FL is a complex psychological-pedagogical phenomenon because it involves many factors that lead to a positive learning outcome, including one of great importance, namely the learner’s motivation to learn, if we mention only one of the indirectly important factors that influence the quality of FL competence (Brumen et al., 2015). Moreover, one could state that “motivation is a factor that strongly influences all forms of learning” (Jazbec et al., 2016, p. 126). Other equally important factors are the richness, abundance and constant study of the language (Muñoz, 2016). This is especially important in the first cycle of elementary school (grades 1 to 3), as children begin their educational process as a kind of *tabula rasa*, which is completely contradictory to the facts. In fact, children enter the process of learning an FL with far more experience of life and the language they are learning (Smajla, 2014). In addition, children have natural abilities that help

them in learning in general and promote the process of learning the FL towards which they have already adopted an attitude (Moon, 2005). Furthermore, MacIntyre et al. (2002, quoted in Mihaljević Djigunović, 2012, p. 57) believe that “young learners vary considerably in their motivation, positive attitude and in the presence or absence of learning difficulties”. Teachers or other adults involved in the teaching process should consider the specific behaviour of children and their characteristics when choosing an appropriate teaching approach (Smajla, 2014) or utilize age-appropriate methods and tools. The latter is even more important when discussing the importance of using Information and Communication Technology (hereinafter ICT) in FL class.

2 The Importance of Using Information and Communication Technology (ICT) in FL Teaching and Learning

Information and communication technology has been gradually and somewhat cautiously introduced into FL teaching, a research field that dates its modest beginnings to the 1980s and has since drawn considerable attention (Podgoršek, 2020). Particularly, this is the case with online teaching, which has been in effect in many countries around the world since even before the beginning of the COVID-19 pandemic. Blurton (2002) defines ICT as a “diverse set of technological tools and resources used to communicate, and to create, disseminate, store, and manage information”. Winskel et al. (2017, p. 1) claim that in order “for effective language learning to occur, a stimulating and rich linguistic environment is required.” That can pose quite a challenge for all stakeholders, let alone for 7–9-year-olds. One way to remedy this problem is to utilise the new technologies to enhance learning by giving children opportunities to interact and engage with native speakers. Beside that, Çakici (2016, p. 73) claims that “research findings over the past two decades provide some evidence as to the positive effects of the use of information and communications technology (ICT) on students.” Altun (2015) also claims that using computers, the internet, smart boards, cell phones, video games, music players, etc. for target language learning purposes can raise students’ motivation and language awareness. Applying ICT in language learning provides for a more student-centred learning environment. Moreover, Al-Mahrooqi & Troudi (2014) state that by integrating technology into language teaching, teacher-centred understanding and lowering of students’ language learning anxiety can be achieved. Students are encouraged to be risk-takers in practicing the target language, as they are digital

natives (*ibid.*). More importantly, Jayanthi & Kumar (2016) explain the following positive impacts of ICT on FL teaching: availability of materials, students' attitudes, learner autonomy, authenticity, helping teachers, student-centred, and self-assessment. Finally, Jayanthi & Kumar claim that as far as the students' attitudes are concerned, ICTs increase motivation, meaning that students feel more motivated to learn a language, since they display positive attitudes towards language learning when they use computers and learn in a stress-free learning environment (*ibid.*). On the other hand, ICT fosters learner autonomy, as ICT tools demand learners to take responsibility for their own learning. Students are free to choose the material convenient for their learning styles. Furthermore, ICT provides authentic situations and a real-life learning environment. This sets high standards for the FL teachers and high expectations from various stakeholders, especially since the gap between the highly developed technologies and the classroom methodologies of ICT-supported teaching still proves to be rather vast (Lei, 2010; Jung & Latchem, 2011; Podgoršek, 2015). Considering that the focus of our study is not limited to any particular technology, the general terms of ICT or technology will be used throughout the paper.

