STUDENTS' RESEARCH IN TEACHING AND LEARNING ENGLISH AS A FOREIGN LANGUAGE

PETRA HITKOVÁ (Ed.)

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INTRODUCTION

The book *Student's Research in Teaching and Learning English as a Foreign Language* discusses the latest research conducted by pre-service English teachers at University of Trnava, Slovakia. The main focus was to establish an outline of CLIL and bilingual education and the impact of online learning during COVID-19 pandemic. As the pre-existing research in the field of online learning in Slovakia was scarce and rather limited, the analysed data provide a rich and undoubtedly important source of information not only for the English language teachers, but also for authorities dealing with issues which arose during school lockdowns.

The book consists of four independent research studies, mapping several topics connected to CLIL, bilingual education and general English language classes. Nevertheless, the attention is shifted mainly to the issues which occurred during long periods of online learning, such as social isolation, technical difficulties, students' mental health, lack of motivation and inability to focus during lessons provided through online platforms, such as ZOOM and MS TEAMS.

The book consists of three studies written by students of the Department of English language and Literature, the Faculty of Education, at the University of Trnava. They illustrate the longitudinal interest of the department in various issues related to digital literature and digitally supported literature education, which led to proposing the complex project KEGA 019TTU-4/2021 *Introducing new digital tools into teaching and research within transdisciplinary philology study programmes*, which is funded by the Ministry of Education, Science, Research, and Sport of the Slovak Republic. It intends to study necessary innovations in the content and possible modernization of methodological tools used in philological study programmes (Godiš, 2021, 2022a, 2022b; Hitková, 2021; Hitková & Hitka, 2022; Horváthová, 2022; Hriňák, 2021, 2022; Kocianová, 2021; Komlósi, 2021; Liashuk, 2021a, 2021b; Pokrivčák, 2022a, 2022b; Pokrivčáková, 2021, 2022a, 2022b; Vančová, 2021a, 2021b).

In the first chapter, *Teaching English Online at Primary Schools*, Škerlecová focused on analysing the pupils' experience in learning English online during the COVID-19 pandemic. The ambition was to compare learning English in regular face-to-face lessons taking place in the classroom with the online lessons through platforms ZOOM and MS Teams. Using a survey, she collected data online from 115 pupils from different primary schools in Slovakia. The conclusion was that the online classes were not as effective as the regular face-to-face English lessons taking place in the classroom. The results also showed that pupils preferred

learning English in the classroom compared to online lessons. The results revealed many other hidden aspects of online learning and provided a useful overview of the online education in Slovakia.

Lešková focused on the *Impact of online education on students at bilingual secondary grammar schools in Slovakia.* Her main aim was to find out whether online education affected students at bilingual grammar schools. The objective of her research was to determine which parts of the educational process were influenced the most during the school lockdown. The focus of the survey questions included technical difficulties, motivation, mental state of students, as well as their ability to pay attention during online lessons. In her chapter, she described different aspects of bilingual education in Slovakia while using the CLIL teaching method. Furthermore, the outbreak of the COVID-19 pandemic in Slovakia is outlined in connection with the shift of the country's education to online learning. Lešková prepared an online survey and distributed a questionnaire to students of bilingual secondary grammar schools. After analysing data from 172 respondents, the results clearly indicated the impact of COVID-19 on adolescents' mental health. Other reported problems included lack of motivation, inability to concentrate or technical difficulties with hardware, software and internet connection.

In the chapter *CLIL in Slovakia*, Belancová focused on the implementation of CLIL in elementary and secondary schools. The author offered a clear overview of CLIL in Slovakia, but she also mentioned other European countries and their experiences with CLIL. In her study, she focused on specific subjects used in CLIL classes, the foreign language usage, the number of CLIL lessons per week, the way the pupils are tested, and the extent of the school management's involvement with CLIL. The analysis of the usage of CLIL in Slovak was based on 19 detailed teacher responses from different primary and secondary schools located mainly in Western Slovakia. Subsequent analysis indicated that each school used its own CLIL model, based on their specific requirements. Majority of CLIL schools use English as their language of choice, while the teachers usually alternate English and Slovak lessons. The data also showed that the most common CLIL subjects in Slovakia were ARTS, SCIENCE, and MATH.

Galková analysed *The Impact of CLIL on undergraduate education of students of bilingual secondary schools,* and focued her survey on subsequent academical choices of the graduates of bilingual programmes. In her paper, Galková presented some of the educational institutions in Slovakia which use the CLIL method. Nevertheless, the main objective was to determine the differences as well as common features of graduates in matters of reasoning behind selection of high school education, experiences from being taught by CLIL method, determination of subsequent educational choices and experience undergoing these different academical options. The data were collected in a survey using a method of questionnaire on a sample of 71 respondents.

The editor as well as the authors hope that this publication will inspire others to engage in the issue of online education and the impact it has on the English language classes and CLIL lessons at primary and secondary schools in Slovakia. It could also help improve the programmes for non-native English language teachers at Slovak universities.

Editor

LEARNING ENGLISH THROUGH ONLINE LESSONS AT PRIMARY SCHOOLS

Alexandra Škerlecová

Education during pandemic

The beginning of the invisible enemy in Slovakia comes with the date of March 12th, 2020. The first case of the COVID-19 infection in Slovakia was confirmed on March 6th, 2020 and March 15th, 2020 was the day that the Slovak Government put Slovakia in lockdown due to pandemic. Following that, the implication of this was that all nursery schools, kindergartens, elementary schools, high schools, colleges, and universities were closed from 16th March. According to UNICEF "Schools for more than 168 million children globally have been completely closed for almost an entire year due to COVID-19 lockdowns" (UNICEF, 2021). Many schools have been looking for alternative ways to provide effective education. The primary schools including all the other teaching institutions were instructed by the government that teaching need to be done and the usage of technology was one of the main ways how it would be possible to continue in education.

The impact of pandemic on the primary schools in Slovakia

As motioned above, all primary schools were put to lockdown from March till June 2020. As Hudáková states the first two weeks were the worst for primary education. Teachers had problems using network and work with a computer. Many of them decided to work only with EduPage which led teachers to flood the pupils with much homework from different subjects (Hudáková, 2020).

Many schools cut the traditional 45 minutes lessons to 30 minutes sections 4x per day which equals the average of 10 hours per week. This may be related to protecting pupils' eyes against blue light from their computers.

Strenáčiková (2020) wrote about the negative impacts of COVID-19 on the pupils and teachers. Educational Policy Institute also confirmed the negative impacts of the situation on education. The institute shares a survey that reveals that 128 000 pupils of primary and secondary education did not learn via the internet. This information with the combination of table no. 1 provides not pleasing information. The survey consisted of 2 194 answers from headmasters and 15 645 answers from class teachers of primary and secondary education. The most commonly reported problem of teachers (53,7%) during distance-based education was that they did not know how to explain the topics effectively. This would need a follow-up study for a better understanding and analysing of the information provided (IVP, 2021).

Primary school pupils and their technological skills

When talking about primary school education, think of the age between 7 to 15 years. After that, a short description of their technological skills is provided.

Cameron considers young learners between 5 and 12 years of age. The two-word description of them would be "lively learners". They are highly motivated when it comes to playing games. Cameron states "They also lose interest more quickly and are less able to keep themselves motivated on tasks they find difficult" (Cameron, 2001: 1). It needs to be understood that the usage of textbooks during the whole lesson is not enough when talking about the achievement of effective learning. The successful lesson is full of activities, games, and fun. But it is possible to keep their motivation to learn also online?

Bolstad describes 3 main reasons why information and communication technologies matter in childhood education. The first one describes that pupils are already attacked by the ICT in everyday life, so it is natural for them to learn how to use technology. The second point reflects on opportunities that could support children's learning and communication. The last point explains the support and interest of education to develop ICT into the curriculum (Bolstad, 2004).

The National Institute for Education of the Slovak republic updated educational standards for 4th year graduates from Informatics. Only a few points were chosen for the general knowledge about the technological skills of pupils.
- Pupils master the basic use of computers.
- Pupils have no problem using e-mails or the Web.
- Pupils know how to work with files, applications, and programs.
- Pupils can talk about risks on the Internet.
- Pupils know how to secure themselves on the Web (ŠPÚ, 2022).

In Slovakia, compulsory secondary education starts at the age of 12. Smith ranged the preadolescents somewhere between 11 to 15 years. This stage is characterized by rapid biological aspects like puberty. Self-interest, self-ego, and selfishness are becoming visible during that period. They become argumentative and with this comes abstract thinking and sarcasm. As children they were self-centred but now, it is more about the world that revolves around them (Smith, 2020).

When it comes to technology, teens find the internet fun. Especially social media allows them to stay connected to their friends or family. Teenagers also like to play games, involving fun activities or educational games could encourage the pupils' motivation to educate.

The National Institute for Education of the Slovak republic shares the educational standards for compulsory secondary education from Informatics. Not all provided information was selected only a few for a general overview. The information provided is valid for the 8th grade.
- Pupils can communicate through many different applications.
- Pupils can provide pros and cons of social communication.
- Pupils know how to respect copyrights.

- Pupils know how to solve algorithmic problems.
- Pupils are able to orient in the local computer network (ŠPÚ, 2022).

With the information provided above, it could be assumed that we live in the world of technology, so young learners should not have problems with the usage of computers.

Forms of online learning

According to the Cambridge Dictionary, a pupil "is a person, especially a child at school, who is being taught" and a student is "a person who is learning at a college or university". The usage of the word *student* occurs more frequently in the works of the cited authors. The possible reason for that is they refer to a person who is learning as a student.

Distance-based learning

When want to talk about online learning, it needs to be understood what exactly distance-based education is.

According to Simonson et al. distance learning is characterized as "a form of education in which the main elements include physical separation of teachers and students during instruction and the use of various technologies to facilitate student-teacher and student-student communication" (Simonson et al., 2016).

According to Strenáčiková distance education refers to the way of learning at a distance. The essential characteristic is that it could occur either in real-time or according to the needs of the student at a time that suits him best. Distance learning can therefore be considered as a new form of education because of the high usage of different technology, various platforms, and special electronic applications. Shortly, distance learning is realized in the virtual environment. This term is highly used with the universities where the learning process is organized outside of main working hours (Strenáčiková, 2019).

According to Hudakova, several authors provide different definitions for the term distance education which can be divided into 3 parts. The first part provides information about the physical distance. The student is physically separated from the educator during the learning process. The second part describes the procedural part of this type of education. Shortly, it is a planned process where the lectures, teaching, and materials are under the supervision of the teacher. It needs to be understood that students have to be fully motivated and organized to be able to succeed in this form of learning. The third part is based on modern information technologies and their support which are considered as the main support system for this educational process (Hudakova, 2020).

Face-to-face vs Online-based learning

The sudden changes brought on by pandemic opened doors for a population of online-based learning. To discuss it, it is important to understand the main differences between these two approaches and look at their effectiveness.

Both teaching forms have strengths and weaknesses. As Graham et al. outlook a smart example; it should be thought of the differences between a teacher proving a lecture and a textbook. Both are providing some piece of information but in different ways. However, the traditional face-to-face lectures can do many things that passive learning cannot, for example:

- Monitoring the students understanding and interests.
- Quick adaptation of the information presented based on students' needs or behaviour.
- Motivation of students to engage in the learning activity more fully.
- Establish a relationship with students (Graham et al.,2019).

But there are several advantages for the student who is choosing a textbook over a lecture. A textbook provides:

- It is available for the students all the time.
- The student can read the textbook as many times as he needs to and with the tempo he needs.
- The student can choose the order he wants to.

Sujatha states that online teaching become very popular since the usage of technology. The main difference is that online education is student-centred, and traditional classroom teaching is rather teacher-centred. But the difference is not just in that. The teacher needs to be prepared for both teaching processes but again, differently. During online teaching, the tutor needs to guide the students to understand the concepts of the course, control their feedback, submission status and follow the participation in the discussion forum in the online platform. The teacher preparing for the traditional face-to-face learning is aware of the fact that teaching is done more simultaneously (Sujatha, 2021).

The advantages of online learning according to Sujatha:

- There are many tools available online like Prezi, Google classroom, Zoom, MS Teams which could help the teacher with efficiency. For example, online lectures can be recorded and shared among students for future use.
- Teachers could save more time; they do not need to travel for taking the class. Online learning takes place beyond geographical limitations.
- More teaching availability and freedom for the teachers.
- The results of the student can be documented online. It saves time with the administration works.
- Online platform provides group and one-to-one conversation, so the feedback can be done in a more personalized way.

The disadvantages of online learning according to the author:

- There are many different students, some of them can struggle to focus on the screen for a long period of time. They can be easily distracted because of that. Online educators need to present very interesting materials to perpetuate students' interests.

- In some households, the internet connection may be weak, so it could have consequences on education.
- In any way, social interaction is important but even more important during online classes. It is an added responsibility for the teacher to motivate the students to any form of communication to reduce the sense of isolation.
- Many teachers need to be tech-friendly to teach effectively.
- Teacher needs to keep track of the students e.g with frequent communication (Sujatha, 2021).

To compare, she provides pros and cons also to the traditional teaching. The pros are:
- Traditional teaching method is the direct teaching method, where passionate teachers create a positive learning environment that has a great impact on students.
- The physical presence allows the teacher to adapt different teaching styles for different students. e.g.: visionary, auditory, and kinesthetic styles to stimulate the learners' interests.
- Traditional classroom enables the teacher to observe the students which could have a positive impact on the silent or slow students.
- Big advantage is the face-to-face interaction with the learners, the constant feedback will reach the students better than passive listening during online classes.
- A fixed schedule and specific timetable help teachers to monitor their lessons

Here the cons of traditional teaching held in classes are provided:
- Traditional teaching is a teacher-centred approach which means that is more focused on repetition and memorizing the content and passing the exams. It could lead to a lack of certain skills like problem-solving and analytical thinking.
- The teacher cannot pay attention to everybody in the class at the same time.
- Teachers need to follow a strict schedule designed by the organization which means that there could be less time for the many classroom-based activities. This could have a negative impact on the young learners.
- Time is a major disadvantage as mentioned above. The evaluation process is also very time-consuming (Sujatha, 2021).

Traditional teaching is still believed to be an effective way of learning, but it needs to understand that every teaching model has its pros and cons. Today, when everyone lives in a world of technology it is common to use online-based learning, especially at universities. But it is possible to combine both models to achieve the learning objectives? The characterization of blended learning is on the next page.

Blended learning
This form of learning is not as well-known as it would be expected but it is interesting to know how two forms of learning can be combined to achieve effective objectives.

According to Watson et al., there is no difference between hybrid learning and blended learning. Blended learning combines online with the features of classroom interaction and lives the learning process. This learning process should be viewed as an approach with a fundamental redesign of the instructional model with the characteristics like:

- Combination of a formative and summative assessment system for the teacher and student.
- Develops interaction between teacher and student, student-student, student-content, and student-outside resources.
- A shift from lecture to student-centred learning benefits the activity of interactive learners - this shift should apply to the whole lesson, including face-to-face sessions (Watson et al., 2020).

As Moore states that this type of learning was common in corporate and higher education but now it is highly used with K-12 students. The author provides answers to the question: What exactly is blended in Blended based learning? It is possible to:

- blend the online and face-to-face instruction
- blend the instructional modalities or media of delivery
- blend the instructional methods (Moore, 2013)

Graham et al. describe three main reasons why a teacher may decide to choose a blended teaching approach with K-12 students:

- Improves the student learning process. This method might enable the instructional strategies not practical or possible in traditional settings.
- Increases the flexibility and access of students. Students gain not only more flexibility skills but also, might extend access to learning experiences.
- Increases cost efficiency. That means that it could save more time and money for both teacher and student.

It needs to be understood that these benefits are valid only when talking about the strategic combination of online and in-person instruction. When looking deeper into the blended teaching, it can be concluded that there could be many different models often learning. According to Graham et al. it is important to mention at least a few of them to decide which specific approach could be right for students' needs, teacher's teaching method or school culture. The author provides an example of the blended teaching models (see Picture 1).

He and others provide examples to some of the models:

- **Flipped classroom model:** Based on gaining information from online videos at home and after coming to the class the students' become collaborators with each other.
- **Flex model:** Based on online teaching in the classroom. Students gain as above mentioned, a high level of flexibility, and they can learn based on their speed and

need. It is highly challenging when it comes to the preparation process. A teacher is there for them to help if they do not understand something.

- **Station rotation model:** Based on the rotation process in the classroom. Students are divided into groups, and they move to each section. The sections could be made by a teacher according to his need. At one of the sections, a small group works with the teacher to customize better the instructions according to the students' needs. The other sections could be the collaborative workstation or targeted small group workstation. The common use of that model is when students are preparing for different projects in groups. The teacher gets the best result with the help of an assistant who can assist in those sections (Graham et al., 2019).

K-12 Blended Teaching Models
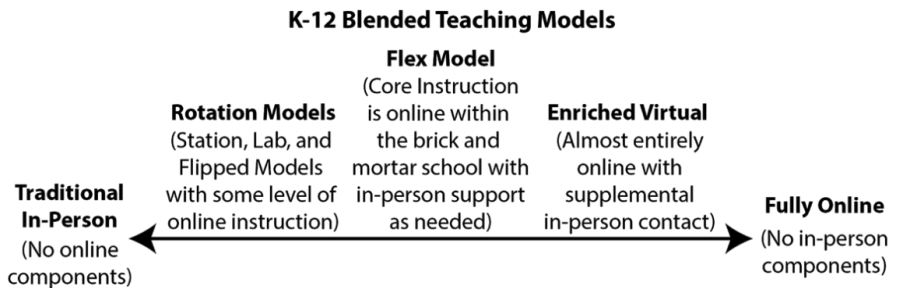
Picture 1: K-12 Blended Teaching: A Guide to Personalized Learning and Online Integration, GRAHAM, Charles R., et al. 2019

With the theory of blended learning, it can be understood that nowadays even after the COVID-19 situation it could be possible to provide this model effectively. Educational Policy Institute provides that teachers blended offline lessons with online ones during pandemic situation. Online education included sending emails to pupils or through other communication apps. The offline one included sending assignments via post. No other information was found. Considering this blended learning, it could show as inefficient in long-term use (IVP, 2021).

RESEARCH

The following chapter shows the practical part of the thesis. Hypotheses and statements will be introduced and analysed. Research sample and methodology will be described. Finally, the interpretation of results and examination of hypotheses and statements will be provided with the pedagogical implications.

Research objectives

The aim of this study is to analyse the pupils' experience in learning English online during the COVID-19 pandemic. The survey aims to find out whether the pupils' attitude to online education is positive or negative and also to conclude whether the

online classes are as effective as the regular face-to-face English lessons taking place in the classroom.

Hypotheses and statements

The hypotheses and statements were supposed to provide an answer to the main question which can be visible throughout the thesis: What was the pupils' experience during online education? In order to answer this question, the following hypotheses and statements were formulated.

*Statement 1***:** Pupils do not have problems with the usage of technology.
Hypothesis 1: Pupils prefer online education to traditional face-to-face education.
Hypothesis 2.1: Pupils find learning English online more boring than learning English face-to-face in class.
Hypothesis 2.2: Pupils find learning English online less effective than learning English face-to-face in class.
Hypothesis 3: Pupils consider writing English testing online easier than writing them at school.

Teachers in Slovakia had weak digital skills before pandemic so for that reason it is assumed that teachers were not ready to use the breakout rooms and were not ready to know how to use digital games for pupils.

*Hypothesis 4.1:* Less than 50% of pupils used breakout rooms during online English lessons.
Hypothesis 4.2: Less than 50% of pupils used games during online English lessons.
Hypothesis 5: The teacher provided less attention to everybody during online education than during traditional face-to-face education.

Research sample

The survey sample consisted of the primary school pupils. The participants were pupils from the 1st to the 9th grade. The questionnaire was conducted on 16th February and lasted until 15th March. The survey was created online with the help of "Google docs" because the current pandemic situation could prevent the possibility to meet pupils face-to-face. The advantage of online surveys is that there is no need for personal contact. The questionnaire was shared on the Facebook page called "Zavretá škola".

