ARE PAPER BOOKS OBSOLETE IN FOREIGN LANGUAGE LEARNING?

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Abstract

Although there is no generally accepted definition of the so-called Generation Z, this concept is used by a large number of authors for the generation of Digital Natives who grew up with the Internet and social media. As far as their age is concerned, researchers usually use the mid-1990s to mid-2000s as starting birth years. Therefore, it is about the generation involved in the current school system or which has already completed their education. Since digital media has opened up new opportunities in teaching in general, it also applies to the teaching and learning of foreign languages. In the first part of the paper, the possibilities and boundaries of digital media in teaching of foreign languages will be analysed in more detail in the context of the "School for life", the curriculum reform pilot project in the Republic of Croatia, 2019. This project gives greater importance to the use of digital media in teaching and implements the use of tablets already in the first year of primary school. The second part of the paper will present a part of a study conducted among the students of the Faculty of Teacher Education at the University of Zagreb in 2017. The students are members of the aforementioned Generation Z. The research examines the use of digital media in learning and teaching of foreign languages. In this paper, we will focus on whether foreign language learners prefer online or printed dictionaries, and whether they prefer a screen or a printed book when reading foreign language texts. Respondents were also asked to give a more detailed explanation of their responses. The research results showed that respondents, although they grew up with digital media, prefer to read texts in a foreign language in a printed book rather than on a screen.

Keywords: *foreign language teaching, learning, digital media, Generation Z*

1. INTRODUCTION

The accelerated development of digital media in recent years is evident in all areas of human life, and this includes the area of education. At the start of the 21th century, Prensky divided generations into Digital Natives and Digital Immigrants [1], indicating that there was an important difference between people who have grown up with digital media and the ones who came into this world later. Digital Natives are adapting to changes in their environment quickly and continuously, they explore the world in a different way, and, of course, are prepared to accept digital technologies in the area of education as well. Apart from the aforementioned name, there are numerous other names for the generations before and after the accelerated development of digital technologies, such as the Net Generation [2], Millenials [3], i.e. Generation Y and Generation Z. Although there is no generally accepted definition of the so-called Generation Z, this concept is used by a large number of authors for the generation of Digital Natives who grew up with the Internet and social media. As far as their age is concerned, researchers usually use the mid-1990s to mid-2000s as starting birth years. Members of this generation, born between the mid-1990s and around 2005 are the focus of interest of this paper. Members of the generation which grew up with digital media are said to possess certain characteristics which other generations do not, one of which is a lower level of reading competency, caused by the increased use of digital technology [4]. It is a fact that digital media play a major role in the formation of one's life as early as early childhood. They are an integral part of social reality, from daily communication through mobile applications for message exchange, social networks and the like, all the way to their use for the purposes of political participation and communication [5]. At the same time, along with the dangers which digital media bring, some other commonly mentioned issues include less direct interpersonal contacts and increased loneliness of individuals, as digital communication tends to be superficial and mostly conducted through short messages and on screens. Regarding computers and digital media, we can notice that over the years, possibilities, but also expectations of new media (as they have been called