2.1 ICT and the Attitudes of Young FL Learners Towards ICT-Supported Language Teaching

The development of technology has had a profound impact on almost all fields, including education (Isman & Dabaj, 2003), and is gaining on importance in FL teaching (Almekhlafi & Almeqdadi, 2010; Dang, 2011; Dogoriti, 2010). Recent relevant research has shown that one of the important factors influencing the perspectives towards technology is attitude (van Braak et al., 2004), which makes attitudes an important factor to consider. Relevant studies have further shown that both English FL learners and teachers alike have positive attitudes toward the use of technology in the FL classroom (Başaran, 2013; Kitchakarn, 2015; Liton, 2015; Mollaei & Riasati, 2013; Uluuysal et al., 2014). Studies in the field of teacher attitudes have also shown that the importance of technology is one of the more important factors in the choice of integrating ICT into instruction (Bullock, 2004; van Braak et al., 2004). If the teacher is not enthusiastic about using ICT in their teaching, they may not be prone to implement it in their instruction. The teacher's positive attitudes towards ICT can spill over to FL learners, which was proved by studies undertaken across the globe (Isman & Dabaj, 2004; Tsai et al., 2001). An overview of the issue

of the use of ICT in FL teaching is provided by many longitudinal research projects carried out both in Slovenia (Gerlič, 2011) and abroad (Petko & Graber, 2010; Ottestad, 2010, Kresal Sterniša, 2012), covering a wide range of topics. In Slovenia, for example, a relevant study on the use of ICT in German elementary and secondary school classes was carried out by Podgoršek (2011). However, a study focusing exclusively on FL students in the fourth grade of elementary school and their attitudes towards learning an FL with ICT has not yet been carried out. A state-of-the-art analysis of the ICT infrastructure in Slovenian schools, its use, and the ICT skills of FL teachers has already been investigated, as reported by Podgoršek (2015); the role of foreign teachers in FL teaching with ICT has also been thoroughly investigated, as reported by Podgoršek et al. (2019). There is a need for empirical research in the field of ICT use in the FL teaching of young language learners, since so far researchers in the field have mainly focused on studying the attitudes of students in secondary schools and universities.

2.2 Research Questions

Studies have demonstrated that most students have access to computers (Vekiri & Chronaki, 2008) and to the internet at home (Vekiri & Chronaki, 2008). Although this seems not to have been the case in Slovenia in the Spring of 2020, when all pedagogical facilities needed to shut down in-presence teaching and shifted to distance teaching because of the onset of the COVID-19 pandemic. This caused great problems to both students and teachers, mostly owing to the underpreparedness for distance teaching and learning, as well as to the lack of technical support (not all students possessed a desk or tablet computer and not all teachers were prepared for distance teaching). Schools and parents were struggling equally hard to enable the students a quality learning experience, with limited success. There is a common understanding that learning with computers is more interesting and that it provides for better learning conditions for students (Conti-Ramsden et al., 2010; Ari & Inan, 2010). Our study aimed to explore the differences in attitudes towards the use of ICT in language learning with regard to gender and age. Gender plays an important role in the process of attitude formation (Admiral et al. 2014; Heemskerk et al., 2012; Kubiak & Halakova, 2011; Conti-Ramsden et al., 2010) and is said to have influence over differences in students' experiences and preferences in ICT, and it should be considered when using ICT. The age of elementary school students in the fourth grade may also be a relevant variable, as

well as the class they attend. Consequently, the following research questions were explored:

RQ1: Are there statistically significant differences in the attitudes of 4th grade elementary school students towards the use of ICT in FL 1 learning regarding their gender?

RQ2: Are there statistically significant differences in the attitudes of 4th grade elementary school students towards the use of ICT in FL 1 learning regarding the class they are enrolled in?

3 Method

The study applies a quantitative research paradigm, which employed a survey design to measure the students' attitudes and the extent to which the students use ICT for learning English. The paradigm consisted of a descriptive and causal-non-experimental method of empirical pedagogical research. Our study focused on a pedagogical topic; therefore, the appropriate research method was descriptive. To elicit data for the study, the students responded to the following two parts in the questionnaire: 1) general attitudes towards their FL learning (the first 11 items of the research instrument), and 2) their attitude towards the use of ICT in FL 1 learning (the three additional multiple-choice questions).