To reach as many respondents as possible, primary teachers were contacted via mail and social media and all of them were willing to share the survey on their school management system. Some of them also distributed the survey in their classes. The main focus was on schools located in South Slovakia but due to sharing the questionnaire on social media, some respondents happened to be from different geographical areas. Together 115 answers were collected and analysed. The structure of the respondents cohort according to the school year is indicated in Graph 1.
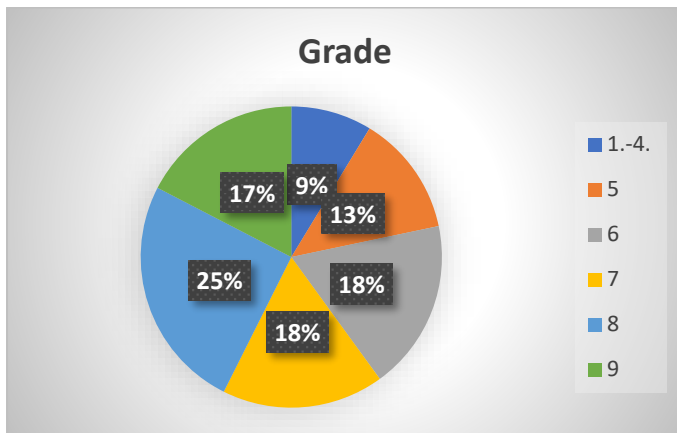
Graph 1. Pupils' grade

The questionnaire has been administered in the Slovak language because some pupils might not have a sufficient level of English to understand the survey.

Methodology

For the practical part of the thesis, the method of questionnaire was selected. The survey consisted of 17 questions. Pupils had a chance to answer open-ended questions, multiple-choice questions or even rate on a scale. All questions were obligatory because, without them, it could be impossible to finish the questionnaire. The questions were formulated to be easily understood by the pupils. The questionnaire also held some additional questions. As mentioned above, the first two questions included general information about the pupils. The results were processed in Microsoft excel for a better representation of results.

In the following text, questions from a questionnaire will be presented and the answers will be analysed in relation to the hypotheses. All questions provided below were multiple-choice questions (except for questions 15 and 17, which were open-ended). For a better overview, the multiple-choice questions are not always listed here (see appendix).

Q3: Which way of learning do I prefer?
The question refers to the teaching methods of the teacher and aim at the learning experience from their education in both forms. However, pupils might prefer learning online because of the lack of responsibility and more free time. The possible answer to this question might be "I don't mind", which may be associated with the personality development of young adolescents. Please, see hypothesis no. 1.
Q5: What type of technology did I use/do I use to learn during pandemic?
Q6: What problems did I have during online education?
Q7: Mark from 1 to 5 how difficult the usage of technology was for you.

The aim is to find out whether pupils have problems using technology. This is associated with their learning experience, and it also could be helpful for hypothesis no. 1. However, according to the theoretical part, it is assumed that pupils are well prepared when it comes to the usage of technology. Please, see statement no. 1.

Q10: The online English classes are… A, fun B, boring C, neutral

Q11: The English classes at school are… A, fun B, boring C, neutral

Every pupil is different, some of them could enjoy learning science more than languages. If the pupils do not like learning languages or English at all it should be determined from their answers. It could happen, that the pupil finds learning in class boring and enjoys learning online. That is why there was a need to analyse both options. Both questions provided are aimed to determine the answer to hypothesis no. 2.1.

Q8: Do I enjoy my English classes at school?

Q9: Do I enjoy my online English lessons?

Q12: I feel I've learned English better… A, at school B, online C, at the same level.

There are many factors from which a negative answer can emerge. It could be a loss of motivation, bad teaching technique, network problems, etc. The questions help us to provide the answers of the pupils' attitudes toward learning English. It is important to mention that the effectiveness of education is measured by pupils' views. The answers from questions 8 and 9 will show a correlation to Q12 and provide an answer to hypothesis no. 2.2.

Q17: What feelings have I got from online English exams?

The aim of the open-ended question is to find out how many pupils were tested in English and whether the results are comparable with the traditional exams. Hypothesis no. 3. confirms or rejects that.

Q4: Through which online platform did/do I learn?

Q14: Does my English teacher divide us into the breakout rooms during lessons?

The most important part of learning a language is speaking. Without practice, it is hard to use the language correctly. During online classes, everybody might not have a chance to speak but the teacher can use breakout rooms to split up the class into smaller groups where they can socialize and work on the group assignments. To analyse this, it would be useful to find out, which online platform for education their school institution provided.

The answers are connected to hypothesis 4.1.

Q15: Do we use any learning platforms during online English lessons?

The rapid change from traditional teaching to online learning could bring many positives related to the usage of online learning platforms. Games have a positive impact on the motivation of learning. This open-ended question could be associated with questions 9 and 10. The hypothesis for the question is provided in no. 4.2.

Q13: How much attention do I get from my teacher?

As English online games can increase pupils' motivation, the online atmosphere may not be as effective. The young learners tend to be active. In the situation of online education, it is assumed that the teacher cannot provide equal attention to everybody,

and this could lead to a loss of motivation for learning. This question should give us the answer to hypothesis no. 5.

Q16: What did I miss the most during pandemic?

This question is selected as redundant. The question focuses on the same thing as others, but it produces a completely new subjective answer.

These questions can be divided into two categories. Questions 3, 5, 6, 7, 8, 9, 10, 11, 12, 13, 16 and 17 are questions where the answer vary from one pupil to another and include their subjective view. The second set of questions 4, 14 and 15 are based on the school institution and the answers helped to determine the techniques used by English teachers during online English lessons.

Results of the survey and interpretation

The results are interpreted with graphical charts. The following analysis will look at the two samples and then the rest of the questions will be analysed.

The first two questions that have been asked determined the pupil's class and gender. It can be concluded that the lowest percentage of participants are the young learners from the 1st to 4th grade. The most answers were from the 8th grade with a total of 25%. Most of the respondents were girls (51%) but only with a difference of 3 pupils.

Question no. 3: Which way of learning do I prefer?

Pupils had a multiple choice of these three statements: *online, face-to-face* and *it does not matter.* Only one statement could be picked. The majority of pupils (47%) picked that they prefer traditional classroom learning instead of the online one (23%), which rejects hypothesis no. 1. that pupils prefer online education to traditional face-to-face education. But with the answer, *it does not matter,* it can be concluded that more than 30% of learners may not feel the difference between these two forms.

Preference of learning

- online
- face-to-face
- it does not matter

23% | 47% | 30%
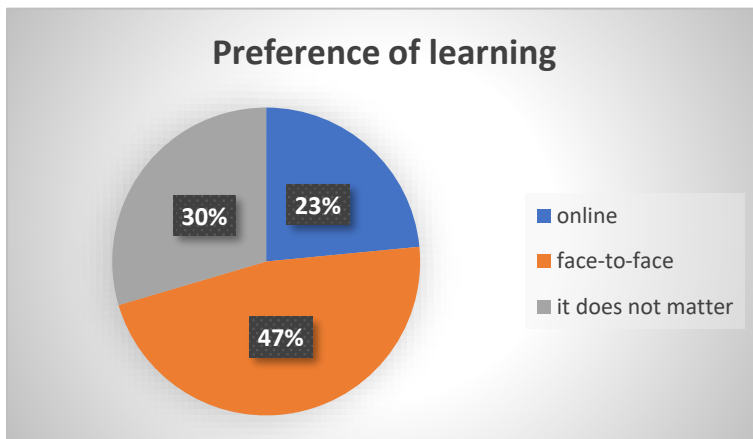
Graph 2. Pupils' preference of learning during pandemic

*Question no. 4: Through which online platform did/do I learn?*

86% of pupils stated that they use ZOOM for learning. Only 8% of participants answered that they use MS Teams and 6% provided another source of education. The ZOOM could be the most used platform during COVID-19 education in Slovakia, but this would need further study because no clear information was provided. It would be interesting to ask all primary schools in Slovakia to provide answers to this question. The results of this question could have a negative impact on hypothesis no. 4.1, which is evaluated in question number 14.
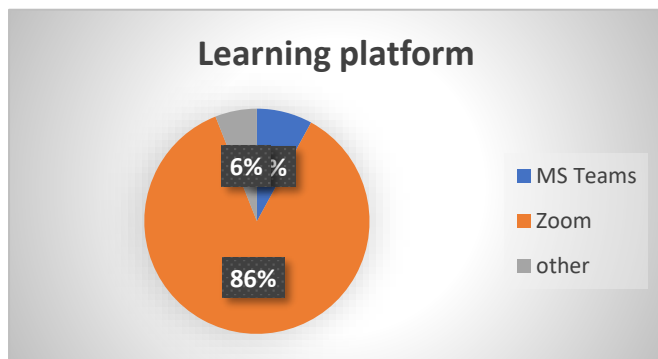
Graph 3. Pupils learning platform

Question no. 5: What type of technology did I use/do I use to learn during pandemic?

62 participants answered that they learn through laptops, 58 that they use mobile phones for education (see Graph 4). The answers were not surprising, the majority of pupils use mobile phones or laptops. The rest answered that they learn through a tablet (9 respondents) and through the computer (19 respondents). Only one answer could be picked, so this question may be inaccurate because one pupil may use more than one tool. The provided answers are taken into the consideration in question 7 where statement no. 1 is analysed.
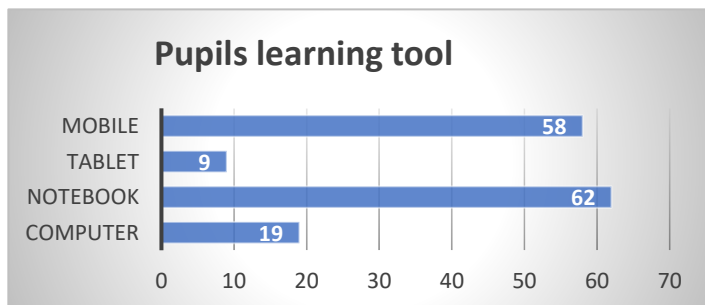
Graph 4. Pupils learning tool

Question no. 6: What problems did I have during online education?

According to survey question number 6, it is assumed that pupils do not have a problem with the technology (52 respondents), so the learning could be realized without problems. But 28 respondents picked the option that they have problems with the internet connection, 23 of them might not turn on/off their cameras and microphones, 20 pupils had not enough personal space at home. As Strenáčiková states, many parents had home-office. This fact could also affect the pupil's personal space for education (Strenáčiková, 2020). 7 participants answered that they have a problem with the technology, which could be understandable for financially disadvantaged families. The other (3 respondents) mean that the pupil did not understand the question or provided an incomprehensible answer. This question was provided to help with the evaluation of statement no. 1.
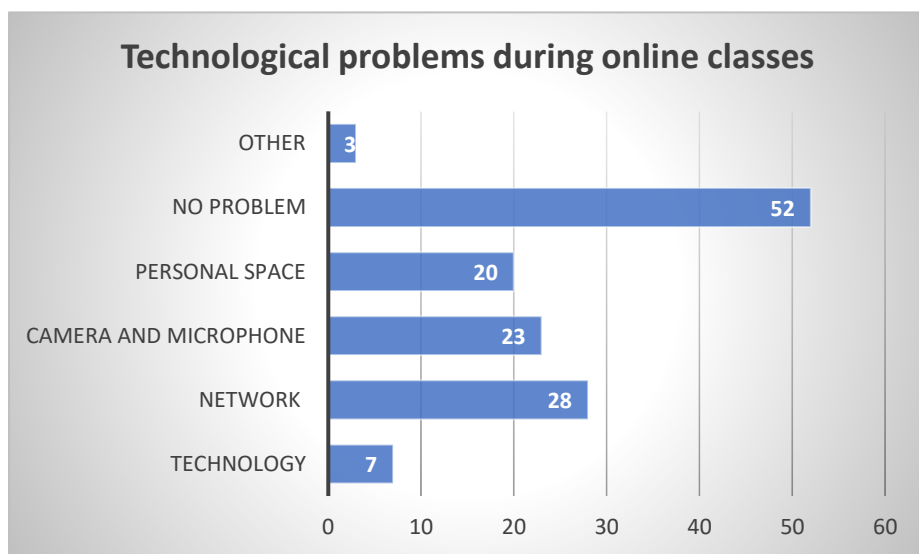
Graph 5. Technological problems of pupils during online classes

Question no. 7: Mark from 1 to 5 how difficult the usage of technology was for you.

In this question, pupils needed to choose on a scale from *1 (very easy)* to *5 (difficult).* As could see in the graph no.7, 62,60% of respondents have selected the number *1 (very easy)* and 20,09% number *2* (easy) so the conclusion is that these two groups are technologically proficient. 12,20% of pupils marked num. *3 (medium)* and num. *4* (2,60%) where they admitted that using technology was harder for them. Only 2 pupils (1,70%) selected the num. *5 (difficult).* These answers confirm the information about the technological skills of pupils learned in school. Statement no. 1 is confirmed because the pupils do not have problems with the usage of technology.
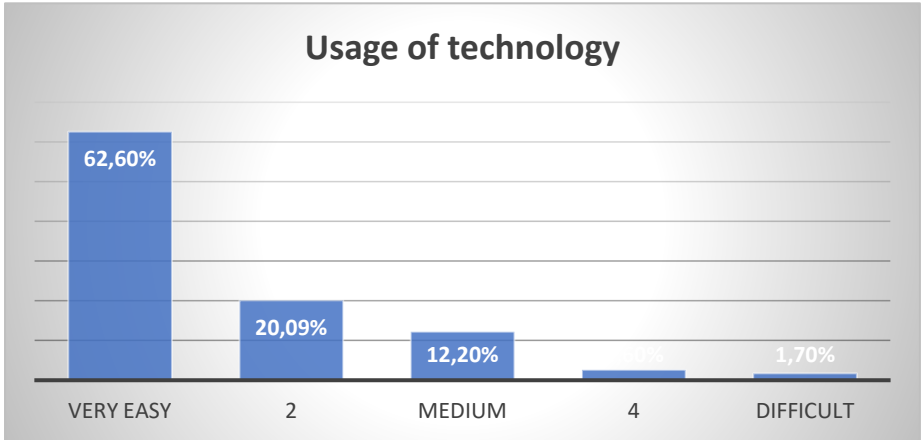
Graph 6. How pupils perceived the usage of technology

Question no. 8: Do I enjoy my English classes at school?

Pupils could choose from 3 statements: *Yes, No* and *I don't know.* 68% of respondents stated that they enjoy their traditional English classes. It is assumed that pupils have a positive attitude towards English. The rest have chosen I don't know (23%) and no (9%). This question is related to question no. 12 where hypothesis 2.2 is evaluated.
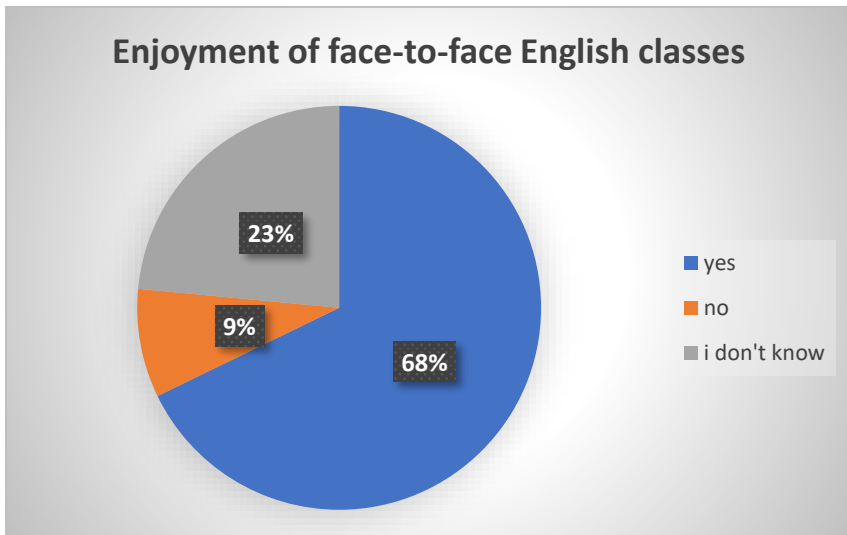
Graph 7. Pupils' enjoyment of face-to-face English classes

Question no. 9: Do I enjoy my online English lessons?

As the graphical interpretation below portrays, 51% of learners enjoy their online English classes. 29% of them *do not know* and 20% have selected the answer *no*. As the previous question shows, it can be concluded that more learners enjoy the traditional English classes. This question was provided to help with the evaluation of statement no. 2.2.

Graph 8. Pupils' enjoyment of online English classes

Question no. 10: The online English classes are...

This question aims to know whether pupils find learning English online *fun* (34%), *boring* (17%) or *neutral* (49%). The majority answered they find online English classes neutral this information may be helpful for the Q15. where games during online lessons are analysed. This question is associated with the following question.
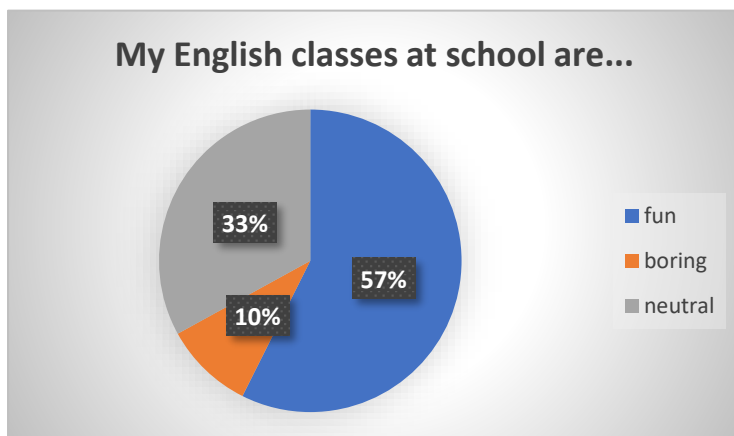
Graph 9. Pupils' attitude for learning English online

Question no. 11: The English classes at school are…

As could be seen, 57% of pupils have chosen *fun* and 33% selected *neutral*. It is pleasant to see how many participants find learning English enjoyable, but 10% of them also find learning English at school boring. So, in this case, hypothesis no. 2.1 is confirmed because the online lessons are more boring than the traditional ones.

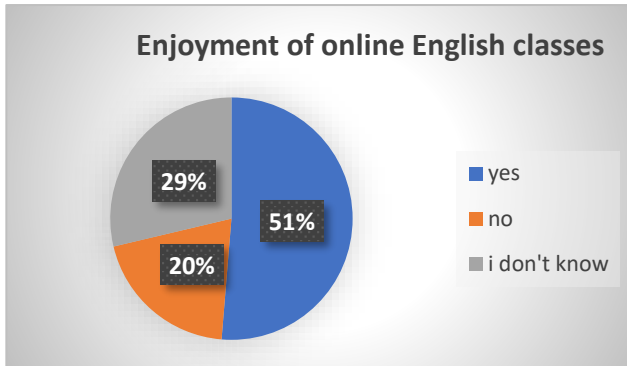*Graph 10. Pupils' attitude for learning English at school*

Question no. 12: I feel I've learned English better…

This subjective question has been chosen because it plays an important role in this thesis. 57% of pupils choose *school*, 39% think that online education did not affect what they learned and how much, and only 4% stated they learned better *online*. The results could be associated with the survey from the Educational Policy Institute where more than 50% of teachers admitted that did not know how to teach online effectively (IVP, 2021). With the answers from Q8 and 9, it is concluded that pupils enjoy learning English at school more than online and that is associated with the answer that pupils learn English at school more effectively. Hypothesis no. 2.2 is confirmed.
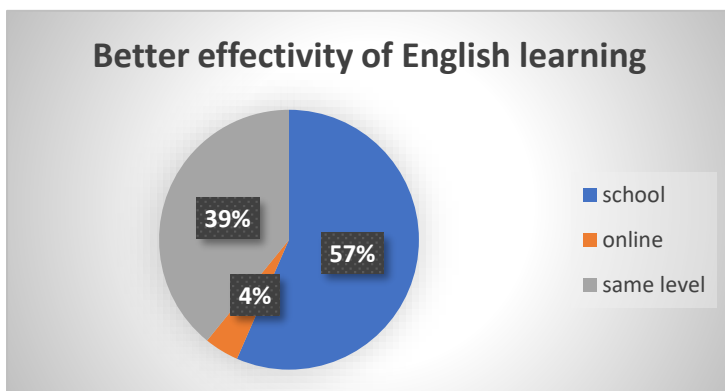
Graph 11. The effectivity of English learning

Question no. 13: How much attention do I get from my teacher?