for a long time) in the area of education. Looking back to the 1970s, with the development of the third generation of computers, there was a real euphoria about organising lessons with the help of computers [6]. In those times, the prevalent opinion was that computer technology improves and accelerates achieving the desired learning outcomes [7], however, later research showed that digital media were not a key factor to achieve the desired learning outcomes [8]. Numerous other factors are crucial for organising optimal lessons, e.g.: individual characteristics of pupils and teachers, assessment of learning outcomes, the ability to use digital media, positions on learning and media, i.e. the general didactic organisation of learning and teaching [9] [10]. To sum up, a didactic contribution exists when, through the use of digital media, it is possible to learn more about a certain topic, and in a different way than traditional lessons allow. In foreign language learning and teaching, digital media can greatly contribute in some segments. We primarily refer to the fact that they enable quick and direct contact with native speakers of the language being learned, without leaving the classroom, or their country of residence. Authentic communication has a much greater impact on acquiring language skills than non-authentic situations. Pupils can hear the spoken language, different varieties of a particular foreign language, and, in contact with native pupils, they not only receive factual knowledge about a country, but also the value concepts of the country whose language they learn. Apart from that, digital media can help in mastering vocabulary and pronunciation, since there are numerous online dictionaries which feature sound clips. On the other hand, we should mention that, for example, automatic spell-checkers, which are integral parts of text-processing programs, have an impact on the increasingly poor literacy of pupils. They no longer need to rely on their own knowledge of a language, i.e. orthography, while translating programs and applications are, ever more frequently, taking the place of (still) better and more accurate translations done by trained translators. Apart from this, foreign language students are facing an enormous quantity of information, more data is collected than can be processed, and numerous links lead to irrelevant areas. In short, users are "lost in hyperspace". In summary, there are advantages and disadvantages to digital media in education, which, of course, includes foreign language learning. As opposed to traditional media, digital media enable a networked, multimedial, and interactive presentation of content and offer tools for communication and networked cooperation. However, at the same time, digital media can distract the students from important content and increase the possibility of superficial work on a topic, i.e. plagiarism. Some studies show that students who use computers and tablets in class spend two-thirds of their school time doing activities (social networks, games, etc.) which are completely unrelated to the topic of the lessons being taught, which reflects negatively on their academic success [12] [13] [14]. With all the aforementioned positive and negative sides, digital media have definitely entered into the education system of the Republic of Croatia. However, this process has for years been the result of individual preferences of the teachers themselves, i.e. the technical and financial possibilities existing in their schools at the time. In 2014, however, a Strategy of Education, Science, and Technology was adopted, the aim of which is the implementation of the Comprehensive Curriculum Reform which includes: a) the development of basic competencies for lifelong learning; b) clearly defined educational outcomes which are not explicitly cognitive in nature (knowledge), but, in accordance with the determining of basic competencies for lifelong learning, also include the development of skills, opinions, creativity, innovation, critical thinking, initiative, entrepreneurship, aesthetic assessment, responsibility, relations to the self, others, and the environment, behaviour, and many others; c) open didactical-methodological systems which enable educators, teachers, secondary school teachers, children, and pupils freedom in choosing the content, the methods, and the forms of learning; d) clearly defined standards/criteria of the levels of development and acquisition of educational outcomes. In accordance with this, an experimental program was started, called "School for Life", as the first step toward the realisation of the above-mentioned goals. The experimental program should check the possibility of implementing new curricula and forms of working methods, as well as new teaching aids. Training of the teachers participating in the reform started in 2017, and along with the training, methodological manuals were available in the form of open, digital educational materials, with the aim of facilitating the transition from the traditional model of content-centred school programs to new, outcome-centred curricula. In the 2018/19 school year, the "School for Life" experimental program started in Croatia, in the first and fifth years of selected primary schools (primary education in Croatia takes eight years). In accordance with this, the selected primary schools introduced tablets in their first years, which should have been regularly used in teaching, along with interactive class books at the