3.1 Data Collection

Public elementary schools were randomly selected from a list of schools provided on the website of the Ministry of Education, Science and Sport of the Republic of Slovenia. The schools chosen randomly received a printed detailed description of the study design with its aims, objectives and procedures. The schools that agreed to participate in our study were subsequently sent printed questionnaires. Each FL teacher at the selected schools received printed questionnaires, which were then filled in during English class. There were no specific deadlines for the delivery of the questionnaires. Accompanying disclaimers for parents were sent to the teacher who in turn gave them to the students to take home. Great importance was given to the anonymity and confidentiality of the study. The author provided a stamped envelope that was then sent back to the researcher by regular post.

3.2 Research Instrument

The research instrument applied in the study was an AMTB adapted from Gardner (1985). AMTB or Attitude/Motivation Test Battery was originally developed to test attitudes and motivation for teaching French as a second language in Canada. The original version of the instrument consists of 104 items. The respondent then expresses their attitude towards an item on a 7-point Likert scale, where 1 means that they absolutely disagree and 7 that they absolutely agree. The instrument has already undergone the process of standardization but has been adapted for the purposes of our study. An 11-item instrument was developed by Smajla for his 2014-2019 study (2019) that was reused for the 2020 study. This part of the 2020 instrument targeted the students' attitudes regarding the learning of FL 1, and there were additional three multiple-choice questions that specifically targeted the fourth graders' attitudes towards the use of ICT in FL class. Since the research was aimed at schoolchildren in the early cycle of elementary school (second grade children or mainly 7-8-year-olds), the instrument underwent a localization process, so both capital letters and simplified terminology were used.

Based on the statistical analysis of the Smajla 2020 study, the results of the confirmatory factor analysis were as follows: the 11 items that targeted students' general attitudes regarding FL 1 learning used in the Smajla 2019 questionnaire were considered for the Smajla 2020 statistical analysis, but only six items qualified, owing to the skewness and kurtosis values below $|2|$. *Table 1* shows the results of the analyses of the skewness and kurtosis coefficients.

As shown in *Table 1*, only six items in bold meet the criteria for further statistical analysis owing to their values below $|2|$. The items are as follows: My attitude towards people who speak English is good, English is interesting, I want to learn English, My attitude towards learning English is good, I am not afraid to use English outside of class, and My English class/my English teacher is good. The above points were then used in the follow-up analyses.

Table 1: Results of the skewness and kurtosis coefficients analysis for the Smajla 2020 research sample

Item	N	M	SD	SK	K
I'm learning a foreign language in order to be able to communicate with others who use this language.	406	6.34	1.23	-2.27	5.54
My attitude towards people who speak English is good.	405	5.25	1.93	-0.89	-0.32
English is interesting.	406	5.47	1.76	-1.35	0.76
I want to learn English.	405	5.67	1.78	-1.36	0.83
My attitude towards the learning of English is good.	405	5.68	1.70	-1.29	0.76
I learn a lot during English class.	406	6.17	1.40	-1.96	3.25
Learning English is a good thing.	406	6.45	1.19	-2.57	6.74
I am not afraid of using English outside class.	405	5.30	2.04	-0.94	-0.41
My English class/my English teacher is good.	405	5.96	1.62	-1.69	2.02
I am not afraid of using English during class.	406	6.14	1.56	-2.05	3.40
Learning English makes my parents happy.	406	6.67	0.92	-3.71	15.89

Legend: M – mean value; SD – standard deviation; SK – skewness coefficient; SE of SK – standard error of skewness; K – kurtosis coefficient; SE of K – standard error of skewness

As far as the research instrument that draws upon the 2019 Smajla instrument, all 11 items were processed in the confirmatory factor analysis. The reliability of the Smajla 2020 research instrument was, based on Ferligoj et al. (1995), very good, since the Cronbach alpha coefficient value was $\alpha = .82$. Based on the results of factor analysis of the 6 items, the values for skewness and kurtosis values met the required criteria, the declared total variance explained was 56, 58% for the first factor, which was a

good result. Considering all relevant criteria, the instrument was both valid and reliable.