The results do not fulfil the expectations. It is very surprising to know that more than half (65%) of pupils think that the attention from the teacher is equal. 21% of them think that the attention is higher during the traditional teaching and 14% of them chose *more online*. These answers might be inaccurate. Young pupils are lively learners and according to the information we have, it is hard to pay attention to everybody during online lessons. It would need follow-up research to be sure that the answers are true. Hypothesis no. 5 cannot be confirmed.
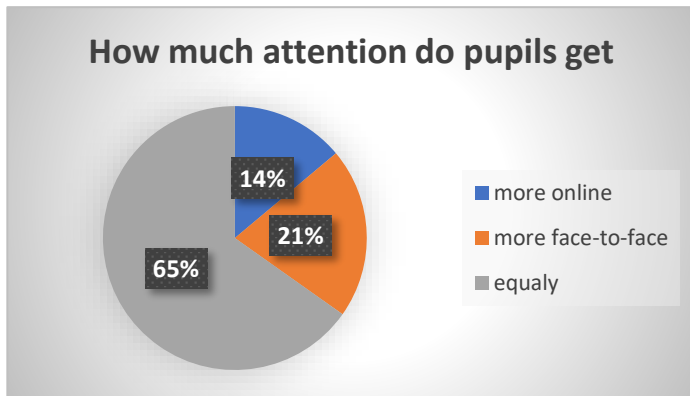
Graph 12. Comparison of teachers' attention that pupils get online and face-to-face

Question no. 14: Does my English teacher divide us into the breakout rooms during lessons?

Pupils were asked to evaluate the activity of their English teachers. According to the general knowledge, it could be assumed that English is best learned through practice so the English learning without speaking cannot be fulfilled. That is why it's good to consider the usage of breakout rooms. The results are not surprising because only 11% of respondents answered *yes* and *89%* of them answered *no*. Many pupils stated they used ZOOM for learning. The answer could be associated with this learning application which might be too difficult for teachers to create and control the breakout rooms because of the lack of their technological skills. Hypothesis no. 4.1 is confirmed.
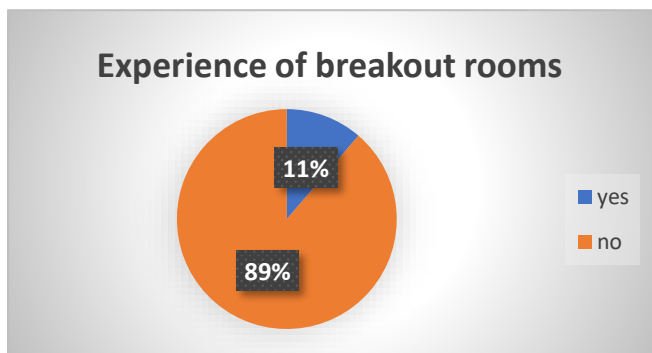
Graph 13. The pupils' experience of breakout rooms during online lessons

Question no. 15: Do we use any learning platforms during online English lessons?
Young learners are highly motivated to learn through play but the usage of games are mainly dependent on the teacher. Looking at the chart, 79 respondents answered that they did not play games, 12 pupils wrote *wocabee*, 6 of them have no clue and another 6 respondents provided an incomprehensible answer. 5 of them admitted they play games but without specifying it. Only 4 pupils wrote they play *Kahoot!* and 2 of them wrote *Quizlet.* Together, only 22 pupils admitted that their teacher provide games during English lessons. Hypothesis no. 4.2 (less than 50% of pupils used games during online English lessons) is confirmed. This question was open-ended and provided pupils to write the answer in their own words.

Question no. 16: What did I miss the most during pandemic?
This question was created for interest to know whether the pupil missed something during pandemic. Looking at the chart, 55 respondents missed their schoolmates, 25 of them did not miss anything, 16 pupils missed the school atmosphere, 13 missed the interaction with a teacher and the rest (13 respondents) wrote an incompressible answer. As mentioned in the methodology, this question does not serve as important in this study.
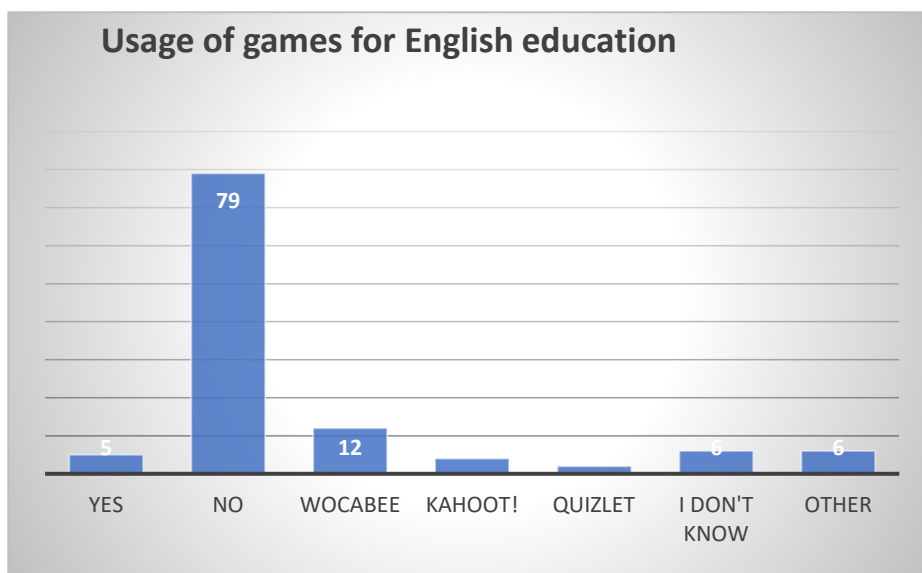
Graph 14. Playing games during English classes
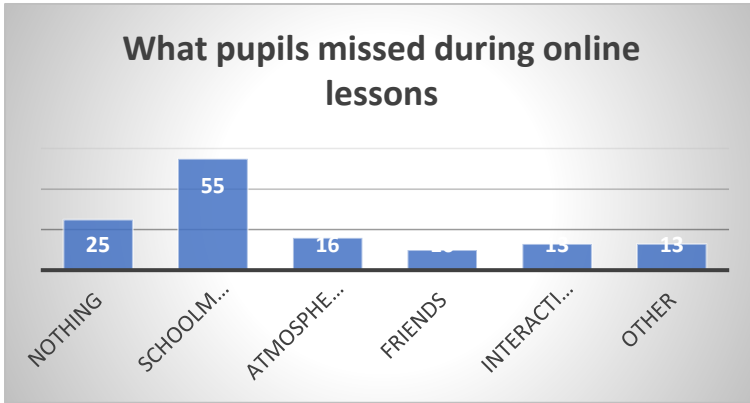
Graph 15. What pupils missed during online education

Question no. 17: What feelings have I got from online English exams?

As it can be seen, there are 43% of pupils found online testing easy, 29% selected that the examination is equal and only 3% have chosen *hard.* Only one pupil wrote *fine* (1%). Otherwise, hypothesis no. 3 is inconclusive because even the 43% of pupils find exams easy, 24% of respondents were not examined during online education.
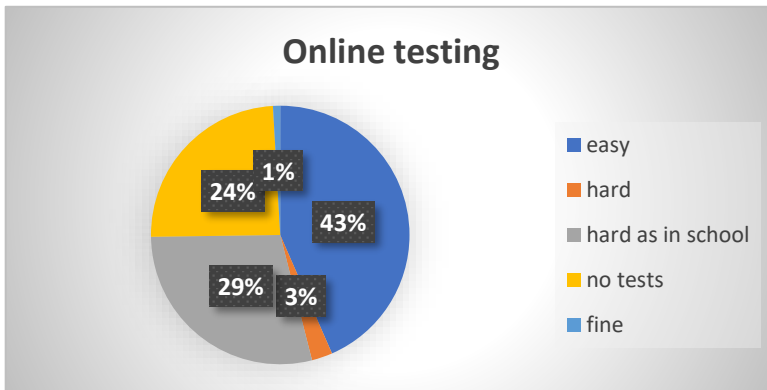
Graph 16. Online examination of pupils

Conclusions

On the following page, a short evaluation of the hypotheses and statements are provided.

Statement 1: Pupils do not have problems with the usage of technology. This statement is confirmed.

Hypothesis 1: Pupils prefer online education to traditional face-to-face education. This statement is denied.

Hypothesis 2.1: Pupils find learning English online more boring than learning English face-to-face in class. This statement is confirmed.

Hypothesis 2.2: Pupils find learning English online less effective than learning English face-to-face in class. <u>This statement is confirmed.</u>

Hypothesis 3: Pupils consider writing English testing online easier than writing them at school. <u>This statement is confirmed.</u>

Hypothesis 4.1: Less than 50% of pupils used breakout rooms during online English lessons. <u>This statement is confirmed.</u>

Hypothesis 4.2: Less than 50% of pupils used games during online English lessons. <u>This statement is confirmed.</u>

Hypothesis 5: The teacher provided less attention to everybody during online education than during traditional face-to-face education. <u>This statement is denied.</u>

Implications for pedagogical practice

The survey provided an option to look deeper into the emotions of pupils during pandemic and brought us closer to their school institutions and their teachers. Based on the results of the study, the following pedagogical implication were formulated. Firstly, based on the facts that the Educational Policy Institute provided, it would be useful to consider the installation of network to households that cannot afford it. Because it is not possible to provide useful recommendations to people who do not have the access to the internet (IVP, 2021).

Firstly, it is important for a pupil to have the same learning effect in both classroom education and online education. The process of that could be hard, but it is not impossible. This can be achieved with the usage of blended learning, so the big differences could not be reflected in the changing of the pupil's learning environment.

Secondly, the online English lessons could be also enjoyable. The internet contains an incredible number of applications and tools for education. It is not possible to catch the pupil's attention for the whole 45 minutes with just the interpretations from their student's book. The usage of breakout rooms and playing English educational games may have a positive effect on their education. Especially, when talking about young learners. This would need a follow-up study to determine the reasons why the teacher refused to use the breakout rooms. Maybe, it was due to a lack of technological skills or a worry of losing control over pupils. Due to that, it would be effective to organise workshops for teachers which could help them to keep up with the new innovations in technology. The workshops could prevent the fearful notion of teachers about online education.

In the last point, I would recommend the online exam testing. It is possible that the effectiveness of online testing is not as reliable as the traditional one, but it should not be left out. Pupils cannot have a feeling that online education is easier than the traditional one.

THE IMPACT OF ONLINE EDUCATION ON STUDENTS AT BILINGUAL SECONDARY GRAMMAR SCHOOLS IN SLOVAKIA

Natália Lešková

Bilingual education in Slovakia

Bilingual education, as a specific type of educational organisation in which two or more languages of instruction are combined, is one of those areas of contemporary pedagogy that often provokes heated debate and ambiguous reactions from experts and laypeople alike.

Its perception is particularly complicated by the fact that the term bilingual education has different meanings in different countries. In some countries (e.g., the USA), bilingual education is primarily associated with the education of national minorities, immigrants and children from socially disadvantaged groups. The fact that part of the teaching time is not in the national language (English) but the pupils' mother tongue (currently mainly Spanish) is considered to be the reason for the overall lower quality of education for these groups of pupils and their underachievement in school. It is even not rare to find that bilingual education is a form of segregation of pupils. In Europe, on the contrary, multilingualism and multilingual education are perceived as extremely positive values, enriching the culture of individuals and nations (Pokrivčáková, 2013).

Similarly, the objectives of bilingual education are defined in contrasting ways. In some education systems, bilingual education is a tool to weaken the native bilingualism of pupils and to develop general and academic literacy in only one (national) language, as exemplified by the education of minorities and immigrants in most countries with large immigrant populations, such as the USA, the UK, China, etc. Quite different goals are pursued in education where pupils' general and academic bilingualism is developed in a targeted and systematic way (European context) (Pokrivčáková, 2013).

In a general international context, the term bilingual education includes all forms of education in which the school curriculum, or at least part of it, is delivered in two different languages, irrespective of the combination of mother tongue, second or foreign language. The condition is that the education is provided in the two languages over and above the compulsory teaching of the mother tongue, the national language, or the foreign language as separate subjects of instruction.

From this perspective, for example, the following forms of bilingual education are implemented in Slovakia:

a) mother tongue + foreign language (within the education of pupils of Slovak nationality, when part of the curriculum subjects is taught in Slovak and part of the subjects - but at least three - in a foreign language;
b) mother tongue + state language (in the framework of the education of members of national minorities, if their language is recognised as the official language of instruction, e.g., Hungarian and Ukrainian);
c) state language + foreign language (this form is relevant for those pupils whose mother tongue is not recognised as the language of instruction in Slovakia and therefore, from their point of view, teaching is conducted in the state language and partly in a foreign language - e.g. foreigners, immigrants and a large group of members of those national minorities who do not have schools with their language of instruction, e.g. Roma) (Pokrivčáková, 2013).

Slovak school legislation considers bilingual education only the first of the above-mentioned models, in which the teaching of the school curriculum in the mother tongue and a foreign language is combined (Pokrivčáková, 2013).

Bilingual education has recently become more and more established in primary and secondary schools. This is a logical consequence of the European Commission's requirement that all citizens of the European Union should be proficient in their mother tongue, and two other languages at a level sufficient to enable them to use them in their work and everyday life.

Teaching in secondary schools is organised in year groups according to age in each year group. Education is co-educational. There is no strict division of pupils according to ability. The age of secondary school pupils is generally 15-19 years, with the exception of pupils in 8-year grammar schools, bilingual grammar schools and conservatories. Upper secondary and post-secondary education are not age-limited. Individual subjects are taught by teachers with the appropriate qualifications. Studies in all secondary schools are mainly organised in the full-time form in classes with a maximum of 30 pupils, which can be increased to 33 pupils in cases provided for by law (Eurydice, 2021).

As far as the use of multiple languages at bilingual schools in Slovakia is concerned, according to Pokrivčáková, the additive type is the most spread. A foreign language is only utilized as a secondary instructional language in particular subjects or the teaching of only some themes or lessons, while the mother tongue is used as the primary language of instruction. Slovak (being the only state language) is a requirement for all students. Ethnic minorities have the right to receive education in their mother tongue. In addition to the traditional four-year grammar schools of various specializations, there are bilingual grammar schools with a duration of 5 years. For grammar schools to be recognised as bilingual, at least three subjects must be taught in the second language of instruction (the first language is Slovak). Intensive language training for pupils in the second language of instruction in bilingual grammar schools takes place mainly in the first year, with a minimum of 8 lessons per week. Applicants who have successfully completed the eighth or ninth year of primary school are admitted to study at the five-year bilingual grammar school. At present, there are Slovak-English, Slovak-German,

Slovak-French, Slovak-Italian, Slovak-Chinese and Slovak-Spanish bilingual grammar schools. However, studying at a bilingual school is recommended mainly for students who are highly motivated and have above-average intellectual skills. The main reason for this is that at bilingual schools, at least three content subjects are taught in a foreign language which may be challenging for some learners (Pokrivčáková, 2013).

Bilingual education within the Slovak Republic is mostly implemented through two languages of instruction, i.e., the state Slovak language and a foreign language. Teachers of subjects taught in a foreign language do not usually have that language as their mother tongue. They are therefore mostly qualified teachers of the subjects in question with excellent communication skills in a particular foreign language (Portiková, 2012).

The number and structure of subjects taught in a foreign language at each bilingual school vary. The number, scope and structure are presented by each bilingual school separately in its school curriculum, which is mostly available on the official website of the school. This is a good source of information for pupils and students themselves when deciding which secondary school to attend. It is also a good source of information for parents, who mostly co-decide on the choice of school for their child.

A significant proportion of bilingual schools operate under international agreements. Bilingual grammar schools list the following subjects as taught in foreign language mathematics, physics, chemistry, biology, and geography. Bilingual business academies in foreign language mathematics and optional vocational subjects. In other bilingual, mainly primary, but also secondary schools, the range of subjects taught in a foreign language is much more varied and depends mainly on the capacity and staffing of professionals and resources of the educational institution in question (Štefánik, 2002).

It is now no exception that school establishments of different levels to improve the quality of teaching and attract more pupils and students to their establishments and thus increase the prestige of the school, invite foreign lecturers to teach who have a foreign language as their mother tongue. These are mainly English language teachers. Their presence in the classroom naturally ensures that pupils have good contact with the language (Horňáková, 2007).

The difficulty of bilingual teaching, both for the pupil or student and for the teacher, requires special forms of teaching. In practice, more playful forms of learning are preferred, using a variety of educational and entertaining educational methods, such as interactive whiteboards or foreign educational servers with different activities, that are both motivating and fun for pupils. To make bilingual education truly effective, it is necessary to invest not only in a variety of tools but also in time and energy spent on quality preparation (Naštická, 2014).

In general, for each educational level of bilingual education applies, during the intensive focus on a foreign language, it is necessary to take care of the development of competencies related to the use of the state language, Slovak. The content of education at any level of bilingual education should not be limited in any way compared to a normal educational environment where only the Slovak language is taught. On the contrary, in addition to the normal learning objectives of the educational process,

education in a bilingual environment should be enriched by the mastery and fluent use of general and, in particular, specialist vocabulary in a foreign language. In order to achieve this objective, it is often necessary to increase the number of educational hours in a bilingual school by setting up so-called 'zero years' (Naštická, 2014).

Benefits and challenges of bilingual education

Research since the 1960s has shown conclusively that bilingualism confers a cognitive, social, and educational advantage, and consequently bilingual students tend to demonstrate greater ability in solving key learning tasks than their classmates who are proficient in only one language. This positive impact is reflected in the following areas:
- cognitive flexibility,
- metalinguistic awareness,
- communication sensitivity.

Cognitive flexibility refers to two areas divergent and convergent thinking.

Divergent thinking is often observed in the person being studied by identifying a problem to think about and asking them to generate all possible solutions.

The other area which is convergent thinking - is measured by tests that provide a certain amount of information that a person must process in order to arrive at the correct answer. According to research, bilingual people are better in both areas and consistently perform better than monolinguals (Gullach, 2014).

Metalinguistic consciousness is the ability to analyse language, especially forms of language about how they function and how they are integrated into the larger linguistic system. It is a consciousness that is demonstrated at different levels: phonological consciousness (understanding of sound units), word consciousness and syntactic (grammatical) consciousness. Bilingual learners have metalinguistic awareness at a higher level. Since they work simultaneously with more than one language, they need to have more knowledge of how each language works, and how the two languages are similar and different. This additionally forces them to think about the language they decide to use (Gullach, 2014).

Communicative sensitivity refers to the level of perception of the participants. Bilinguals are more communicatively aware because they think about what language to use, in which communicative situation and with which person. The common denominator of these cognitive abilities is that bilinguals perceive a situation or stimulus more analytically. They can focus on the key parts of the problem and select the most relevant ones to solve the problem. They seem to be able to apply this analytical skill in language, communication, thinking and visual perception. This skill gives them advantages in divergent and creative thinking as well as in analysis (Gullach, 2014).

Bilingualism brings significant practical advantages. Improvements in cognitive and sensory processing due to bilingual experience can help the bilingual person to better process information from the environment, which supports the learning process. This kind of improved attention to detail makes it possible to explain the reasons why

bilingual adults learn a third language more easily than when monolinguals learn a second language. The bilinguals' advantage may stem from the ability to focus on information about the new language at the same time than to reduce interference from the languages they know. This ability would allow bilinguals to acquire newly learned words more easily, which would lead to vocabulary expansion compared to monolinguals who do not have the same ability in suppressing competency information (Gullach, 2014).

The cognitive and neurological benefits of bilingualism are present also during older age. Bilingualism appears to have the effect of reducing natural cognitive decline and preserving so-called cognitive reserve. Cognitive reserve refers to the efficient use of the brain's neural network to enhance the functions of the brain during ageing. Bilingual experience can contribute to this reserve by maintaining the functionality of cognitive mechanisms and by engaging alternative neural networks of the brain to compensate for ageing-damaged networks (Gullach, 2014).

Bilingual education in Slovakia also faces some challenges. For instance, the reception and presence of a foreign teacher at a school is a great benefit for the students, but at the same time, it represents a certain economic burden for the school facility. In addition, as mentioned above, the more economically challenging item of bilingual education is teaching and didactic materials. In this regard, the Slovak textbook market lacks bilingual textbooks (Naštická, 2014). The shortage of bilingual teaching materials thus means in practice that educators are forced to search for teaching texts on their own and copy the necessary number for students.

The possibility of extending teaching to a zero year means for the school a greater capacity burden on the premises as well as on the teaching staff. Bilingual teaching in addition to the higher financial requirements also requires the presence of qualified teaching staff who are qualified to teach vocational subjects in a foreign language. This is not only about qualified 'English teachers' or only qualified teachers of vocational subjects such as mathematics, biology, chemistry, or physics. It must be a combination of both criteria in one person. This is often a problem in bilingual schools, i.e., finding qualified teachers for vocational subjects who are also linguistically proficient (Naštická, 2014).

CLIL in bilingual education in Slovakia

"CLIL (Content and Language Integrated Learning) is a widely accepted acronym that, collectively, refers to several different methodological approaches, the common element of which is the specific position of language in the teaching of other subjects and educational content." (Menzlová et.al, 2020: p.6).