teachers' and pupils' disposal. Digital media, therefore, entered into foreign language classes as well. We should mention that the manner in which the curricular reform is being implemented was met with great criticism from the academic community, and the majority of the objections can be summed up in the fact that the results of numerous scientific studies in the area of using digital media in education were not sufficiently taken into account. One of the experts' complaints was, e.g., that the intensive use of tablets will have a negative impact on the pupils' graphomotor skills as early as the first years of primary school. Moreover, teachers who have undergone additional training are participating in the experimental stage of the reform, but the connection with teacher training institutions was not established, in the sense that the students currently studying in Teacher Education colleges and who should, in the next year or two, start working in schools, will come into a new educational environment unprepared. Since digital media will not have a positive impact on learning outcomes by themselves, but rather, as mentioned earlier, in order to organise optimal teaching, one should take into account not only the capabilities, but also the opinions of teachers on using digital media in the classroom, at the Faculty of Teacher Education in Zagreb was conducted a research in 2017, which we shall present in the following text. At the Faculty of Teacher Education in Zagreb, tertiary education is currently (2018/19) conducted as 1) Undergraduate university study of Early Childhood and Preschool Education, which lasts for three years and awards 180 ECTS credits upon completion; 2) Graduate university study of Early Childhood and Preschool Education, which lasts for two years and awards 120 ECTS credits upon completion; 3) Integrated Undergraduate and Graduate University Study of Primary Teacher Education, which lasts for five years, awards 300 ECTS credits upon completion, and is organised as a regular study (includes modules); and 4) Integrated Undergraduate and Graduate University Study of Primary Teacher Education, which lasts for five years, awards 300 ECTS credits upon completion, and is organised as a regular study (includes English or German language studies). The respondents were 21 years of age on average, and therefore belonged to the aforementioned Generation Z, who have grown up with digital media. The aim of the research was to explore how many foreign languages the respondents – future teachers – have studied; how they assessed their own knowledge of foreign languages; if they have used free online foreign language courses; if they used dictionaries at all while learning a foreign language, i.e., whether they preferred online or printed dictionaries, and whether there was a statistically significant difference in using a particular kind of dictionary regarding the number of foreign languages the respondents have studied? Furthermore, we wished to establish the extent to which the respondents deemed particular features of learning important for learning a foreign language. Finally, and the answers to these questions are in the focus of this paper, the respondents had to answer whether they, during reading texts in a foreign language, i.e., searching for answers, preferred a screen and hyperlinks or a printed book, and how they explained their answer.

2. MATERIALS AND METHODS

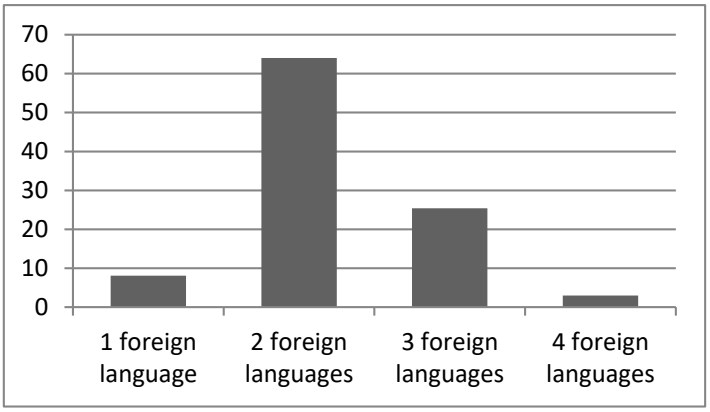
The study included students of the Faculty of Teacher Education, University of Zagreb (N=236). Regarding gender, there were 10 (4.2%) male and 226 (95.8%) female students. Regarding the type of study at the Faculty of Teacher Education, there were 176 (74.6%) respondents from the Primary Education Department and 60 (25.4%) respondents from the Preschool Education Department, out of which there were 32 (13.6%) respondents from the first year, 115 (48.7%) from the second year, 13 (5.5%) from the third year, 4 (1.7%) from the fourth year, and 72 (30.5%) from the fifth year of study. The youngest student was 18 and the oldest was 27 years of age (M=21.27; SD=1.69). The data was collected using a paper-and-pencil questionnaire. The first part of the questionnaire featured questions on gender, type of study, the chronological age of the respondents, and their year of study (first/second/third/fourth/fifth). The second part examined the foreign languages the respondents have studied (English, German, French, Italian, and Spanish). The data on the manner in which the respondents have learned their respective foreign languages were entered as multiple answers (at school, foreign language studies, spending time abroad, bilingual family, after-school or extracurricular activities (foreign language courses), television, the Internet, social networks). In this question, the respondents were also asked to mark which of the aforementioned ways of learning a foreign language they deemed the most important. The question on whether they have used online foreign language courses was answered with a Yes or a No, and in the question on what they used during foreign language