3.3 Research Sample

Invitations for cooperation in the study were sent via e-mail to the schools' e-mail addresses to public elementary schools in the Republic of Slovenia in January and February of 2020. The invitations consisted of a detailed description of the purpose of the study, objectives, significance of the results and procedures (delivery of the questionnaire, anonymity of the research procedures, parental consent). Seven public elementary schools chose to participate in our study producing a 406-strong sample of students in the second grade (137 or 33.7% of students), third grade (131 or 32.3% of students) and fourth grade (138 or 34% of students). Presentation of the sample is shown in *Table 2*. For this study only the fourth graders (*Table 3*) are presented in detail.

Table 2: Sample presentation based on grade

Grade	f	f (%)
2	137	33.7
3	131	32.3
4	138	34
Total	406	100

Table 3: Sample of fourth grade students according to age and gender

Fourth grade students	Age	f	f (%)
	9		63.8
	10		34.8
	11		0.7
	12		0.7
Total%			100
	Gender	f	f (%)
	M	63	45.7
	F	75	54.3
Total		138	100

Legend: M – male, F – female

As shown in *Table 2*, all three classes of elementary school students were represented relatively equally. There were slightly more students in the 4th grade, but their numbers were not excessively higher than those in the 2nd and 3rd grades. *Table 63* shows sample presentation of fourth grade students age and gender wise.

As shown in *Table 3*, the majority of fourth-graders were 9-year-olds (63.8% of respondents), followed by 10-year-olds or 34.8%, while the two remaining respondents (the 11 and 12-year-old) only provided irrelevant numbers that were not included in the analyses. Gender was evenly distributed, with female students slightly outnumbering male students 75 to 63.

3.4 Data Analysis

The data were statistically analysed using descriptive statistics (frequency distributions, mean values and crosstabs). They were then processed by using SPSS IBM Statistical Package version 26. The frequency distribution of the variables and their parameters were examined, and skewness and kurtosis coefficient were determined. The research hypotheses were tested using crosstabs and nonparametric tests, such as the Chi-square test (χ^2).

4 Results

The results of the statistical analyses are presented in the continuation. Crosstabs were used to perform the analyses and the results are presented using descriptive statistics using frequencies and percentages. In addition to the 11-item questionnaire, the fourth graders received three questions (items 12, 13 and 14) with multiple-choice answers. The students were asked whether they used ICT in FL class, for doing their homework, for learning, and for vocabulary acquisition. Regarding item 12 (We use the following ICT support during FL lessons – multiple-choice answers are possible.), the students could choose between a) a tablet computer, b) a computer, c) a mobile phone, d) an interactive whiteboard, e) none of these, and f) unavailable. Regarding item 13 (When I write my FL homework, I use – multiple selection is possible.) and item 14 (When I study the FL or translate new words, I use – multiple selection is possible.), the students could choose between a) a tablet computer, b) a computer, c) a mobile phone, d) none of these, and e) unavailable.

RQ1: Are there statistically significant differences in the attitudes of fourth-grade elementary school students towards the use of ICT in FL 1 learning in connection with their gender?