CLIL primarily involves the use of a non-native language of the learner as a medium for instruction and learning. In addition, CLIL requires teachers of each subject to pay attention to the linguistic aspect as well. Teachers need, in particular, to support the learning of those linguistic areas and elements which are directly related to the content and without which they cannot master the content at the required level. Language teachers have a specific role to play in CLIL. In addition to teaching the standard

curriculum, they collaborate with and support the teaching of teachers of other subjects by helping learners to acquire the knowledge and language skills they need to work on the topics of their subjects and develop the required cognitive skills. In this way, they reinforce the learning of subject content in depth (Gullach, 2014).

The concept of CLIL (content and language integrated learning) was introduced in Europe in 1994. However, the use of the CLIL strategy has a much longer history. The first known CLIL-like programme dates from around 5000 years ago in what is now Iraq. The Akkadians who conquered the Sumerian empire wanted to learn the local language. The Akkadians used the Sumerian language as a medium and used it to teach subjects as diverse as theology, botany and zoology. There are many other examples of the application of CLIL in earlier and more recent history (Gullach, 2014).

CLIL began to emerge in Slovakia as a result of favourable teacher responses to the Kovaliková Foundation's ITV (Integrated Thematic Teaching) program (1996). Though ITV, which originated in the United States, did not include languages, it proved to be a useful tool in developing teachers' ability to integrate subject fields. Bilingual education in Slovakia began with instruction in foreign languages such as English, German, and French. Bilingual education was difficult for both students and teachers because teaching bilingually meant teaching at least three subjects only in a foreign language, which is why the CLIL method was introduced shortly after 2000 (Hanesová, 2015).

CLIL is used in monolingual classes which are classes where students communicate in just one language, usually their mother tongue (Menzlová, 2013).

As far as secondary education in Slovakia is concerned, "CLIL is applied mostly at grammar schools, health care schools and business academies." (Pokrivčáková, 2015: p.77). CLIL is uncommon in Slovak vocational schools, which may be due to school and teacher concerns that it will be too demanding for vocational students.

In Slovakia, secondary CLIL is developed along two lines, depending on the aims of its application:

a) in academic subjects (primarily in bilingual and mainstream grammar schools) to prepare students for university study in a foreign language.

b) in vocational subjects (mostly at business academies, health-care schools, and other types of secondary vocational schools) to develop profession-oriented literacy and to prepare students to communicate in a foreign language on the international labour market. CLIL is one of the approaches used in vocationally oriented language learning (VOLL), which integrates the development of work-related professional skills with foreign language education while also fostering critical abilities such as communication, ICT, problem-solving, and teamwork (Pokrivčáková, 2015).

CLIL activities are integrated into content subject courses (e.g., math, biology, geography, arts, etc.) at bilingual schools, which are typically taught exclusively in a foreign language and by teachers competent to teach content subjects (and only exceptionally to teach a target language). A foreign language is taught as a separate curricular subject (in addition to the other disciplines) for at least three lessons each week (Pokrivčáková, 2015).

Benefits and challenges of CLIL

CLIL has many advantages. The undeniable advantages of CLIL include a natural environment for learning and developing a foreign language. Learners use the foreign language in a completely natural environment, not in artificially contrived situations as happens in foreign language classes. They are better motivated and at the same time participate in the immediate use of the language. According to some experts, CLIL also supports the development of cognitive processes that positively affects understanding and thinking. It became an interesting fact when several teachers confirmed that the introduction of the CLIL method into teaching had a positive impact on them. Not only did they gain more confidence, and they realised the importance of their own and their pupils' linguistic competencies, in addition, when working with CLIL they discovered new methods and practices that they consider suitable for any other type of teaching (Vaňková, 2012). Another benefit of CLIL is that it helps to save time by teaching topics that students have already studied in two subjects at the same time (Menzlová et.al, 2020).

Of course, CLIL also brings some disadvantages and requirements. One of the biggest is the higher demands on the teacher. These are placed not only on their professional and pedagogical preparedness but also on their language knowledge and skills. Another disadvantage is that when integrating a foreign language into the teaching of a non-language subject, there is a risk of demotivating the pupils. This can occur in two cases in particular. The first is where the pupil has a problem with a particular non-language subject. At that point, he or she may resign himself or herself to solving the tasks in the foreign language due to the feeling that if they can't master the material in their mother tongue, they can't master it in the foreign language. The second case is that of pupils who have mastered a vocational subject but have problems with foreign languages. They may give up on the solution precisely because of the fear of misunderstanding and failure. However, both problems can be addressed with appropriate positive motivation (Wossala et.al, 2014).

Covid-19 and online education

The pandemic of Covid 19 has forced many of us, employees, schoolchildren, and university students alike, to stay at home. Schools, universities, organisations, and businesses have been forced to switch to a form of digital learning. The pandemic will be a time to remember for many years to come. It has affected all aspects of life, from health regulations, and economic struggles to social and political impacts. Many restrictive rules and regulations have been implemented globally, from mass quarantines, lockdowns, and social and physical distances to the closure of schools, businesses, and other institutions (Onyema et.al, 2020).

The Coronavirus outbreak has a negative impact on educational activities around the world. The coronavirus pandemic negatively impacted the educational systems globally, forcing many schools to close. Many countries around the world closed schools in an attempt to contain the coronavirus epidemic as part of the global strategy to fight COVID-19. Since the beginning of restrictions on the field of education, the

majority of educational interactions between educators and learners have been moved to the virtual online space in the interest of preserving health and life.

In Slovakia, the first case of covid-19 was confirmed on 6 March 2020. The Slovak government issued a set of regulations concerning bans on school competitions and subject Olympiads, excursions and trips, and all sporting events carried out in the system of schools and school establishments. After that, outdoor and indoor sports grounds, children's play areas and all leisure facilities where pupils would congregate were closed. In the second half of March 2020, the educational institutions were completely closed, and the Ministry of Education, Science, Research and Sport ordered the discontinuation of the full-time form of study and its replacement with the distance learning method until further notice. In Slovakia, because of the restrictive measures, it was necessary to resort to the use of distance learning in a way that our education system has never seen before, with children, pupils, and students from kindergartens to university students learning online through some platforms.

Online learning has become a viable and exciting method of delivering learning in a global business company that operates 24 hours a day, 7 days a week because it gives students great flexibility (Mahyoob, 2020).

Online learning will be here forever. Many students prefer the online classroom because it offers flexibility in their busy schedules. With the proliferation of information and knowledge in today's world, students must become lifelong learners and online education plays an important role in helping individuals access learner-centred and self-directed learning.

Types of online education

As online learning and the relevant technological tools are constantly evolving, several terminologies related to online learning are used. They include e-learning, online learning, distance learning, blended learning, and hybrid education. Each of these terminologies refers to the act of using technology in learning, but how learners engage in this process is slightly different. To differentiate these terminologies, we reviewed the relevant literature to determine their definitions, characteristics, and distinctions.

E-learning is a tool using network technologies to create, distribute, select, administer, and continuously update educational materials.

Previously, in the U.S., e-learning was defined as the delivery of educational content using any electronic media (Internet, intranet, CD, satellite broadcasting, etc.). In the field of e-learning, one can come across various names for the application of computers in teaching, such as "automation of the teaching process" or "e-Education" (Černák, Kútna, 2006).

E-learning allows the creation of multimedia databases of information about a given school in the form of "e-courses" on the Internet, which can be accessed from any computer connected to the Internet, to communicate remotely with the teacher and obtain the relevant certificate of completion of the courses (Vadkertiová, 2022).

E-learning includes such learning processes as web-based learning, computer-assisted learning, virtual classrooms, and collaboration using digital information and

communication technologies (ICT). Learning is usually delivered via the Internet, intranet/extranet (LAN, WAN), audio or videotapes, audio or video conferencing, satellite broadcasting or CD ROM. The basis for the development of e-learning is distance learning. (Orbánová, Urbančíková, 2003).

The analogous concept of e-mail defines e-learning. The action of transmitting "mail" via computers and networks is commonly referred to as e-mail. E-learning refers to learning activities that use computers and networks (networks include the internet and intranets). E-learning does not necessitate the delivery of learning materials via computer, but it does necessitate the use of computers and networks (Tsai, Machado, 2002).

Most authors define online learning as "access to learning experiences through the use of technology." (Moore et.al, 2010: p.2). Content that is easily accessible on a computer is related to online learning. The terms "online learning" and "online help," "online documentation," and "online services" are all used to describe online learning. It's linked to computer-based learning materials that are readily available. Learning materials directly accessible from within a core application (such as via online help) are frequently referred to as online learning; however, learning materials available online on a network also qualify when they are readily accessible. The usage of a network is not needed, and the concept of online learning predates the emergence of the Web and the delivery of learning materials over the Internet or networks (Tsai, Machado, 2002).

Online learning (often mistaken for e-learning) is a form of distance education that involves the use of technology as a facilitator of the educational process, whereby the learning takes place entirely via the Internet (Heng, 2021).
Depending on the individual educational institutions/instructors, students may attend regularly scheduled online lectures/presentations and/or discussions. In addition, students usually have online access to learning materials such as recorded lectures/presentations, reading lists, activities, assignments, etc. via the platform provided.

In online learning, students upload their work and receive feedback online. Students can also connect and interact with their peers online and sometimes they can be together in an online class with the instructor while working on their digital lessons, materials, or assessments. (Heng, 2021).

Distance learning entails interaction between the instructor and the students from a distance, allowing the instructor to respond to students more quickly. Distance learning is not simply posting or broadcasting learning resources to students. When it comes to obtaining feedback from students, teachers must be involved. Distance learning is not dependent on the use of computers or networks. It involves largely remote contact between class members and allows the instructor to connect with students. Distance learning is most commonly linked with television broadcasts and correspondence courses, but it can also refer to some e-learning programs. On the Internet, educational interaction is usually conducted at a distance, either between instructors and students or among students. In this context, typical distance learning comprises live instructor

broadcasts over the Internet, video conferencing, chat and planned online conference discussions, and even e-mail courses or conversations (Tsai, Machado, 2002).

Blended learning (also known as hybrid learning) refers to practices that combine (or blend) traditional face-to-face classroom instruction with online learning.

Compared to other forms of online learning, blended learning provides more fruitful channels for students to connect with their peers and instructors. Academic research also suggests that blended learning enables students to better understand course content by promoting social interactions.

As the above definitions suggest, online and blended learning education is distinct, but not entirely different (Heng, 2021).

According to Pearson, online education encompasses the learning environment that exists online, while blended learning is a mixture of face-to-face and online learning (Pearson, 2020).

Positive and negative aspects of online education

Online education has the potential to transform the education system by extending educational opportunities, transforming the student population and supporting the development of new pedagogical methods, making the educational process more reliable, efficient and less stressful for both instructors and students. Although there are studies that suggest that online and traditional education are comparable in terms of learning outcomes, it is also acknowledged that online education is perceived as lacking interactivity compared to classroom learning (Gautam, 2020).

We think there is no significant difference in learning preferences between students taking online courses and students taking face-to-face courses. The effectiveness of online education has shown several benefits due to the increased flexibility and educational opportunities:
- Easy access to experts,
- exposure to the learning environment,
- a wide range of course types and connections to student communities.
There are also several disadvantages of online education, such as:
- Internet browsing problems,
- computer compatibility or technical problems (Gautam, 2020).

The lack of parental guidance, especially for young students, is an additional challenge as both parents' work. There are practical issues related to physical workspaces that lead to different learning styles. Innately motivated students are relatively unaffected in their learning because they need minimal supervision and guidance, whereas a vulnerable group consisting of pupils who are weak in learning face difficulties. Some academically able students from economically disadvantaged backgrounds do not have access to online learning and cannot afford it. The level of academic performance of students is likely to decline in classrooms where end-of-year and internal examinations are held due to reduced contact time for students and a lack

of consultation with teachers when faced with learning/comprehension problems (Gautam, 2020).

School time, besides being fun for children, also increases social skills and awareness. There are economic, social, and psychological implications on students' lives when they are outside the normal school timetable. Many of these students have now attended online courses and spending more time on virtual platforms, making children vulnerable to online abuse. The increased and unstructured time spent online learning has exposed children to potentially harmful and violent content, as well as a greater risk of cyberbullying.

At the beginning of the COVID-19 pandemic, students had to reorganize their daily schedules, to adapt to the isolated situation. Those studying abroad had to return home, but at the same time, many of them were blocked due to the airport and border closures. Insufficient socialisation has affected pupils and their socio-emotional balance has suffered, especially for young people with pre-existing problems of this nature.

The impact of COVID-19 on adolescents' mental health

The period of adolescence of the human individual is divided into two phases. The first is the older school age, which begins at about eleven and ends at about fifteen. The second phase is called adolescence, which lasts from about age 15 to 20. year of life. It is safe to say that most individuals will experience their adolescence right through high school. The essence of adolescence is to reach a certain level of mature and cultivated personality (Kopčanová et.al., 2016).

Adolescence is a period with specific health and developmental needs. At this age, youth are intensely acquiring new knowledge and skills, struggling with mood swings and emotions. Long-term friendships and first relationships are formed, and social values are introduced (Čavojská, 2019).

Relationships with peers are very important. They satisfy in them some psychological needs such as the need for stimulation, the need for orientation and meaningful learning. Peers replace the family in terms of emotional security and safety (Kopčanová et.al., 2016).

COVID-19 is believed to have a considerable impact on psychology and mental health, and it may affect a disproportionate number of people, with adolescents being the most vulnerable (Octavius et.al, 2020).

According to a meta-analysis of the results of research carried out in Spain, Italy, Bangladesh, Nigeria, China, and the USA the prevalence of coronavirus in the general population during a coronavirus pandemic increased levels of psychological distress have been reported in the general population (Tomšík et.al., 2021).

Mental health and mental health disorders are still accompanied by stigma and taboo in the 21st century, but 2020 was a watershed year in that mental health began to be talked about more publicly and openly. And it has also been openly discussed that the COVID-19 pandemic and social isolation have hit young people the hardest (IPčko.sk, 2021).

The pandemic era brings into the lives of children and adolescents' stressors such as fear of infection and infecting others, lack of truthful information or information overload from the mass media, lack of personal contact with classmates, friends and relatives, frustration and boredom, lack of privacy and personal space at home, parents' financial problems caused by the weakened economy and other aspects that directly or indirectly negatively affect their lives. (Jančinová et.al., 2020).

Among the most significant restrictions adopted by a number of countries in an attempt to prevent the spread of infection include the closure of school closures and the gradual implementation of online learning, so that the continuity of education for children of all ages. While these measures are necessary, there are reasons for concern, as the long-term closure of schools and the stay of quarantine or isolation at home affect children's physical and mental health. The closure of schools and leisure facilities also restriction of outdoor exercise during a pandemic may have an impact on a reduction in physical activity, an increase in computer time, impaired sleep patterns, and poorer eating habits, which may lead to weight gain and a decline in physical condition (Jančinová et.al., 2020).

More than a year of " overwhelming" loss, grief, isolation, and uncertainty have taken a toll on students' mental health, compounding the challenges students face in the classroom, whether online or in person.

According to preliminary data from a UNICEF and Gallup international poll of children and adults in 21 countries, 1 in 5 young people aged 15–24 indicated they often feel depressed or have little interest in doing things (UNICEF, 2021).

RESEARCH

In the practical part of the thesis, we analysed the individual questions of the questionnaire using graphs. In this chapter, hypotheses and statements will be introduced and analysed. Finally, pedagogical implications will be presented for the interpretation of results and analysis of hypotheses and statements.

Research objectives

The aim of this chapter is to determine the impact of online learning on students at bilingual grammar schools in Slovakia. The main goal is to find problems that students encountered during online education. The purpose is to investigate which type of learning students prefer, whether face-to-face learning or online learning.

We think it is important to mention that a questionnaire was also created for teachers to find out what problems they encountered during online education. However, the questionnaire was not evaluated or analysed due to the small number of respondents, despite being sent to a large number of teachers.

Hypotheses and statements

The hypotheses and statements were designed to provide an appropriate answer to the thesis's major question which is "Had online education impact on the students at bilingual secondary grammar schools in Slovakia?". The following hypotheses and

statements were constructed in order to have an answer to the question mentioned above.

Statement 1: Students felt depressed during online education.

Statement 1.2: Students lacked social contact during online education.

Statement 2.1: Students did mind having their web camera turned on during online classes.

Statement 2.2: Students wondered how they look like to others if their web camera was turned on during online classes.

Statement 3: The majority of students experienced technical problems during online lessons.

Hypothesis 1: Students prefer online education to traditional face-to-face education.

Hypothesis 2: More than 50% of students struggled to pay attention compared to face-to-face classes.

Hypothesis 3: Students had more homework during online learning than in face-to-face learning.

Hypothesis 4: Students were not as motivated to study as they are during face-to-face learning.

Research sample

The survey sample consisted of private and state bilingual secondary grammar school students. The participants were students from 1st to the 5th grade. The survey was carried out on 10th March and lasted until the 31st of March. The questionnaire was created online via "Google docs" since the pandemic situation in Slovakia prevented the possibility to deliver questionnaires personally to students. However, the benefit of a questionnaire created online is that it can be delivered to a larger number of participants.

To deliver the questionnaire to as many participants as possible, principals, teachers and students were contacted via e-mail and social media that work or study at state bilingual secondary grammar schools or private bilingual secondary grammar schools in Slovakia. The participants were not related strictly to any geographical area in Slovakia, since we have contacted schools in North Slovakia but also in the West of the country. In the practical part of the thesis, 172 answers were analysed. The first question asked students which type of school they attend, the second question asked about the gender of the participants and in the third question, the participants were supposed to answer the grade they are attending. The questionnaire was delivered in the Slovak language to avoid any problems with understanding the questions. It was then translated to the English language.

Methodology

In the practical part of the study, data was collected by using the questionnaire method. We were not inspired by any other questionnaire during the formulation of the questions in the questionnaire, as we did not find a questionnaire that suited our topic.

The questionnaire consisted of 22 questions and the answers were anonymous. Students answered multiple-choice questions and open-ended questions. Not every question was obligatory since some of them were intended for participants who answered "Yes" in the previous question so they could expand their answers. The obtained information was evaluated by graphs using Microsoft Office Excel. Q1, Q2, Q3, Q4, Q5, Q8, Q15 and Q21 in the questionnaire are just informative and they are not related to any hypothesis or statement.

The following text will provide questions from a questionnaire and analyse the responses in accordance with the hypothesis.

Q19: Have you encountered any of the problems listed below during your online learning experience?

Q22: What do you find negative about online education?

These questions were created to confirm or deny statement 1 and statement 1.2. In Q19 students could choose from the option "Depressive moods" and in Q22 there was a possibility that students mention some issues concerned with their mental health.

Q12: Which type of education do you prefer?

Q13: In comparison to face-to-face education, online education is...

The goal of these questions was to find out which form of education students enjoy more, whether online education or face-to-face education. These questions confirm or deny hypothesis no.1.

Q18: Were you able to concentrate during online classes as well as during face-to-face classes?

The objective of this question is to determine whether students were able to pay attention during online classes the same as they did in face-to-face classes. Hypothesis no. 2 is related to this question.

Q16: Did your teachers give you more homework during online education than they did during face-to-face learning?

Q19: Have you encountered any of the problems listed below during your online learning experience?

Q22: What do you find negative about online education?

These questions aim to find out whether students had more homework during online classes than they had during face-to-face learning. Hypothesis no.3 confirms or denies that.

Q9: Did you mind having your web camera turned on during online classes?

Q10: If you answered "yes" in the previous question why did you mind having your web camera turned on?

Q19: Have you encountered any of the problems listed below during your online learning experience?

The objective of these questions was to find out whether students felt comfortable while having their web camera turned on or not. In the Q10 students wrote reasons why they did not want to have their web camera turned on. These questions are related to statement 2 and statement 2.1. In Q19 and Q22 there is a possibility that students mention why they did not like having their web camera switched on.

Q19: Have you encountered any of the problems listed below during your online learning experience?

Q22: What do you find negative about online education?

One of the drawbacks of online learning is undoubtedly the possibility of cheating during examinations. This fact may cause some students not to have the motivation to study for tests as they had to when they were examined in the classroom since it is easier to cheat during online examinations. These questions are related to hypothesis no.4.

Q6: The school I attend has helped me with technical equipment during my online classes.

Q7: If you answered "yes" in the previous question, how did your school help you with technical equipment?

Q14: Have you had stable internet access at home since the beginning of the pandemic?

Q19: Have you encountered any of the problems listed below during your online learning experience?

Q22: What do you find negative about online education?