learning, they circled their selected answer (online dictionaries / printed dictionaries / no dictionaries used). For the question of what the students considered important in foreign language classes, a five-point Likert scale was constructed (from 1 = the least important to 5 = the most important), and referred to 1) flexibility in learning regarding time and place; 2) personal contact with other students; 3) the possibility of individual learning and work; 4) the possibility of personal contact with the teacher; 5) the possibility of quickly getting feedback on their progress; 6) the possibility of self-assessment of their progress; 7) the timeliness and concept of a printed class book; and 8) using "new media (computers, tablets) in education. On the question of which medium they preferred to use for reading foreign language texts, the respondents circled one of the following answers: 1) they would prefer to read the text from a screen; 2) they would prefer to read the text from a book, and 3) I don't know. Regarding the question on where (with the help of which medium) they would search for answers to their questions, the respondents circled one of the following answers: 1) they would search for answers in a printed text by flipping through pages of a book, or 2) they would rather get a text on a screen with numerous hyperlinks. The participation in the questionnaire was completely voluntary and anonymous, and the respondents were able to resign from answering it further at any point in time.

3. THE RESULTS

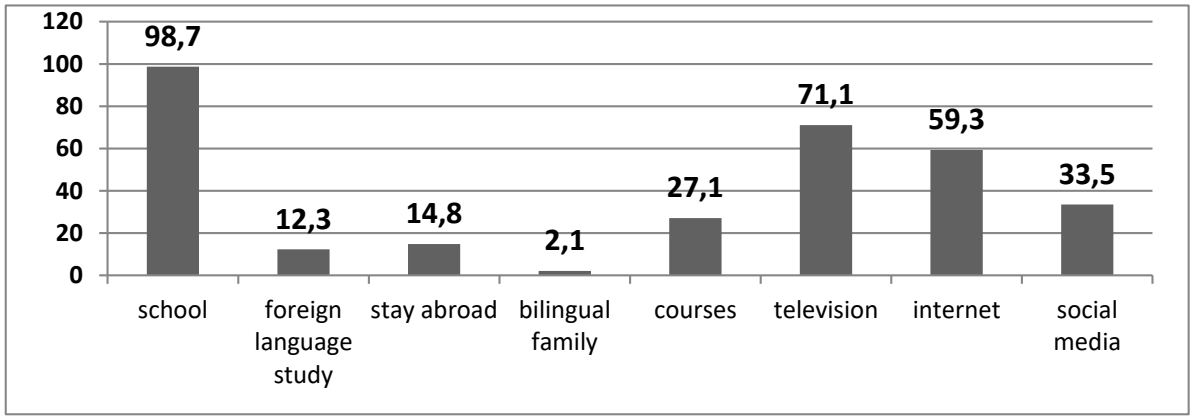
Descriptive analysis showed that the majority of the respondents have studied two languages (151 / 64%), somewhat fewer studied three (59 / 25%), and considerably less studied only one (19 / 8%) or four foreign languages (7 / 3%) (Chart 1).

Chart 1. The number of foreign languages that the respondents have studied (shown as a percentage).



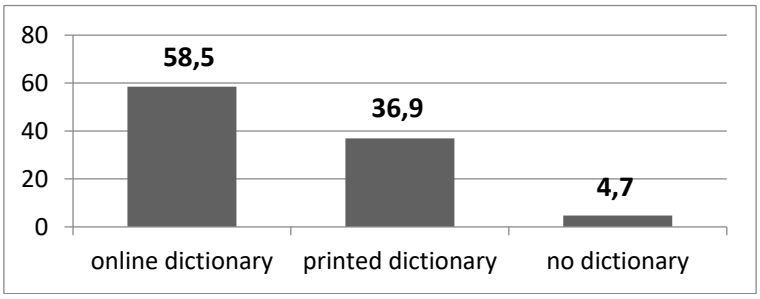
The results show that 230 (97.5%) respondents have studied English, 204 (86.4%) have studied German, 15 (6.4%) have studied Spanish, 16 (6.8%) have studied French, and 59 (25%) have studied Italian. From answering the multiple choice question of how the respondents have learned their respective foreign languages, it is evident that the majority of the respondents estimated that they have learned them at school (233), while 169 respondents learned them with the help of television, 140 respondents learned them with the help of the Internet (by surfing and communicating online), and 79 learned them with the help of social networks. 29 of them have learned their foreign languages at their foreign language studies, 35 have learned them abroad, 5 of them have learned them in bilingual families, and 65 of them have learned their foreign languages at after-school or extracurricular activities, i.e. foreign language courses (Chart 2).