Table 4: ICT supported FL class: Statistically significant differences in fourth-graders' attitudes towards the use of ICT in FL learning in terms of gender

ICT in FL learning						
	G	f	f%	f	total	x ²
Tablet	m	14	12.9	23	108	0.14
	F	9	8.3			
Desk comp.	M	20	18.5	36	108	0.22
	F	16	14.8			
Interactive board	M	36	33.3	73	108	0.55
	F	37	34.2			
Mob.	m	5	4.6	5	108	0.02
	f	0	0.0			
ICT in homework writing						
Tablet	m	6	13.3	12	45	0.59
	f	6	13.3			
Desk comp.	m	8	17.7	18	45	0.42
	f	10	22.2			
Mob.	m	9	20.0	11	45	0.01
	f	2	4.4			
ICT in vocabulary learning						
Tablet	m	5	6.2	12	80	0.45
	f	7	8.7			
Desk comp.	m	17	21.2	28	80	0.06
	f	11	13.7			
Mob.	m	18	22.5	37	80	0.51
	f	19	23.7			

Legend: G – Gender, f – frequency, f% – percentage, comp. – computer, Mob. – mobile phone, m – male, f – female, x² – Chi-square test

Table 4 has been divided into three main sections: ICT in FL learning, ICT in homework writing and ICT in vocabulary learning. Each section is further divided into male/female frequency/percentage by response, number of participants, total number of participants and statistical significance of the Chi-square test. The statistically significant results are written in bold.

As far as the ICT in FL learning section is concerned, Table 4 shows the following results: 108 of the 138 fourth grade students answered this question. The majority, or 73 out of 108 fourth graders, indicated that they used an interactive board in their FL class, with the answers equally distributed among male and female students. This

result was followed by 36 out of 108 respondents, who indicated that they used a desktop computer in their FL class, wherein the values showed slightly more male students compared to female students. With regard to the use of tablet computers, the results indicated that 23 out of 108 fourth graders chose this option. Only 5 out of 108 fourth grade students reported having used a mobile phone during FL class, which is based on the result of the Chi-square test, the sole statistically significant difference ($p = .02$) in the fourth-grade students' attitudes towards ICT-supported FL learning.

The second section of *Table 4* presents the results of ICT-based homework. 45 of the 138 fourth graders responded to this question. The majority, or 18 of the 45 fourth graders, indicated that they used a desktop computer in their FL lessons, with female students slightly outnumbering the male ones 10 to 8. Regarding the use of tablet computers, 12 of the 45 fourth graders answered this question affirmatively, with male students outnumbering female students 9 to 2. Eleven of the 45 fourth graders indicated that they used a mobile phone for homework, which makes this, based on the Chi-square test results shown in *Table 3*, the sole statistically significant difference ($p = .01$) in fourth graders' attitudes toward the use of ICT-supported FL learning.

The third and last section of *Table 4* presents the results of ICT-supported vocabulary learning. The results are as follows: 80 of the 138 fourth graders responded to this question, and the majority of 37 (18 males and 19 females) indicated having used a mobile phone for vocabulary learning. With regard to desktop computer usage, 28 of the 80 fourth graders indicated having used a desktop computer for vocabulary learning, with male students outnumbering the female ones 17 to 11.

As shown in *Table 4*, the use of tablet computers was the least popular, with only 12 of the 80 fourth graders stating that they used a computer for vocabulary learning, wherein female students slightly outnumbered male students 7 to 5. There are no statistically significant differences in the attitudes of fourth graders towards ICT-assisted FL vocabulary learning, although the values concerning the use of mobile phones lean towards statistical significance ($p = .06$).

In summary, the results presented in *Table 4* show that the fourth graders who agreed to participate in our study learned a FL in an ICT-supported learning environment. Their FL learning was supported by state-provided ICT equipment, mostly interactive boards, which are a widely used learning support tool in FL teaching in Slovenia, followed by desktop computers and tablets. It is not surprising that the students used their mobile phones for learning at home, as the use of mobile phones in official school environments is largely discouraged. Nevertheless, FL students occasionally obtained permission from their teachers to use mobile phones in class, but only for specific purposes.

A regression analysis was performed to test the research hypothesis. Linear regression was used with the ENTER method. In the regression model, the students' gender and school class were taken as independent variables, while the factor of young Slovenian FL learners' attitudes towards FL learning with the help of ICT was inserted as a dependent variable. By applying this model, 22.4% of the total variance of the model was explained. The regression model was statistically significant ($F = 10.548, p < .001$), as seen from *Table 6*.