The rapid switch from face-to-face education to online education caused many households were not technically prepared for online lessons. Not every student owns his or her own technical item via which he or she could attend online classes. Some students also share their laptops with family relatives. The aim of these questions was to find out whether students experienced any technical problems, for instance, non-functional microphone or web camera, poor sound quality, weak Internet connection etc. Q6 and Q7 are interesting since there is a possibility that the school that the student attends helped with their technical equipment. Statement 3. is related to these questions.

Data analysis

The results of the survey are interpreted with graphical charts. The number of participants that answered the questionnaire is 172.

In the first three questions, we find out what type of bilingual grammar school students attend, and what gender and class they are. The first question reveals that 98% of participants attend state bilingual grammar schools and only 2% of participants attend private bilingual grammar schools. In the second question, we find out that the questionnaire was answered by 72% women and 28% men. The Q3 describes which grades are students. We see that no grade predominates, since 19% is 1st grade, 21% is 2nd grade, 20% is 3rd grade, 17% is 4th grade and 23% is 5th grade.

Question no.4: I am satisfied with how my school handled the transition to online learning...

This question was informative since we were interested in how schools handled the rapid transition to online education. Q4 is not related to any hypothesis or statement, however, the results are pleasant. 71% of participants were satisfied with how the school they attend managed to switch to online education and 18% of participants were not

satisfied. 11% could not decide whether the school they attend handled the switch to online education (see Graph 1).
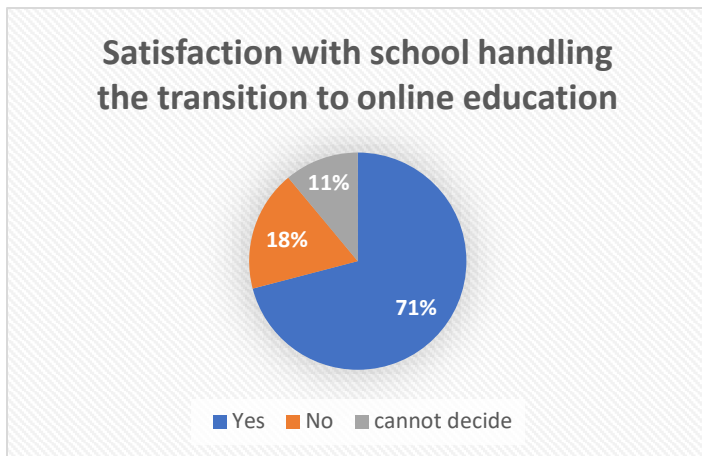
Graph 1. Students' satisfaction with school handling the transition to online education

Question no.5: Online education was conducted via:

Q5 was also informative, and students were supposed to answer via which learning platform they have been learning. Students could choose from multiple choices and also add their own answers if they wanted. 53% of students used Zoom during online lessons and 40% of students used Microsoft Teams. 7% of students mentioned that they used both Microsoft Teams and Zoom during their online lessons (see Graph 2).
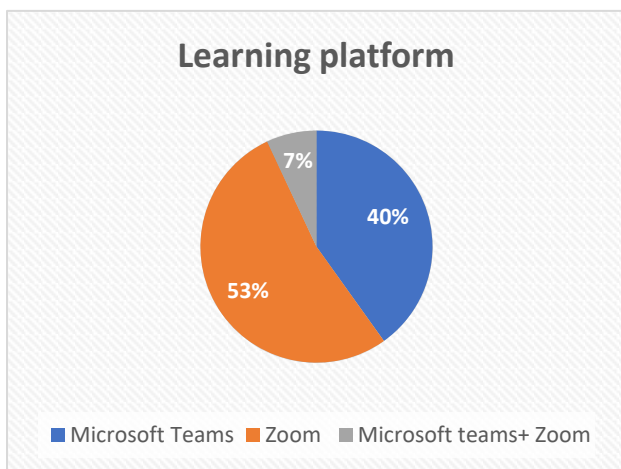
Graph 2. Learning platform

Question no.6: The school I attend has helped me with technical equipment during my online classes.

The pandemic of Covid-19 caused that not every household was prepared for online education. We were interested if schools helped students with technical equipment. Unfortunately, 98% of students answered that they did not get any help from school as far as technical equipment is concerned, however, 2% of participants stated that school provided them with help in accordance with technical equipment. We assume that students attending private bilingual grammar schools answered "yes" since it is more likely for private schools to provide students with extra equipment.

Question no.7: If you answered "yes" in the previous question, how did your school help you with technical equipment?

This question aimed to find out ways how the school helped with technical equipment for students. This question was not obligatory, since only students who answered "Yes" in Q6 were supposed to answer this question. This question was open-ended. 3 students answered that the school provided them with an iPad and one student claimed that the school he or she attends provided him with a microphone. We assume that students attending private bilingual secondary grammar school answered "yes" in Q6 since it is more likely for private schools to provide students with extra equipment.

How the school helped with technical equipment for students
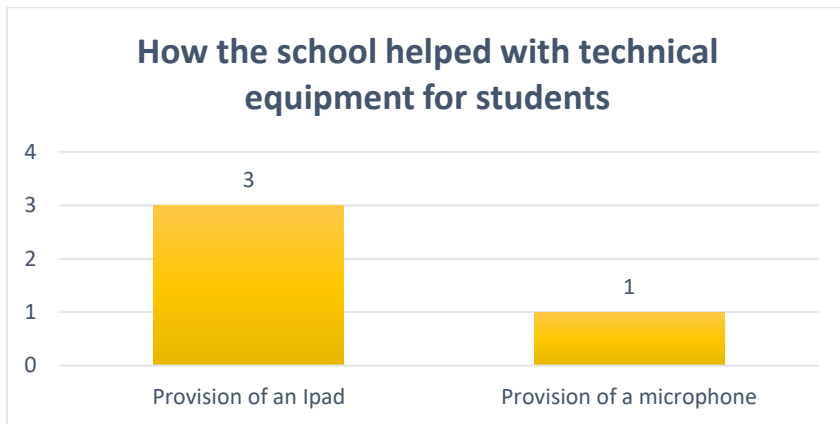
Graph 3. The ways how the school helped with technical equipment

Question no.8: Online education was introduced

Q8 was only informative since we wanted to know if the schools were able to adapt to the rapid switch from present to online education. We consider it alarming, that 112 students were not educated online until the third wave of COVID-19 in Slovakia (September 2021). This question is not related to any hypothesis or statement.
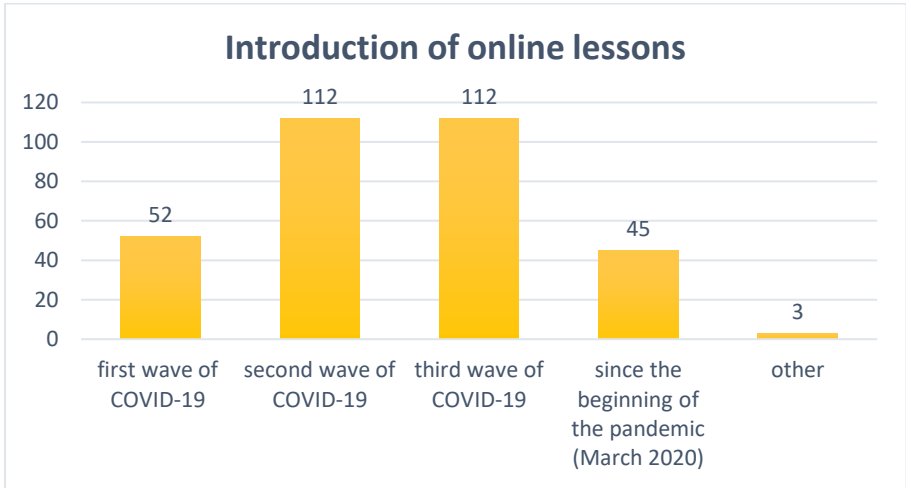
Graph 4. Introduction of online education after the beginning of the pandemic of COVID-19

Question no.9: During online lessons, I had my web camera
139 students did not have to have their camera turned on during online lessons, unless their teacher required it. In this question, students could pick more than one answer. This question is related to statement 2.
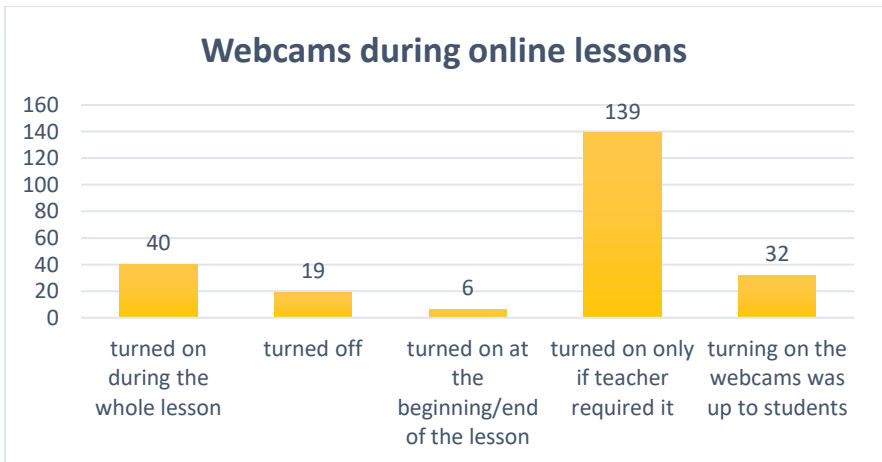
Graph 5. Students and web camera during online lessons

Question no.10: Did you mind having your web camera turned on during online classes?

The results show that 29% of participants did mind having their web camera switched on and 51% did not mind having their web camera switched on. 20% of students did not care if their web camera was turned on or not. Statement 2.4. cannot be confirmed since 51% of students did not mind having their camera turned on.
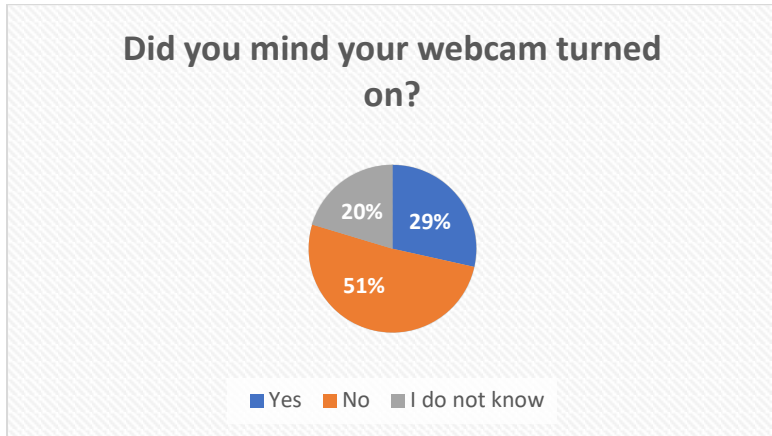

Graph 6. If students minded having their web camera turned on

Question no.11: If you answered "yes" in the previous question why did you mind having your web camera turned on?

5 students wrote that they had technical problems with web camera, 13 participants considered having their camera switched on as an invasion of their privacy, 15 students stated that they wondered how they looked like to others, and 11 students answered that they shared a room with a family member and 5 felt ashamed of their room and felt uncomfortable when their classmates could see it. Since only 15 answered that they wondered how they look like to their classmates, statement 2.2 is rejected (see Graph 7).

Question no.12: Which type of education do you prefer?
Participants chose only one answer to this question. 68% of participants prefer face-to-face education to online education. 13% of students prefer online education and 19% of students state that it does not matter via which type of education they learn. Hypothesis 1 is denied (see Graph 8).
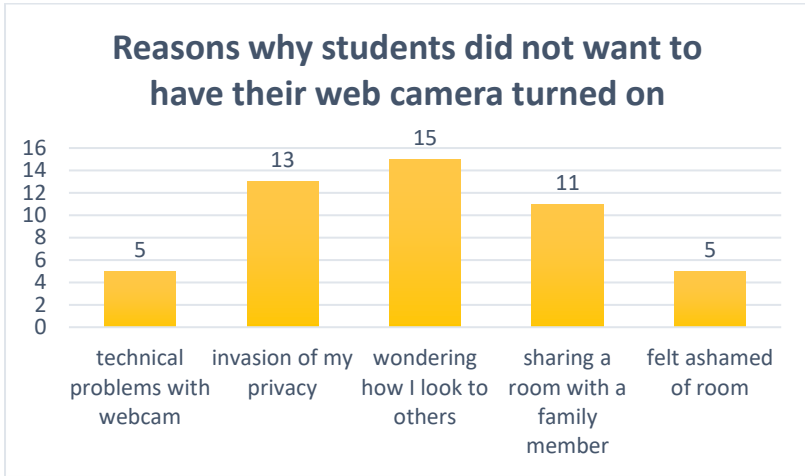
Graph 7. Reasons why students did not want to have their web camera turned on
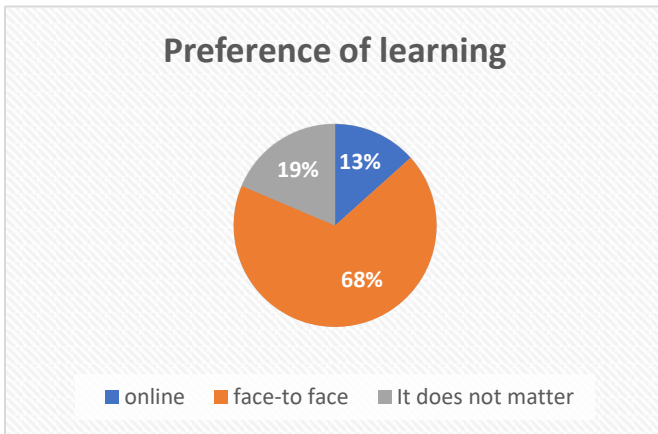
Graph 8. Students' preference for learning

Question no.13: In comparison to face-to-face education, online education is...

According to the graphical interpretation above, 46% of students consider online education rather worse than face-to-face education. 16% of participants state that online education is worse and for 14% there is no difference in general between online and face-to-face education. This question is connected to previous question and helps with the evaluation of hypothesis no.1.

In comparison to face-to-face learning, online learning is

- 9%
- 15%
- 14%
- 46%
- 16%
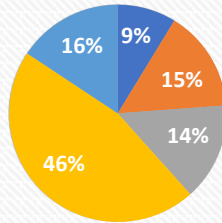
■ is better ■ rather is better
■ same as online learning ■ rather worse
■ worse

Graph 9. Students' attitude to online learning in comparison to face-to-face learning

Question no.14: Have you had stable internet access at home since the beginning of the pandemic?

According to survey question number 14, 72% of the participants had stable Internet access since the beginning of the pandemic. However, 26% of students state that did not have stable Internet access which may cause problems to be present in online lessons. 2% do not remember if their Internet access was stable or not. This question helps with the evaluation of statement 3.

Stable Internet access since the beginning of the pandemic in households

- 2%
- 26%
- 72%
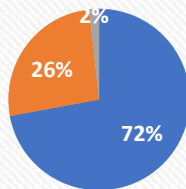
■ yes ■ no ■ I do not remember

Graph 10. If students had stable Internet access since the beginning of the pandemic

51

Question no.15: Did online classes continue as scheduled according to the timetable since the beginning of the pandemic?

Question number 15 was informative because we wanted to know if online lessons continued according to the scheduled timetable. No hypothesis or statement is related to this question. 50% of students state that their online lessons continued according to the scheduled timetable, however, unfortunately, 38% of participants claim that online lessons did not continue according to the timetable. The reason for this may be, that schools were not prepared for rapid change to online education.
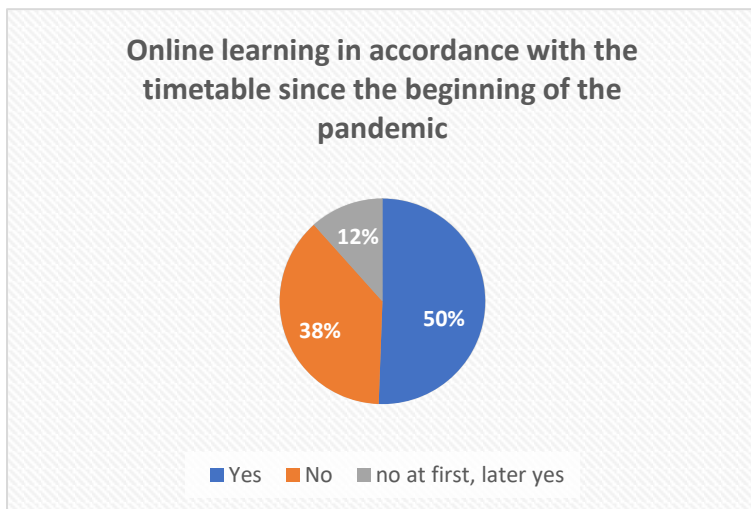
Graph 11. Continuation of lessons in accordance with scheduled timetable since the beginning of the pandemic

Question no. 16: Did your teachers give you more homework during online education than they did during face-to-face learning?

According to the graphical interpretation above, 57% of students had more homework during online education than they had during face-to-face education. 30% of students claim that they did not have more homework during online education and 13% cannot decide. The reason why teachers gave students more homework may be that teachers thought that students have more free time during online education. However, it would need another research to support our assumption. Hypothesis no.3 is confirmed.

Question no.17: Did you find online learning more challenging than face-to-face learning?

Graph 13 reveals that 45% of participants do not find online education more challenging than face-to-face education, however, 41% do. 14% of participants cannot decide whether is online education more challenging than present education or not.

Graph 12. Amount of homework students had during online education
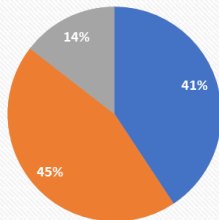
Graph 13. Which type of education do students find more challenging

Question no.18: Were you able to concentrate during online classes as well as during face-to-face classes?

The graphical interpretation below shows that 50% of students could not concentrate the same during online lessons as they did during present education. Only 8% of students could pay attention the same as they do during face-to-face classes, 20% picked "rather no" and 18% picked "partly yes". Hypothesis no.2 (More than 50% of students could not pay attention during online classes as they did in face-to-face classes) is confirmed (see Graph 14).

Ability of students to pay attention same during online lessons as they did in face-to-face classes
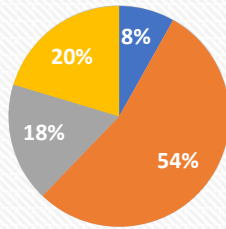
- 8% yes
- 54% no
- 18% partly yes
- 20% rather no

Graph 14. Students' concentration during online lessons in contrast to face-to-face lessons

Question no.19: Have you encountered any of the problems listed below during your online learning experience?

In this question, students were able to pick more than one option and add and formulate an answer in their own words. 129 students had the lower motivation to study during online education. This finding confirms hypothesis no.4. 114 participants lacked social contact with classmates. Statement no.1.2 is confirmed. 100 people had problems with technical issues which confirms statement 3. 81 participants were frustrated during online education, and 80 students think that the curriculum was poorly explained to them. 102 people experienced depressive mood which confirms statement no.1. 54 lacked social contact with a teacher and 54 lacked privacies during online lessons.

Question no.20: Returning to face-to-face education was for me...

The participants could pick more than one answer to this question and add something if they wanted. 77 of them found return to present education exhausting, 67 consider it seamless, 53 think that returning to school was difficult, according to 20 students it was stressful and 5 wrote weird. No hypothesis or statement is related to this question since the question is informative (see Graph 16).

Question no.21: What do you find positive about online education?