Chart 2. Place of learning a foreign language (shown as a percentage)



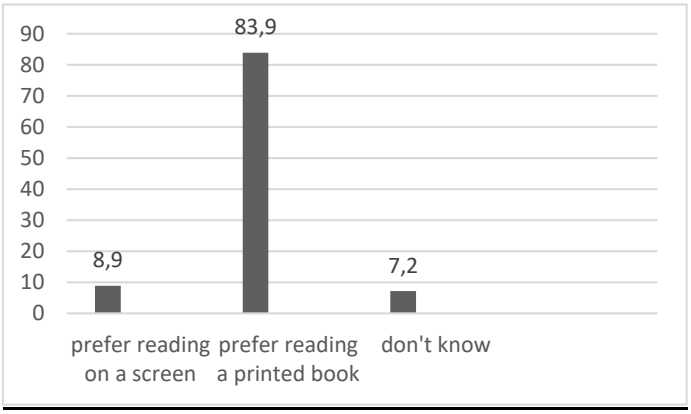
Furthermore, the answers to the question on which of the ways, i.e. places they considered the most important for learning a foreign language show that 120 respondents (51%) believe it to be the school; 5 (2%) marked foreign language studies; 27 (11%) believe it to be staying abroad; 3 (1%) marked bilingual families; 16 (7%) marked after-school and extracurricular activities, i.e. foreign language courses; 39 (17%) marked television; 25 (11%) the Internet; and one respondent chose social networks. Out of 236 respondents, 22 said that they have used online foreign language courses, where 214 have never used them. Regarding the use of dictionaries for foreign language learning, 138 (58.5%) respondents said that they used online dictionaries; 87 (36.9%) said they used printed dictionaries, whereas 11 (4.7%) respondents said that they did not use any dictionaries at all (Chart 3).

Chart 3. Using dictionaries in foreign language learning (shown as a percentage)



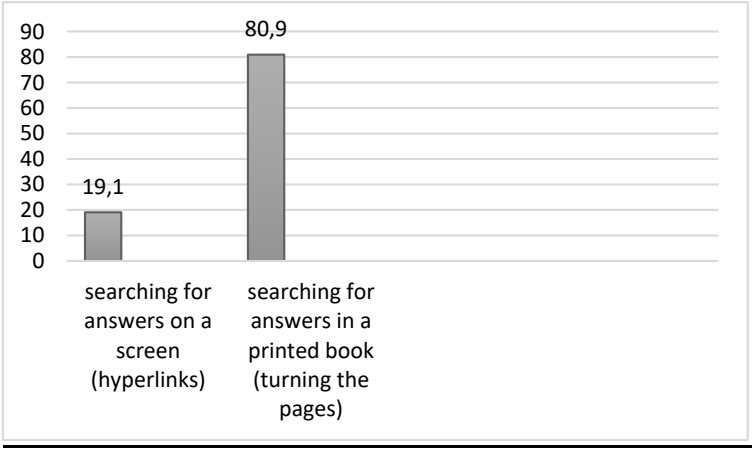
The results showed that there was no statistically significant difference in the use of a particular type of dictionary regarding the number of languages the students have studied (χ^2 = 3.524; p = 0.741). Regardless of the number of foreign languages they have studied, the majority of the respondents have used online dictionaries, a somewhat smaller number of respondents have used printed ones, and those who have never used them at all were the fewest. With regard to their estimation of what they considered important in foreign language learning, the results showed that all the presented options were deemed important. They considered the most important option the possibility of quickly getting feedback on their progress, the possibility of self-assessment of their progress, the possibility of personal contact with their teacher, and the possibility of individual learning and work. Regarding the question "If you had to read a foreign language text...?", the majority of the respondents answered that they would prefer to read it from a book (198 respondents), whereas a significantly smaller number of them decided to answer that they would rather read the text from a screen (21) or were indecisive (17) (Chart 4).