As shown in *Table 5*, the students' class ($B = -.24, sig. < .001$) has a statistically significant influence on the factor of young Slovenian FL learners' attitudes towards the learning of an FL with the help of ICT. The results suggest that younger students (enrolled in a lower grade class) had more positive attitudes towards learning an FL with the help of ICT as compared to students who were enrolled in a higher grade. The students' gender ($B = .11, p = .22$) had no statistically significant influence at the 0.05 level on the factor of young Slovenian FL learners' attitudes towards the learning of an FL with the help of ICT.

Table 5: The influence of the students' gender and school class on their attitudes towards the learning of an FL with the help of information and communication technology

Model		Unstandardized	Standardized		t	Sig.
		Coefficients	Coefficients	Beta		
		B	Std. Error	Beta		
1	(Constant)	.32	.18		1.72	.08
	Class	-.24	.05	-.21	-4.42	< .001
	Gender	.11	.09	.05	1.20	.22

a. Dependent Variable: attitudes (factor)

5 Discussion and Conclusions

This paper presents the results of research into the attitudes of fourth grade elementary school students towards the use of ICT in FL learning. Equipping state elementary schools with ICT has been one of the state educational authorities' more important projects. This was done with the effort of the whole state to create a creative and supportive learning environment and thus boost digital literacy, which is one of the key competences mentioned in both the new edition of the Učni načrt za angleščino (2016) (English as a Foreign Language Curriculum), as well as in the Učni načrt za tuji jezik v 2. in 3. razredu (2013) (Curriculum of Foreign Language Teaching and learning in 2nd and 3rd grade). Brumen et al. (2017) claim that students use technology to communicate with each other (in the FL) and with native speakers or with other students, who are beginners and still need to practice their target language skills. Internet providers, on the other hand, have been actively involved in setting up broadband internet connections throughout Slovenia, offering wireless internet options to as many citizens as possible. In this way, even some low-income families have gained access to internet services that will enable children to learn efficiently at home and from home.

As a follow-up to the study carried out by Gerlič (2005; 2006a; 2006b), which mainly involved FL teachers, our study showed that in most cases, except for the use of ICT in vocabulary learning, male students numerically outnumbered female students in ICT-supported FL learning. Based on the results, male students seemed to prefer using ICT support in their FL classes. Male students made greater use of technology wherever it was available, whether through tablet computers or mobile phones, which can be confirmed by the results in *Table 3* – the ICT section on writing homework and learning vocabulary. In that same vein, Awad (2012) indicated that boys tend to spend more time in front of the computer or mobile phone screen than girls do, nevertheless, this difference does not seem to present a significant impact on their attitudes towards the usage of ICT in the FL classroom. It can therefore be argued that gender effectively plays an important role in the formation of attitudes towards ICT-supported language learning. On the one hand, international research has shown that male students tend to be more interested in and use computers more frequently than female students. On the other hand, various studies have shown that computer use and attitudes towards computers are influenced more by educational opportunities and personality than by gender (Teo, 2006; Ates et al., 2006).

The results of this study have shown female students in the 4th grade of elementary school to be less keen on using digital technologies in the FL classroom, especially mobile phones. This result may be related to the attitudes of female students towards the use of ICT in general. However, the overall results of this study show a different picture when it comes to female students engaging in ICT-based vocabulary learning. One might add that by applying age-appropriate motivational measures, the attitudes of female students might skew more positively towards ICT usage in the FL classroom. The development of digital skills (using ICT and similar) is part of the curriculum in Slovenian elementary schools from grade 4 of elementary school onwards, but merely as an elective course. It would certainly be helpful if all fourth graders attended an ICT course; it should be promoted to a compulsory course in the first cycle (grades 1-3). If introduced to digital literacy at an early age, both male and female students would consequently adopt a more positive attitude and learn to move freely in the digital world.

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