This question was open-ended and only informative, so it is not related to any hypothesis or statement. The aim of this question was to find out the benefits of online education according to students. What is interesting is that according to 165 students the biggest advantage of online education is that they did not have to commute to school. 130 participants enjoyed the comfort of home during online education. 100 claimed that they had more free time for their hobbies, 98 considered presenting in front of their

classmates less stressful, 79 found better time management as a benefit, and 63 stated that a positive aspect of online learning was that they had access to online materials, 60 pointed out an opportunity to sleep longer as an advantage, for 56 students considered as benefit prevention of COVID-19. Only 16 students stated that the advantage of online education is more interactive lessons (see Graph 17).
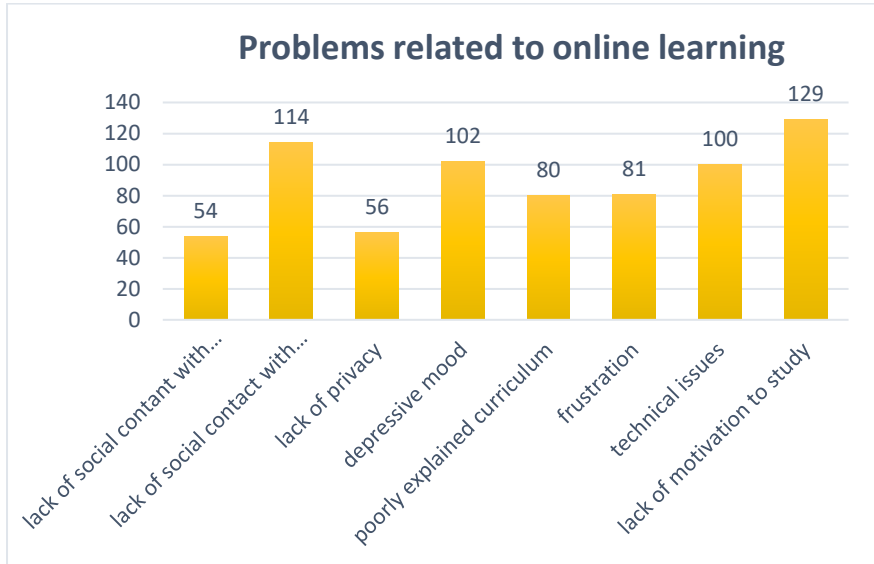
Graph 15. Students' problems connected with online education
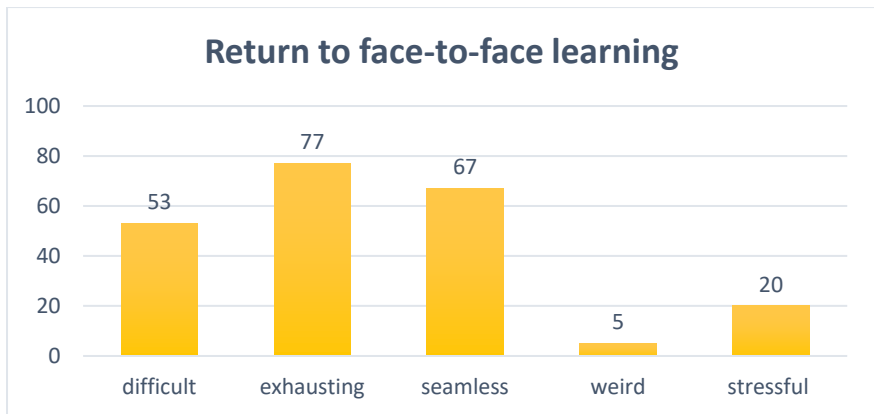
Graph 16. Return to face-to-face education

Advantages of online education
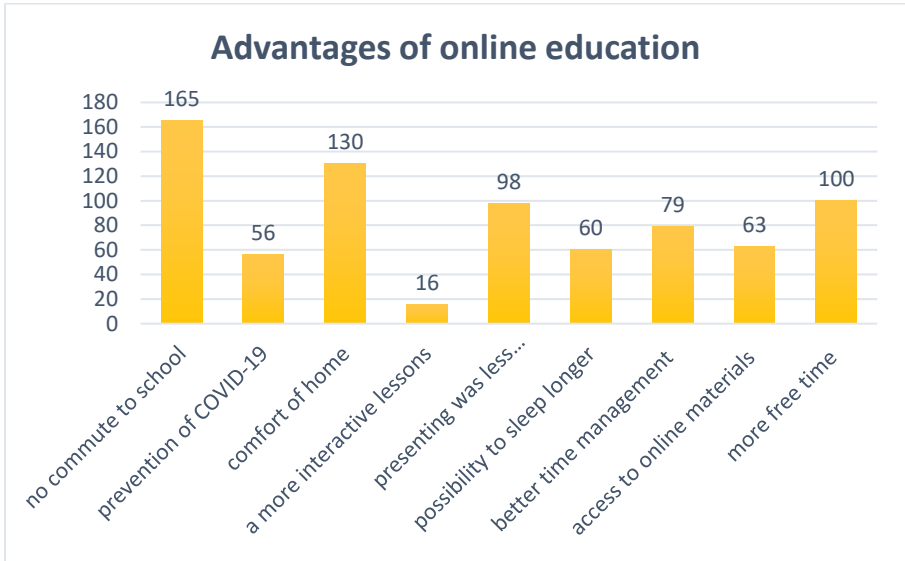
Graph 17 . *Advantages of online education according to students*

Question 22: What do you find negative about online education?

Graph 18 reveals the disadvantages of online education according to students. This question was open-ended, and students were supposed to write their own answers. 165 of them consider difficulty concentrating as a disadvantage, 161 think technical problems are a disadvantage, and 154 participants consider lack of social contact with classmates as a drawback. 131 students answered that the negative aspect of online education is a lack of motivation, 114 said that too much homework and 95 lacked privacies. What we find interesting is that even 47 said that they had strained family relations because of online education and 26 students' mental health got worse. 22 stated that the negative aspect of online education is also the possibility of cheating during examinations. This question helps with the evaluation of statements 1, 1.2 and 3. and hypotheses no. 2,3 and 4.

We believe it is important to mention that we also created a questionnaire for teachers teaching at state and private bilingual secondary grammar schools in Slovakia. The aim of this survey was to find out what problems teachers encountered during online teaching. However, the survey was not evaluated or analysed because of the small number of respondents, even though it was delivered to a large number of teachers via e-mail and social media. Nevertheless, even from such a small number of responses from respondents, we expect the results to be consistent with those of the students, as teachers stated lack of students' concentration, technical difficulties, and demotivation to study as disadvantages of online education. We think a qualitative questionnaire would be needed to analyse teachers' responses.
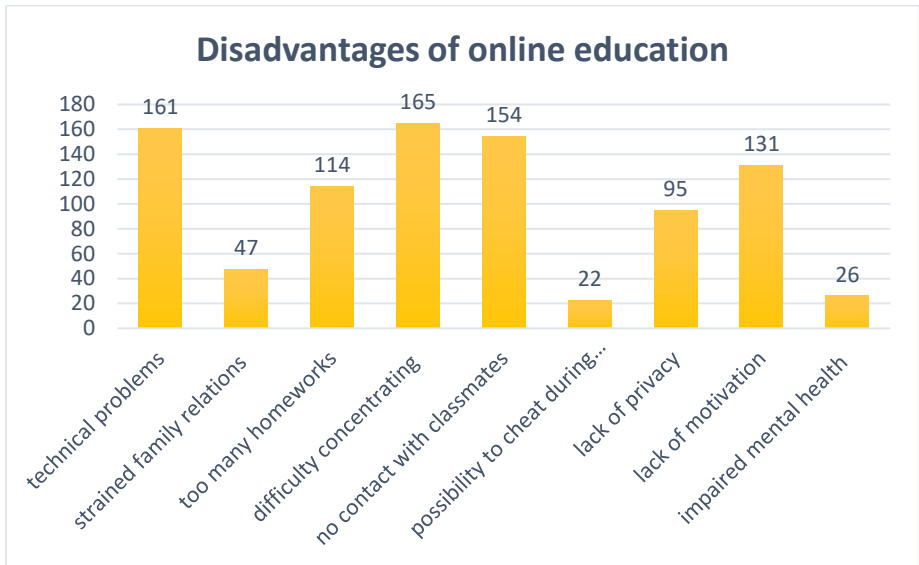
Graph 18. Disadvantages of online education according to students

Conclusions

Statement 1: Students felt depressive during online education. <u>This statement is confirmed.</u> (Please see graph 19.)

Statement 1.2: Students lacked social contact during online education. <u>This statement is confirmed.</u> (Please see graph 19.)

Statement 2: Students did mind having their web camera turned on during online classes. <u>This statement is denied.</u> (Please, see graph 10.)

Statement 2.2: Students wondered how they look like to others if their web camera was turned on during online classes. <u>This statement is denied.</u> (Please, see graph 11.)

Statement 3: The majority of students experienced technical problems during online lessons. <u>This statement is confirmed.</u> (Please, see graph 19.)

Hypothesis 1: Students prefer online education to traditional face-to-face education. <u>This hypothesis is denied.</u> (Please, see graph 12.).

Hypothesis 2: More than 50% of students could not pay attention during online classes as they did in face-to-face classes. <u>This hypothesis is confirmed.</u> (Please, see graph 18.)

Hypothesis 3: Students had more homework during online learning than in face-to-face learning. <u>This hypothesis is confirmed.</u> (Please, see graph 16.)

Hypothesis 4: Students were not as motivated to study as they are during face-to-face learning. <u>This hypothesis is confirmed.</u> (Please, see graph 19.)

Pedagogical implications

The survey provided an opportunity to find out students' attitudes toward online education. Fortunately, at the time of writing this study, the students are already back in school. However, we never know if we will have to switch to online education again in the future. Based on the results of the survey, the following pedagogical implications were formulated.

The sudden change to online education has been challenging for everyone, whether institutions, teachers and, not least, students. Although we understand that online education was necessary during the pandemic of COVID-19, we believe that more attention should have been paid to the mental health of adolescents since according to our survey 102 participants experienced depressive mood during online education, and 47 of them claimed that their family relations got strained and 26 answered that their mental health got worse. It is understandable that the students also lacked contact with their classmates and also with their teachers. We believe that the socialisation of young people cannot be improved during a pandemic if we do not want to put their health at risk. In addition to existing links and websites providing support to children and teenagers, new ones have been created during the pandemic. Teachers could recommend the following websites to children and adolescents.

What is more, some teachers may have thought that by studying from home, students have more time for homework and therefore gave them more homework than in face-to-face lessons since 98 students answered that they had more homework during online education. We believe that we should not overload students with homework because they also need free time for their hobbies.

Furthermore, we regard one of the advantages of online education as the opportunity to make lessons more attractive to students. 129 students answered that they were not as motivated to study as they were during face-to-face education (Please, see graph 17). According to our assumption, if lessons were more interactive, students would be more motivated to learn and would be able to concentrate better, since more than 50% of participants could not pay attention during online classes as they did in face-to-face classes.

The study could be used in practice by educational counsellors respectively school psychologists and teachers in secondary schools.

CLIL IN SLOVAKIA

Veronika Belancová

Characteristic of CLIL

The acronym CLIL stands for Content and Language Integrated Learning. Many definitions define this method, e. g. Coyle, Hood, and Marsh define CLIL as a "dual-focused educational approach in which an additional language is used for the learning and teaching of both content and language." It means that the teacher should not focus only on content or language, but on both at the same time (Coyle, Hood, and Marsh 2010, p. 16). Bruton (2013, p. 1) gives a similar definition for this term: "Language and content integration concerns the teaching and learning of both language and subject areas (e.g. science, mathematics, etc.) in the same classroom, at the same time." Coyle claims that it is not a new form of language or subject teaching and it is relatively close to already known educational practices, for example, bilingual education or teaching English as an Additional Language (Coyle et al., 2010). Both share some basic theories with CLIL, but they are not the same. The difference is that in Slovakia, there has to be more than 50% of a school curriculum in a target language, so the education can be called bilingual (Gondová, 2013) and the bilingual teachers suppose that the pupils have already some skills and knowledge in the target language (Sepešiová, 2014).

CLIL has naturally some principles and goals. Gondová claims that the main goals are to learn English in context and to teach the students the usage and understanding of FL (foreign language). In CLIL lessons no grammar or language structure is taught, the students learn that subconsciously. For the purpose of learning grammar serves the "traditional" language lessons that all the pupils should have – both CLIL and non-CLIL groups (Gondová, 2013). As Ball adds, the students should be only aware of the various grammatical occurrences and structures (Ball et al., 2015). Language correctness is also not that important, but conveying the meaning has the biggest importance (Gondová, 2013).

Another definition mentions that the CLIL method is a "special approach to teaching in that the non-language subject is not taught in a foreign language but with and through a foreign language" (Coyle et al., 2010, p. 4). Gondová supports this argument, saying that language is not the main aim, but it serves as a tool, medium, instrument, or working language for learning (Gondová, 2013). Marsh gives reason for this focus, saying that "CLIL approach is based on the well-known assumption that foreign languages are best learnt by focussing in the classroom not so much on language – its form and structure – but on the content which is transmitted through language" (Marsh, 2012, p. 4). Coyle emphasize that sometimes the language is more important, sometimes it is the content. This depends on the topics covered in the lessons (Coyle et al., 2010).

Many languages can be used through CLIL. It needs to be mentioned that CLIL is not primarily a method for teaching English, although Dalton-Puffer claims that "[the] dominant CLIL language is English" (Dalton-Puffer, 2011, p. 184). The Anglophone countries can benefit from it too. For example, in Canada, there is a need for understanding French, and in the United Kingdom - French, German, and Spanish languages are taught through CLIL. In Australia, they promote LOTE (Languages Other Than English) such as Asian, European, and heritage languages (Coyle et al., 2010). In Europe, other taught languages are French, German, and Spanish (Eurydice, 2006). Many scholars also suggest that "CLIL is equally used to teach regional and minority languages which are official in certain communities" (Pérez-Cañado, 2016, p. 13). A great example is Catalan or Basque in Spain.

CLIL can be used also throughout many age groups. It is possible to use it in pre-school education, mainly through games, where various words or sounds can be introduced to children. However, Coyle claims that it is used mainly in private pre-school facilities. Then naturally it is used in primary, secondary, and even tertiary education, where various models of CLIL are implemented (Coyle et al., 2010). On the contrary, Dalton-Puffer states that CLIL is implemented rather in secondary education, where the pupils have already managed to acquire literacy skills in their mother tongue (Dalton-Puffer, 2011). Ball supports this argument, saying that when the pupils have developed good literacy skills in their mother tongue, there is an assumption that they will learn the target language better (Ball et al., 2015). However, Coyle argues that "earlier is better […]" (Coyle et al. 2010, p. 39), and surely it can be a great advantage for the child too.

CLIL should have some basic components. Gondová claims that there are four of them that were established, as Harrop says mainly because of the "lack of balance between content and language observed in some early versions of CLIL" (Harrop, 2012, p. 59). These components are "content, communication, cognition, culture, therefore, they are often mentioned as four Cs". Content decides what vocabulary and grammar will be needed and it is important to know the needs and preferences of students as well. Communication is crucial to developing learners' communication competence, therefore they should be exposed to as many texts, listening, and communication opportunities as possible. According to Gondová, the pupils have to be cognitively engaged in the learning process. That means that they should also develop other skills, for example, "learn how to learn" or "[…] to work with information). These cognition skills are "[…] one of the most important aims of CLIL." The last C – culture, does not mean culture such as traditions or art, but "meanings and values that man acquire in the environment, where [the student] learns foreign language" (Gondová, 2013, p. 22, 29-30).

Gondová also introduces several principles that need to remain during CLIL lessons. The first one is that the lesson should be student-oriented (Gondová, 2013) and as Sepešiová adds "based on the principles of constructivism" (Sepešiová, 2014, p. 113). "[The student] decides with the teacher the aims of the lessons, with lesson methods and so on." The activities should be therefore performed mostly in small groups, in

pairs, or even individually (Gondová, 2013, p. 10). In this way, the students are active in lessons, which Sepešiová stresses a lot. Coyle supports this principle, saying that "CLIL classroom practice involves the learners being active participants in developing their potential for acquiring knowledge and skills […]" (Coyle et al., 2010, p. 22). The teacher should also be in the role of facilitator (Gondová, 2013; Ball et al., 2015). "[The teacher] creates the learning conditions for pupils, he helps them with solving the tasks […]." Another important principle is that the learning should be meaningful for students (Gondová, 2013, p. 10). Probably the most important principle of CLIL is that the students should have a lot of space for communication, otherwise it is a "poor environment for foreign- language development" (Ball et al., 2015, p. 63).

CLIL lessons must be naturally somehow assessed and evaluated. According to Ball, there should be clear objectives and assessment criteria. When deciding between formative and summative assessment, Ball suggests that formative is a "more comfortable candidate", because there should be a lot of group or individual work and the students have also space for presenting their knowledge or works. Ball also implies that summative assessment should not be omitted at all. He gives an example of when there can be given a final test for students, but it should take only 20% of the grade. The rest of the grade is assessed with formative assessment. Another crucial issue is whether to assess the language, the content, or both simultaneously. Ball claims that it should be focused on the content, but "we can consider the language aspect", for example by appreciating the accuracy and appropriateness. Other suitable forms of assessment can be peer- and self-assessment (Ball et al., 2015, p. 213-214).

Development of CLIL

Throughout history, people learnt in many foreign languages. Mobility existed long time ago, so therefore many people speaking different languages were educated in a different language. The beginnings can be traced to approximately two thousand years ago in the Roman Empire, where people educated children in the Greek language to ensure that they will have more opportunities in Greek communities. If it is compared to modern days, the need is still the same, except that Greek was replaced with the English language. Another difference is in accessibility – only the privileged people and families with power could acquire education for their offspring. In recent days, Coyle states that there is more interest in CLIL due to globalization (Coyle et al., 2010).

The term CLIL was adopted in 1994 by Marsh. In the 1990s there was a need for having skills in an FL and to spread language awareness, due to the aforementioned globalization. CLIL is one of the outcomes created to solve the situation. There were mainly political decisions that led to the creation of CLIL. To be more concrete, in 1958 a European Economic Community regulation determined the languages that would be used in the forming European Union, in 1978, the European Commission emphasized teaching more than one language in schools. From 1990, the European Union declared that CLIL is a priority in the educational system and that it should be implemented in all the European countries (Coyle et al., 2010). Another important factor that helped with bilingual methods developments was an experiment held in Canada, called

immersion teaching. It is generally known that in Canada, there are two State languages – English and French language. Immersion helped the English-speaking students to learn French. This experiment was held in the 1970s and 1980s and the success was significant (Baïdak et al., 2006; Pérez-Cañado, 2011).

From establishing the term CLIL in 1994 it became significantly popular. Coyle supplies some reasons for that: Firstly, parents wanted their children to be educated in one FL, secondly, the governments wanted improvement in this sphere as well, mainly for economic reasons (Coyle et al., 2010). Marsh gives other reasons for teaching English as a FL. There is a need for better communicative and English language competence compared with the past, because of globalization. Then in some countries, English can be nowadays seen as a second language, not as a FL. There is therefore higher demand for learning the English language (Marsh, 2012).

Types of CLIL

Coyle declares that there is not just one model of CLIL. This idea is supported by Cenoz, Genesee, and Gorter, and Ball. They refer to CLIL as an "umbrella term" for many approaches and variants, for example, CLIL camps, student exchanges, family stays, immersion, bilingual education, language showers, etc. In other words, it is hard "to pin down the exact limits of the reality that this term refers to" (Cenoz, et al., 2013, p. 246). Various types of this method developed throughout the time for different education settings. Pérez-Cañado claims that there can be even 216 types of CLIL programmes, depending on compulsory status, intensity, age of onset, starting linguistic level, or duration. (Pérez-Cañado, 2011). There are some issues that need to be considered before implementing a model for CLIL. One of the most essential issues is "[t]eacher availability". It means how the teachers cooperate with other teachers. The second issue is naturally the level of FL, both of teachers' and students' (Coyle et al., 2010, p. 34). Other issues are the amount of time and period devoted to teaching through CLIL and the way of assessment. Students can be evaluated with formative or summative methods focused only on the subject or on the language as well. It is, therefore, crucial to define the "language politics" before the teachers start to use it, for example, the amount of usage of the mother tongue in lessons, etc. (Gondová, 2013, p. 17). As Pérez-Cañado mentions, CLIL is like a "blanket on a large bed shared by many children, each pulling in their own direction", meaning that this method is very flexible and therefore capable to fulfil the needs of students (Pérez-Cañado, 2016, p. 15).

Coyle gives two main models for implementing CLIL. The first one is called "Extensive instruction through the vehicular language." In this model, everything is introduced and explained in the target language with minimal comments in the first language. This is used mainly for the introduction of the new vocabulary related to the content. Even in some cases, the curriculum may be more than 50% in this model. Another model is called "Partial instruction through the vehicular language". There is just a partial section where the target language is used. It takes less than 5% of the curriculum. Project-based activities may be a good example of this model (Coyle et al., 2010, p. 35-36).

Another distinction that Gondová mentions are soft and hard CLIL, or sometimes, as Ball puts it, strong and weak CLIL (Ball et al., 2015). When using soft CLIL, "some themes from other subjects are taught in language lessons, so there are only language goals. Mostly it is one lesson per week." Hard CLIL is taught on subject lessons and the curriculum of that subject is taught around 50% with the CLIL method. Gondová gives an example of another type called modular CLIL. It is similar to hard CLIL, the only difference is that the teacher chooses some themes from the curriculum that would be taught through CLIL. She also declares that the majority of schools in Slovakia choose hard CLIL. However, when the school decided to start using CLIL, Gondová suggests that they should choose the modular type to accommodate the teachers and students. After some time, they can change it to hard CLIL (Gondová, 2013, p. 8).

Strengths and weaknesses of CLIL

Every method has its strengths and weaknesses. They can be divided from the student's point of view and the teacher's point of view.