Chart 4. Reading a foreign language text (shown as a percentage)



If, while reading a foreign language text, they would have to answer certain questions, 191 respondents answered that they would rather look for answers in a printed text by flipping through the pages of a book, whereas 45 respondents would rather get a text displayed on a screen along with numerous hyperlinks, i.e. in hypertext (Chart 5).

Chart 5. Ways of looking for answers in a foreign language text (shown as a percentage)



The respondents were asked to explain their answers. For the sake of clarity, we can display the answers in a table, and the answers are sorted by descending frequency (upper: more frequent, lower: less frequent) (Table 1).

Table 1. Reasons why I prefer a book / a screen for seeking answers to questions in a foreign language text

Text in a foreign language – Reasons for seeking answers in a printed book (turning the pages)	Text in a foreign language – Reasons for seeking answers on a screen (hyperlinks)
– easier navigation and following the text, more clarity/visibility – easier understanding of unknown vocabulary, easier immersion in the text – able to underline the text – better focus – a feeling of greater security/familiarity in a printed text – no distracting hyperlinks – does not strain the eyes as a screen does – love the smell of paper, i.e. book covers – no spam or viruses	– can find answers easier because of a search engine – faster and more efficient – greater availability of information – I am used to working on a computer – books are clumsy to use as the answers must be covered with a hand / a piece of paper, and the answers must be written upside-down

4. DISCUSSION AND CONCLUSIONS

Digital media are a social reality, they have a large impact on how our lives are formed. Regarding their use in the process of education, they can enrich teaching, including foreign language classes. However, their use does not necessarily mean that the students will be faster and better at remembering and learning the content of our lessons. Digital media are not a key factor in achieving the desired learning outcomes, as the optimal organisation of teaching depends on a variety of factors, one of which being the students', but also the teachers' attitudes and opinions on digital media. The study conducted among the students of the Faculty of Teacher Education showed that they, themselves, although members of the so-called Generation Z, therefore, the generation which has grown up with digital media, (still) do not prefer explicitly digital media in foreign language learning. Most of the respondents who, according to the results of the study, studied two foreign languages on average, believe that they have learned most of these languages at school. In doing so, the majority of the respondents used online dictionaries, and over one-third of the respondents used printed dictionaries. The results of the study showed that printed dictionaries were less and less popular, and less used by people who have grown up with digital media. However, at the same time, the respondents preferred printed books when they need to read foreign language texts, i.e. if they need to seek answers to certain questions. The reasons for this are multiple, but clarity/visibility of the text and the absence of distracting hyperlinks are the most frequently given answers in favour of printed books. Underlining a text for emphasizing important parts and subsequently easier remembering of information is still mentioned as a great advantage of a printed text as opposed to a screen. On the other hand, a smaller number of respondents who prefer reading, i.e. seeking answers in a foreign language text on a screen, state search engines as an important means of finding information as their main reason. However, this simultaneously means that these respondents do not wish to read the whole text, but rather prefer to find answers to questions as quickly as possible, whereas deeming the context irrelevant. This most certainly does not contribute to encouraging reading competencies and leads to superficiality. Therefore, we posit the question of whether the mass introduction of digital media in foreign language teaching, as the Croatian schooling reform provides, truly represents a high-quality forward motion, especially considering that future teachers themselves, the respondents in the study just described, in a large number, and in the segment of reading and text comprehension, still prefer printed books as opposed to screens.

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