Students can benefit a lot from CLIL. When it comes to students' better learning possibilities, therefore the strengths, Pokrivčáková (2013, p. 86) states that "learners learned very quickly", or "[they] responded spontaneously in English." Dalton-Puffer (2011, p. 188) mentions as well that students developed "spontaneous oral production." There were naturally many studies that compared CLIL and non-CLIL groups. The result was that the students using CLIL were more successful in English than the other group (Cenoz et al., 2013; Ball et al., 2015; Lasagabaster, 2008). Dalton-Puffer states that the students were better in other fields too: "CLIL students had at their disposal a wider range not only of lexical but also morphosyntactic resources, which they deployed in more elaborate and more complex structures" and they "show a higher degree of accuracy, not only in inflectional affixation and tense use but also in spelling" (Dalton-Puffer, 2011, p. 186). Another positive is that "[t]he ability to think in different languages, even if to a modest extent, can have a positive impact on content learning." Coyle also points out that "[it] can also have an impact on conceptualization (literally, how we think), enriching the understanding of concepts, and broadening conceptual mapping resources." This enables the learner to gain a higher level of learning (Coyle et al., 2010, p. 29). It seems that some students are more active in lessons (Craen, 2007) and they enjoy it: "The CLIL methodology was immediately very interesting for learners, they were very active" and "motivating and funny for learners" (Pokrivčáková, 2013, p. 86). The students are more motivated (Coyle et al., 2010; Craen, 2007) because they are in "a natural situation for language development which builds on other forms of learning" (Coyle et al., 2010: 30) and they have more confidence when using English language (Pokrivčáková, 2013; Dalton-Puffer, 2011). Bruton sees a significant advantage in CLIL and that is "[…] supposedly both FL and content capacities develop more efficiently and effectively" and "the students get two for the price of one." It means that the students can develop the FL and the school subject together and more effectively (Bruton 2013, p. 1).

On the other hand, there are some negative points of view for the students. According to Bruton, students may lack the immediate effect of CLIL. Some learners just do not want to learn another subject through FL, because they are not interested in it, or they feel that they will not need it in the present or future. Students may have specific needs that the education institute often cannot fulfil. Furthermore, students may experience hard times during CLIL lessons especially when the content is too difficult for them even in their mother tongue (Bruton 2013). Pokrivčáková states the same issue: "Sometimes it happens that with more demanding topics, weaker students lose interest" (Pokrivčáková, 2013, p. 87). It is not only the loss of interest, but it is possible that the weaker students would fall behind because of their weaker language knowledge (Harrop, 2012). The students should be at least familiar with both language and content, otherwise "the cognitive load is simply too heavy" (Ball et al., 2015, p. 11). Because of that, the content in FL may be harder to understand and learn and it can be even harder for learners with special educational needs (Bruton 2013; Pokrivčáková 2013). On the other hand, this argument may vary among different students. Pokrivčáková claims that all the learners have improved in the FL, even those with disabilities or special needs (Pokrivčáková, 2013).

Some strengths can be seen for CLIL teachers as well. As Coyle mentions, subject teachers are more in touch with the language, therefore they can "regenerate their profession" (Coyle et al., 2010, p. 31). What is more, some teachers have said that it has enriched their knowledge and experience. According to Pokrivčáková's questionnaire, the majority of teachers would continue with using CLIL (Pokrivčáková, 2013).

However, sometimes there may be more weaknesses than benefits for teachers. When teaching with the CLIL method, teachers should be prepared for some challenges connected to it. Some teachers imply that it can be rather difficult to concentrate on both content and language. Some teachers find "the need to balance content and language instruction as unrealistic or impossible" (Bruton 2013: 3). According to Pokrivčáková, some teachers responded that they feel the same: "Sometimes, because of a foreign language, I fail to cover the required amount of subject matter." Another issue is that some teachers felt unprepared because of lack of information: "[there was] non-compact information, confusion, what is the practical application of CLIL in teaching and what is my position as an English teacher", as one teacher has written in the questionnaire (Pokrivčáková, 2013, p. 86-87). Sepešiová claims that knowledge and information about CLIL is a crucial competence of teachers using CLIL. The teacher should know the "principles and roles in the teaching process" (Sepešiová, 2014, p. 119). But the most common negative about CLIL seems to be the high demand for teachers' preparation (Gondová, 2013), for example "[there was a] problem to choose suitable terms used in Science" or it is a "[t]ime consuming preparation." (Pokrivčáková, 2013, p. 87). Another problem that the teacher feels during their preparation is lack of materials (Cimermanová, 2020), as one teacher has said: "[there is] poor availability of authentic study materials" (Pokrivčáková, 2013, p. 87). Therefore, Cimermanová suggests that if some school decides to practice CLIL, they would need teachers that are "ready to cooperate, collaborate and to create the material that reflects the dual aims

reflecting the students' needs" (Cimmermanová, 2020, p. 87). However, these negative attitudes may be changed with more experience, as many teachers admitted: "I am more confident [...] I have a better understanding of CLIL." Some teachers change their attitude due to the students' positive feedback (Porkivčáková, 2013, p. 86).

To sum up the usage of CLIL, it seems that from the student's perspective, this method has more benefits that can enrich the student a lot. Some problems appeared during the usage of CLIL, but the advantages clearly outweigh the disadvantages. It is true that in general CLIL is not suitable for every student, but it is worth trying. On the other hand, when it comes to the teacher, it appears that it has more negative outcomes, mainly for the preparation for the lesson.

History of CLIL in Slovakia

According to the Eurydice report in 2006, there were some experiments with bilingual education in general in the early 1990s. The teaching in regional or minority languages was even earlier, from the 1950s (Baïdak et al., 2006). This concerns mainly larger cities, or villages near a border, where more languages are concerned in one place. Hanesová goes even further into history. She mentions Matthias Bel (1684-1749), the headmaster of grammar school, who encouraged his students to learn in different languages (Hanesová, 2015).

When it comes to languages, in the school year 2004/2005, English, French, German, Spanish, and Russian were used as FLs, and Hungarian, Ukrainian, and Ruthenian as minority languages (Baïdak et al., 2006). In the next Eurydice survey, conducted in 2016, another FL was also Italian; and German, Romany, and Rusyn as minority languages (Eurydice, 2017). Some projects even started in pre-primary education, on the contrary with other countries (Baïdak et al., 2006).

Hanesová states that the first educational system carried out in FL in Slovakia was bilingual education. This type of education can be difficult for some students, therefore it is not suitable for everyone, and so the CLIL method was developed and implemented in some schools. The first official experiments started in 2000 (Hanesová, 2015). In 2007, CLIL was established by the Ministry of Education in Slovakia as a medium of FL acquisition, to achieve language goals in education models (Genová). Nowadays, Menzlová (2020) states that the number of schools using this method is increasing every year.

CLIL in Slovakia in general

As was mentioned earlier in this chapter, the model and conditions of CLIL differ from state to state. According to the Eurydice survey, in Slovakia, there is some examination before entering CLIL lessons, concerning mainly the general knowledge of the pupil, especially the mother tongue and mathematics, and focusing on the intellectual abilities. The school marks of the pupil are also taken into account (Baïdak et al., 2006).

When it comes to subject selection, any subject can be chosen from the curriculum by the school management. There is no recommendation from the state regarding

teaching time as well. Pupil assessment is carried out mainly in the target language (Baïdak et al., 2006).

Pokrivčáková claims that the teachers teaching through CLIL are typically non-native. In her studies, the most frequent language is English, after that German, and just in a few schools, it is French or Spanish (Pokrivčáková, 2015). When it comes to using minority languages, in 2017 there was only one case in Slovakia, where the Romany language was used (Genová). In general, it is recommended to use the native language of pupils for at least 50% of CLIL lessons (Pokrivčáková, 2015; Menzlová, 2020) for the native language improvement. Menzlová mentions that during the lessons, typically both the FL and the native language are used, as a combination (Menzlová, 2020).

CLIL can be found in bilingual schools as well. The teachers use it mostly for the content subjects, solely in the FL. In mainstream education, the most widespread model of CLIL is soft CLIL, and only some chosen topics or some tasks are provided in FL (Pokrivčáková, 2015). This model of CLIL can be also named "episodic" (Menzlová et al., 2020). Sometimes, it is also called the "immersion CLIL programme" (Pokrivčáková et al., 2010: 8). It is the teacher who determines the choice of topics and tasks. These activities usually do not exceed 30% of the CLIL lesson (Pokrivčáková, 2013). This model, implemented at the primary level, is the most popular in Slovakia. It can be said that CLIL in general is more used at the primary level than at the secondary (Pokrivčáková, 2015). However, at the lower secondary level, the amount of CLIL schools is similar to the primary (Menzlová et al., 2020). The upper secondary schools that use CLIL are mostly "grammar schools, business academies, and health-care secondary schools." Various projects such as Erasmus+ help with CLIL awareness and implementation in schools (Pokrivčáková, 2015: 18).

One of the main problems with this method seems to be the lack of qualified teachers (Sepešiová, 2010; Pokrivčáková, 2013). CLIL teachers should be qualified in both the FL and the content subject. If a teacher would want to start using CLIL, no special education is compulsory in Slovakia (Sepešiová, 2018), only "[t]he basic qualification(s) of a fully qualified teacher" is necessary (Baïdak et al., 2006, p. 42). Another problem can be that some teachers may be not informed about CLIL enough. Sepešiová gives some examples of this problem: "74% [of primary teachers from various regions in eastern Slovakia] has heard of CLIL, 48% think that they know what that means and 17% know the amount of CLIL aims" (Sepešiová, 2010: 48). Another issue is that in Slovakia, no official regulations or methodologies are legislated (Pokrivčáková, 2013). However, CLIL is recommended by the Ministry of Education and they have given just some recommendations for primary CLIL:

- The teacher who applies the CLIL method needs to be qualified for teaching a foreign language.
- The recommended extent of teaching time mediated in a foreign language should range between 25 - 33% a week.
- Learning outcomes are evaluated only in a mother language, the communicative competences in a foreign language are not evaluated in content subject classes.

- CLIL can be applied in teaching one or more content subjects, it is not recommended to use CLIL in mother language classes.

Therefore, each school can choose an appropriate model of CLIL that suits them the best, as well as the subjects (Menzlová, 2020).

RESEARCH

In the practical part of the thesis, primarily the concrete realisation of the CLIL method in schools is discussed. Because there is a lot of research that analyse the effectiveness of this method (see Pokrivčáková et. al.; Menzlová, etc.), a different approach was chosen. The schools that participated in this research are mainly from the western part of Slovakia and there can be found both elementary and higher secondary schools.

Research aims, hypotheses and statements

The main aim of this study is to determine the form of CLIL implementation in Slovak schools. The primary focus is on the selection of target language, the selection of subjects, the amount of CLIL lessons a week, the lessons realization, examination, and regulations in each school given by the management. Another partial aim is to prove that CLIL has not just one form or one model, but the models are different and vary from school to school. Based on the stated aims, six hypotheses and two research statements are given:

Hypothesis 1: Slovak schools using CLIL choose the English language as a target language over other foreign languages.

Hypothesis 2: The majority of Slovak schools have been using CLIL for more than 10 years.

Hypothesis 3: More than 50% of Slovak schools using CLIL teach the specific subjects in both the Slovak language and the target language.

Hypothesis 4.1: Slovak schools using CLIL have entrance exams for CLIL lessons.

Hypothesis 4.2: The majority of Slovak schools using CLIL examine students in the target language only.

Hypothesis 5: There are some legislation regulations stated by the school management related to CLIL.

Statement 1: The most common subjects taught through CLIL are science, art education, and mathematics.

Statement 2: There is no entrance examination for CLIL lessons.

Methodology

One of the first steps of the survey was to determine the schools where CLIL is implemented in education. At the beginning of the whole survey, there was an assumption that there is a complete list of schools using CLIL in Slovakia. This list could not be found in public sources, so the responsible workers at the Ministry of education in Slovakia were asked directly. The response was however negative. There is no such a list of schools that use CLIL in Slovakia. In some of the publications written

by Pokrivčáková and Menzlová, there are some lists of schools that they have been working with, therefore some of this information was used.

Knowing that there is a non-existent list of CLIL schools, it was crucial to find out where this method is used. Only the Trnava region was chosen, due to capacity reasons. The available sources for the information were the schools' websites or another option was to simply ask the school management, whether they are using CLIL. At first, there was an attempt to look for the information on the Internet, but some of the school websites lacked the "Report of educational activities" (Správa o výchovno-vzelávacej činnosti), where this information should be mentioned, or the reports were not from the recent year. What is more, it was sometimes difficult to find the report on the school's websites. Even if the report was found there, sometimes the CLIL was mentioned, but it seems to be interpreted in the wrong way. Mostly the schools have mentioned in the report that they use CLIL in the FL lessons. This approach was evaluated as probably the wrong approach for CLIL. This was the case for about three schools that were noticed on the website. Because of this reason, the way of information seeking was changed. Another approach was chosen – to ask directly the school management of each school. About 270 emails were sent to the schools of the Trnava region, but there only 36 responses were received. Furthermore, these responses were mostly negative, but there were five schools that have responded positively.

There may be more schools using CLIL in the Trnava region, but there is no information about it, because of the lack of response. Knowing that the sample will not be enough for the survey, some schools from Bratislava, Žilina, and other schools from these regions were contacted as well. It is known already that CLIL is used there, so the school management was asked directly to resend the questionnaire to the teachers by email. Later when the teachers were not responding, each school was contacted by telephone and kindly asked to complete the questionnaire.

A questionnaire was used as a way of analysing the implementation of CLIL. The questionnaire contains nine questions plus one complementary question, concerning the organisation matters of CLIL lessons, and there is one identification question in the beginning. The questions are as follows:

Question 1: Please write the name of your school (or at least the city and the type of school – elementary or high school (základná alebo stredná škola)).

This question was asked to prevent the duplicity of answers from one school. It was intended only to have one answer from each school, or in the case of elementary school one response from primary and one response from secondary level. The management was asked to send it only to one teacher, but they may have sent it to more. Another reason was to find out what schools have participated in the research.

Question 2: What language do you use in CLIL lessons?

There were four answers given: English, German, French, or different. The most popular language is English, so it is expected to be that way. On the other hand, the school has the right to choose from any other language, so there was a need to distinguish the language that they use in CLIL lessons.

Question 3: When did your school start to use CLIL? (Please, give a year, if it is possible)

It is assumed that the schools have a long tradition with CLIL. Therefore, there was the need to distinguish if there is a long tradition of CLIL in that particular school or whether it is just a recent implementation. Another reason for this question was to determine the number of years of practicing CLIL – whether the schools have more or fewer experiences with it.

Question 4: What subjects do you teach through CLIL? If you teach in more classrooms, please write down all of them (for example biology – 5th, 6th and 7th grade, mathematics – 4th grade…).

This question serves to distinguish the subjects that the responding teacher teaches. Because there was no information about the popular subjects taught through CLIL in Slovakia, there is a need to see whether the chosen subjects are more or less the same for each school, or whether it is completely different. Of course, there can be more than one teacher using CLIL in that particular school, so it is not possible to seek all the CLIL subjects, because only one response from each school was asked.

Question 5: What is the time allowance for these subjects through CLIL and in the Slovak language for a week? (Example: biology, 7th grade – three lessons a week, from this amount two lessons are in English and one in Slovak)

With this question, it was intended to determine the foreign and native language ratio for the particular subject for a week. As is already known, the CLIL implementation differs from school to school, but there is some recommendation from the Ministry of education, at least for primary education. It would be interesting to see whether the recommendations are followed, or if the school decided to implement them differently.

Question 6: Do you use the foreign language for the whole CLIL lesson? If not, please be more concrete. (Example: I use CLIL for 50% of the lesson, I use FL only for tasks for students, I alternate English and Slovak language, etc.)

This question studies the amount of FL in the lessons. The amount can be chosen by the teacher or by the school management. Various answers are expected because as was mentioned already, CLIL has many ways of implementation.

Question 7: Do you have entrance exams before entering CLIL lessons for the pupils? If yes, please write on what sphere they are focused on (e.g. language skills, general knowledge, etc.).

The question is based on the Eurydice report, where it is claimed that Slovakia is one of the small numbers of countries, where the examination is present at some schools. There is a need to ensure this statement whether it is still in this way, or it has changed through the years.

Question 8: In what language are the students being tested?

According to CLIL's main principles, the students are mostly examined in FL that is used. The language is however just a medium, so the spelling or grammar should not be graded, only the content. With this question, it would be clear how the schools have coped with testing.

Question 9: Are there any regulations concerning CLIL defined by your school management? (For example, the amount of CLIL lessons, given topics for CLIL, etc.)

There are different types of school managements. In some schools, CLIL is one of the main principles that they offer to the pupils or parents. On the other hand, there are schools where there are just one or few teachers that practice this method because they want it by themselves, so therefore there is no regulation at the school management level.

Supplementary question: If you have answered "yes" to the previous question, please be more concrete about the regulation.

This question serves for explanation purposes, to be more concrete or to give some examples, in what form and what are the regulations about, if they are given by the school.

Survey sample

In this chapter there will be introduced all the schools that it is already known they use CLIL. The schools were contacted via e-mail, telephone, or both. As was mentioned before, the focus was primarily on the western part of Slovakia.

The total number of contacted schools is 21. From this number of schools, just 10 schools have completed the questionnaire. Below are listed all the contacted schools:

	Name of the school	Place
1.	Private elementary school BESST	Trnava
2.	Christian elementary school Narnia	Bratislava
3.	Christian elementary school Narnia	Pezinok
4.	Christian elementary school Narnia	Trnava
5.	Private elementary school Galileo	Bratislava
6.	Grammar school, Grösslingová 18	Bratislava
7.	Private elementary school, Oravská cesta 11	Žilina
8.	Elementary school	Chorvátsky Grob
9.	Elementary school, Nevädzová 2	Bratislava
10.	Private school United Nation Elementary School	Nitra
11.	Elementary school	Hôrky
12.	Elementary school Ostredková	Bratislava
13.	Elementary school	Banka
14.	Secondary technical school Komenského 1	Trnava
15.	Christian elementary school of St. Cyril and Methodius	Sereď
16.	Business academy, Kukučínova 2	Trnava
17.	Elementary school of Captain Nálepka	Stupava
18.	Secondary technical school, Veľká okružná 25	Žilina
19.	Elementary school Martinská	Žilina

20. Elementary school of Mór Koczán	Čiližská Radvaň
21. Grammar school	Vráble

Table 1. List of contacted schools

Results of the questionnaire

In this chapter, the results of the questionnaire will be shown. Each question will be provided with all the answers and some questions will be provided with a table for better understanding.

The total amount of answers to the questionnaire is 19. However, that does not mean that the amount of schools that have answered is 19. It happened that 10 teachers from the same school has completed the questionnaire. From the 19 answers, one answer will be not counted, because the teacher stated that "I do not teach through CLIL method, I teach only the English language." That means the teacher is not using the CLIL method.

The following table concerns the survey sample. When it comes to questions 1 and 3, the answers were put together into one table, so the responses can be seen together. It is important to mention that this table is different from the table in the survey sample. This is a list of CLIL schools that have completed the questionnaire.

Question 1: Please write the name of your school (or at least the city and the type of school – elementary or high school (základná alebo stredná škola)).

Question 3: When did your school start to use CLIL? (please, give a year, if it is possible)

school	year
Private elementary school BESST	2012
Secondary technical school, Trnava	2018
Elementary school, Banka	2017
Christian elementary school of St. Cyril and Methodius	2020
Elementary school Narnia, Pezinok	2013
Business academy, Trnava	1998
Elementary school of Captain Nálepka	2021
Secondary vocational school, Žilina	2016
Elementary school (not written where)	2020

Table 2. Answers of question 1 and 3

All 17 teachers use English as a language of instruction.

Question 4: What subjects do you teach through CLIL? If you teach in more classrooms, please write down all of them (for example biology – 5th, 6th and 7th grade, mathematics – 4th grade…).

Question 5: What is the time allowance for these subjects through CLIL and in the Slovak language for a week? (Example: biology, 7th grade – three lessons a week, from these amount two lessons in English and one in Slovak)

Question 6: Do you use a foreign language for the whole CLIL lesson? If not, please be more concrete (example: I use CLIL for 50% of the lesson, I use FL only for tasks for students, I alternate English and Slovak language, etc.).

In the following table, these three questions were summarized in one table for better understanding and clarity. In the first column, all the subjects that were mentioned in the questionnaire are listed, together with the grade in the second column and the distinction of elementary school (ES) or high school (HS). In the third column, there is the number of lessons in CLIL a week, in the next lessons in Slovak only and in the 5th column the total number of the lessons both for CLIL and Slovak lessons together. The last column is regarded the question 6 and there is usually the percentage of English language (EL) usage or some other comments regarding the language used in the lessons.

subject	grade	CLIL lessons	Slovak lessons	total	The EL usage
Prvouka	1st ES	2	-	2	30%
Art education	1st ES	2	-	2	Only vocabulary
Electrotechnical practice	Secondary technical	3	-	3	60%
Music education	2nd ES	1	-	1	Alternating EL and SL
Prvouka	2nd ES	2	-	2	Alternating EL and SL
Science	4th ES	*	*	*	100%
History	5th ES	*	*	*	100%
Informatics	6th ES	*	*	*	100%
Art education	7th ES	*	*	*	100%
Economic geography (hospodárska geografia)	1st HS	2	2	4	80%
Economic geography	2nd HS	3	-	3	80%
Informatics	3rd, 4th, 5th EL	1	-	1	Tasks, explanation
Prvouka	2nd ES	2	-	2	15 minutes, alternating EL and SL

Subject	Grade	EL	SL	Total	Amount
Mathematics	2nd ES	5	-	5	15 minutes, alternating EL and SL
Science	3rd ES	1	-	1	15 minutes, alternating EL and SL
Mathematics	1st ES	5	-	5	Alternating EL and SL
Prvouka	2nd ES	2	-	2	Alternating EL and SL
Mathematics	2nd ES	5	-	5	Alternating EL and SL
Mathematics	1st ES	5	-	5	15 minutes, alternating EL and SL
Art education	1st, 2nd ES	2	-	2	30%
Art education	3rd , 4th, 5th ES	1	-	1	30%
History	5th ES	2	-	2	30%
Mathematics	4th ES	4	-	4	instructions, revision
Science	4th ES	2	-	2	instructions, revision
Biology	5th ES	2	-	2	Alternating EL and SL
Mathematics	1st ES	1	3	4	90%
FL correspondence	*	3	-	3	70%
Economics	*	3	-	3	70%
Mathematics	*	*	*	*	100%
Biology	*	*	*	*	100%
History	*	*	*	*	100%
Science	*	*	*	*	100%
Art education	*	*	*	*	100%

Table 3. Subjects for CLIL, the languages and their amount
* Information was not provided

It is important to emphasise that some respondents mentioned the subject "prírodoveda" and some mentioned "science". These two subjects were taken as the same subject. Therefore, prírodoveda is not mentioned in the table, because it was taken as science. There is one specific subject called "prvouka", which can be translated as "elementary science and civics". However, the Slovak name of the subject was kept.

There were some other specific comments regarding subjects and the usage of EL, for example: "On the art education I use English language only for getting familiarized with the utilities that we will be using on the lesson because the pupils do not know English that well." (1st grade ES), "I usually alternate between the English and Slovak language, it depends on the situation.", "I use circa 80% English, for the rest, I use Slovak, especially with some of the professional terminology and with explaining of

some phenomena that the pupils do not know even in Slovak." (Economic geography), "[I use English] for instructions, revision, the new topic is in Slovak.", "I alternate between the Slovak and English language in the introductory part of the lesson.", "We do not divide the lessons [for the CLIL and non-CLIL], on mathematics, I try to use as much English as possible."

There seems to be a school, where the CLIL system is different in comparison with the rest of the schools from the questionnaire: In primary education, they have "a CLIL day" one day a week, and in the lower secondary education the amount of CLIL is decided by the teacher himself. "[We use] CLIL circa for 50% of the lesson, it depends on the classroom and the topic, we use CLIL activities outside the CLIL lessons too."

Question 7: Do you have entrance exams before entering CLIL lessons for the pupils? If yes, please write on what sphere they are focused on (e.g. language skills, general knowledge, etc.).
• No (17 answers)
• Yes, [it is focused on] language skills, communication skills, and general knowledge too. (1 answer)

There was just one specific comment regarding the entrance exams: "no [there are no entrance exams], the mathematics teacher is preparing the pupils in the Slovak language".

Question 8: In what language are the students being tested?
• Both in English and the Slovak language (4 answers)
• In the Slovak language (9 answers)
• In the English language (2 answers)
• We do not test the students (2 answers)
• We have not tested the students yet, but if we did, it would be in Slovak I suppose (1 answer)

Question 9: Are there any regulations concerning CLIL defined by your school management? (For example, the amount of CLIL lessons, given topics for CLIL, etc.)
• Yes (5 answers)
• No (5 answers)

Regarding this question, the nine teachers from the same school that has completed the questionnaire, six of them have answered "yes" and three of them "no". Although they are from the same school, the answers are different, so the chosen answer was "yes" to be the right option, according to the majority of the teachers. Still, their answers are counted as one answer, because they are from the same school, as was mentioned before.

Supplementary question: If you have answered "yes" to the previous question, please be more concrete about the regulations.

For this question, the answers were the most different and they varied a lot. Here are the examples and explanations that the teachers have given: "For prvouka, it is established that the 30% of the lesson has to be in EL.", "The number of lessons and subjects in CLIL is established.", "The amount of lessons [that is in CLIL is established], the topics are chosen by the teachers.", "We have our own manuals for using CLIL.", "It is in the school educational programme (školský vzdelávací program) that we use CLIL in the lessons.", "We have established that we have one mathematics lesson in the 1st grade. We teach children according to the plan for 1st grade with the cooperation of the mathematics teacher. We familiarize children with the vocabulary and we teach the chosen topic in FL, naturally accordingly to the number of lessons in FL."

Interpretation of the results

Hypothesis 1: Slovak schools using CLIL choose English language as a target language over other foreign languages.

Hypothesis about the most used language is definitely proven. All respondents have stated that they use the English language as a medium in CLIL lessons. There was not any German or Russian language in the school that filled the questionnaire. Although there has been one answer where the French language was also chosen, together with the English, it was concluded to be a misclick in the questionnaire. It was searched for this information on the particular school's Internet website and there was no information about French being the language as a medium in CLIL. What is more, there was no French teacher, who would teach the lessons in French in that school. Because of this reason, the answer is seen as highly improbable.

Hypothesis 2: The majority of Slovak schools have been using CLIL for more than 10 years.

This hypothesis was based on the fact, that according to the Eurydice survey, the first experiments were established in the 2000s in Slovakia. Some years later some experts helped with the awareness of CLIL, for example, S. Pokrivčáková, B. Menzlová, M. Sepešiová, and others. They were tracking CLIL usage in Slovakia for more than ten years. However, the results of the questionnaire are different. It is clear that it is rather a new implementation in some schools. The number of schools that would fulfil the hypothesis is two. It means that two schools use CLIL from the year 2012 or sooner. The other seven schools have implemented it later, from 2013 to even 2021. Therefore, this hypothesis is not proven.

Hypothesis 3: More than 50% of Slovak schools using CLIL teach the specific subjects in both the Slovak language and the target language.

This hypothesis was based on the main principles of CLIL. As was said in the theoretical part, the method does not have to be necessary in FL for all the lessons of the subjects. The school management or the teacher can choose the CLIL and non-CLIL lessons ratio, depending also on the students. For example, if there are four lessons a week of the subject, two lessons can be only in Slovak and the other two can

be through CLIL. On the other hand, this method can be used in all lessons of the subjects as well.

The total amount of subjects that were in the questionnaire is 33. From this number, just two subjects are divided into only Slovak lessons and CLIL lessons. This was the case of mathematics in the first grade of elementary school, where one lesson is through CLIL and the other three lessons are only in Slovak. The other subject is economic geography at Business academy. Half of the lessons are only in the Slovak language, other half is through CLIL. Two schools were not counted in these numbers, but they belong to this category of some Slovak-only lessons as well. One respondent mentioned that they have a "CLIL day" just once a week in the grades 1-4 and in the grades 5-9 the number of lessons in CLIL depended on the teacher. Another respondent mentioned that they have CLIL lessons "together 10 lessons for 5 classes", so it is not clear how many lessons are in Slovak and how many are in English.

It needs to be mentioned that there are some lessons in primarily the Slovak language, with some elements of CLIL. The important thing is that there is always some CLIL in each lesson during the week, therefore the lessons are counted as CLIL lessons.

To evaluate hypothesis 3, it can be seen that it has not been proven. The majority of the subjects in various schools are only through CLIL. However, this does not mean that EL is used 100% of the lessons. It means that some of the CLIL elements are always present in each lesson.

Hypothesis 4.1: Slovak schools using CLIL have entrance exams for CLIL lessons.

As was mentioned in the previous subchapter, in the results of the questionnaire, nine schools do not have any entrance tests or examinations. It means that in general, CLIL lessons can enter any pupil, without being tested. There was only one school, which does have the entrance test. They have mentioned that it is focused on general knowledge and language skills.

It can be said that this hypothesis is not proven. On the other hand, the result contradicts the Eurydice survey that was conducted in 2004. In that survey, it is claimed that Slovakia is one of the few countries that examine the students before entering CLIL. It is however quite an old survey, nowadays the approach may have changed.

Hypothesis 4.2: The majority of Slovak schools using CLIL examine students in the target language only.

There were various answers to question 7 in the questionnaire. However, most of the answers are in contradiction with this hypothesis.

If all of the answers that claim they use the Slovak language or Slovak with the English language would be counted, there are 13 answers, or 13 subjects, which are examined this way. On the other hand, when it comes only to the English language, there are only two responses. What is quite interesting, two answers mentioned they are not testing their students at all. Adding to that response, there was one that claims they are not testing the students as well, but it is because the pupils are only in 1st grade. If the pupils were tested, the teacher supposes it would be in Slovak. This response was however not counted in the graph.

To evaluate this hypothesis, it seems that it has not been proven at all. There is only a minority of subjects that were examined only in English. The majority of examinations are either both in Slovak and English or in Slovak only.

Hypothesis 5: There are some legislation regulations stated by the school management related to CLIL.

This hypothesis cannot be fully confirmed. Five schools do not have any regulations and five schools indeed have some rules from the school management. To be more concrete, the regulations were mostly concerned about the number of lessons in CLIL, the subjects, the realization of the lesson, or the management has created some guidelines to help the teachers with the realization of CLIL lessons.

Statement 1: The most common subjects taught through CLIL are science, art education, and mathematics.

As can be seen from the questionnaire, the subjects can vary a lot. As was mentioned before, the subject selection is fully determined by the school management, or by the concrete teacher. On the other hand, there seem to be some subjects that are taught more than others. The amount of the most mentioned subjects are summarized in the following table:

subject	Number of schools
Art education	4
Prvouka	3
Science	3
Mathematics	3
History	3
Informatics	2
Biology	2

Table 4. The numbers of specific subjects

There needs to be mentioned that it is hard to generalize the subject selection because not every teacher from the schools has completed the questionnaire. It means that there can be other subjects taught through CLIL, but there is no information about it. In the case of the school where more teachers had completed the questionnaire (there was one school), there were some answers that mentioned the same subjects more times, for example, three teachers have stated that they teach mathematics. To make it more general, these subjects were counted just once for that school.

The number that is given in the table is therefore not the total amount of subjects that were mentioned in the questionnaire, but the number of schools where these subjects are taught through CLIL.

To evaluate this statement, it is considered to be proven, but not completely. Subjects like science, art education, and mathematics were mentioned to be the most common ones, which is true, but together with prvouka and history as well. The most

repeated subject was however art education, then the other subjects that were mentioned followed after that.

Statement 2: Only the target language is used in CLIL lessons.
As was already mentioned in the theoretical part, the CLIL lessons do not have to be all in FL for the whole time. The results showed that 32% teachers used only English as a language of instruction and 68% teachers were alternating English with learners´ mother tongue.

Pedagogical implication
Firstly, as was proven in the practical part, there are many ways of implementing this method. As it can be seen from the questionnaire, each school has its own way of implementation. Therefore, the method can be well suited for the teacher and/or for the pupils. The teacher can decide the amount of target language, the parts of the lessons, the topics that would be in an FL, the language of examination, etc. What it means is that if the students have not the best skills in the FL, there does not have to be a lot of it. It is possible to use CLIL only for the new vocabulary, or for revision, in the introduction part of the lesson, and so on.

Secondary, there are many studies that confirm the effectiveness of this method. There have been many studies that compared CLIL and non-CLIL groups, and the results were that the CLIL students were more efficient with the target language, they were more active, they were not afraid to speak, and they were willing to speak voluntarily or spontaneously. What is more, CLIL lessons are more enjoyable than lessons in the Slovak language only. The majority of pupils seem to enjoy it more. It is an appropriate way of learning the language because the target language is used in an authentic environment. Furthermore, it differs from the traditional language lessons, where the situations are created artificially. If we compare it to CLIL lessons, the language is used for "real" communication. The pupils should express themselves the same way as in non-CLIL lessons, using the target language, not the native, as the tool of communication. This way the language skills are improved and they are trained more effectively.

THE IMPACT OF CLIL ON UNDERGRADUATE EDUCATION OF STUDENTS OF BILINGUAL SECONDARY SCHOOLS

Katarína Galková

CLIL and its principles

CLIL method, an acronym that stands for Content-and-Language Integrated Learning. This acronym emerged in the 1990s and it is a term referring to several educational approaches.

According to Coyle, Hood, and Marsh, "Content and language integrated learning (CLIL) is a dual-focused educational approach in which an additional language is used for the learning and teaching of both content and language. That is, in the teaching and learning process, there is a focus not only on content, and not only on language". (Merino & Lasagabaster, 2018) (Coyle, Hood, Marsh 2010, p. 1),

It is broadly recognized as a "dual-focused approach" offering a well-balanced focus on the teaching of both language and presented content. CLIL can be characterized as a method taught mostly by mainstream primary, secondary, and tertiary education using a specifically target foreign language as a medium in which certain knowledge is presented. Even though the second "L" in the CLIL acronym stands for any chosen language, the CLIL teaching method is undeniably mostly reserved for a limited number of prestigious languages. Apart from Englishspeaking countries, CLIL is mostly implemented for the teaching of the English language. (Dalton-Puffer, 2011)

CLIL shares similar characteristics with other various bilingual educational forms, for example, CBI and immersion education. (Dalton-Puffer, 2011) The term CLIL can be seen as an umbrella term bounding together more than a dozen various educational approaches for bilingual education. (Merino & Lasagabaster, 2018)

We can observe, that we analyze whether the program is identified au CLIL or immersion program depending on its cultural or political frame. (Dalton-Puffer, 2011) Key principles that identify the CLIL method are:

1) CLIL method I practiced using a foreign language or a lingua franca, not a second language. Meaning that the target taught language will not be greatly encountered by students in society they will but rather mostly used in the classrooms.

2) CLIL gives the implication that the teachers will normally be nonnative speakers of a specified language. In most cases, the educators will not be language experts, but rather content based experts, because, as Wolffstates "classroom content is not so much taken from everyday life or the general content of the target language culture but rather from content subjects, from academic/scientific disciplines or from the professions" (Wolff, 2007, pp. 15–16) (Dalton-Puffer, 2011)
3) CLIL lessons are generally timetabled as regular content-based lessons balancing lessons concerning target language as their own specific subject. (Dalton-Puffer, 2011)
4) Predominantly, less than 50% of the given curriculum is being educated in the target language.
5) CLIL method is mostly implanted once the learners, students, acquired adequate knowledge in their first language, thus in commonly more in secondary than primary education. (Dalton-Puffer, 2011)

For a considerable amount of time, since the 1970s, linguists and educators are looking for a way to ensure effective foreign language learning principles, forms, and methods to ease language learning processes. Nowadays, the most complex summary of information in some theoretical guidelines in teaching foreign languages is being defined in the document named

"Spoločný európsky referenčný rámec pre jazyky (SERR)" (Pokrivčáková, 2015) published by Council for cultural co-operation, Education Committee, Modern Languages Division. This document offers a definition of three key principles:
1) Enriching cultural and linguistic legacy varying throughout European countries is a priceless source in need of admiration, development, and protection. There must be ensuring way of enabling communicative barriers to be demolished and means of mutual enrichment installed.
2) Only by a deeper understanding of various modern European languages, there is a possibility of offering communication and interaction of European residents obtaining diverse mother tongues and guaranteeing mobility throughout the European continent, offering means for mutual understanding, cooperation, and preventing discrimination and prejudices.
3) The member states in preparing and adopting various national educational strategies in foreign language learning can accomplish better convergence on the European level at the hand of proper measures in favor of lasting cooperation and coordination of strategies. (Pokrivčáková, 2015)

CLIL encompasses three competencies – linguistic competence, sociolinguistic competence, and pragmatic competence. These competencies have undeniable importance and interchangeable place in foreign language education. (Pokrivčáková, 2015)

Linguistic competencies are the base that in all aspects it merges. That is phonological, syntactical, and lexical skills and competencies without considering pragmatic or sociolinguistics functions. Sociolinguistic competence relates to the socio-

cultural environment and conditions of language in use. It contains a great amount of sensitivity toward social conventions in which the language is presented. This contains social courtesy rules, standards, relations between generations, classes, social groups, and genders, and linguistic codification of certain basic rituals in the life of the community. Sociolinguistic factor certainly significantly influences entire language communication between representatives of diverse cultures. However, it is quite common, that participants in a conversation are not aware of this sociolinguistic factor while participating in the conversation. Pragmatic competencies analyze functional usage of linguistics sources. Pragmatic competence also obtains mastering language skills, their coherence, and internal language arranging or identifying types of texts and their structure. (Pokrivčáková, 2015)

CLIL method in Slovakia

CLIL method has its tradition in Slovakia. As was previously mentioned, firstly, historically in well-known and greatly influential educational personas J.A. Comenius and Mathias Bell. It has a long tradition, for over 20 years. Concerning the different cultural, historical, and sociological backgrounds of our country, after emerging of bilingual education in Europe, the same methods that worked in various different countries weren't as effective in Slovakia. (Pokrivčáková, 2015)

What is, however, more important, is the state of bilingual education in nowadays Slovakia. It combines education in two languages. Most of Slovakia's schools offer education in a combination of mother tongue, Slovak language, and English languages. In the second place, we can find a school with a Slovak-German combination. Bilingual education in Slovakia also offers high school education in other various attractive languages combination of mother tongue with languages such as French, Russian, Italian, and Spanish. For example, in Slovakia's capital city Bratislava, we can see schools proposing education in all previously mentioned combinations. I'd dare to say, that there is greatly growing admiration and popularity of bilingual education. Parents see bilingual education as an effective way of guaranteeing communicative competence for their children. (Pokrivčáková, 2015)

In general, it is believed that bilingual education doesn't degrade the quality of education in the mother tongue. Foreign language learning is a supplementation to demanded knowledge. In Slovakia, there is a recommendation of at least 50% of the week be taught in the mother tongue. This measurement I believed to ensure quality education in both first mother tongue and foreign language with enough properties and competencies. (Pokrivčáková, 2015)

CLIL method in Slovakia is being used in various types of schools. Not only in high school education but in elementary and secondary education as well. It is provided by both mainstream and bilingual schools. The bilingual schools offer parallel education of specific subjects exclusively in the target foreign language with independent teachings of the target language by itself for a minimal number of at least three lessons per week. When it comes to mainstream educational facilities, the CLIL method is perceived as "more friendly", being incorporated by including specific activities and

topics serving the purpose, being mediated in the target foreign language. These concrete topics, themes, and activities, depend mostly on the choices of concrete educators (Pokrivčáková, 2015).

Impacts of the CLIL method

We can observe the effect of content and language integrated learning on the proficiency of the language. It has been discovered, by, Dalton-Puffer, after comparing results obtained from CLIL and mainstream language learners, that the largest difference can be seen in oral language expression. Acquiring superior results in all aspects, pronunciation being the least affected. Students taught with the implementation of the CLIL method also obtained a larger lexicon both receptive and productive, writing skills of higher efficiency, using greater lexical and morphosyntactic resources, as well as a higher degree of accuracy, and finer pragmatic awareness. incorporates a look at the impact of the CLIL learning process as an influence on creativity and risk-taking, to specify, its positive effect on it and also the same linguistic benefits (Pérez-Cañado 2012).

However, what can be interesting to observe are surprising results conducted from similar studies carried out, where CIL students did not exceed their non-CLIL peers. Information received in Sylvén and Sundqvist (2006) conclude results from Sweden, where some studies have presented no difference in the result of CLIL and non-CLIL students. The offered explanation points out to the fact, that Swedish students are greatly exposed to the foreign language – English, outside the school environment, in comparison to the other countries. (Merino & Lasagabaster, 2018)

It is now an undeniable fact, that bilingualism has a great effect on the brain. Its influence has been proven, that the knowledge of the language in a profound way has a physical, biological effect on the brain. It can be defined as rather functional than structural effect. Specifically, we can mention its impact on grey-matter density in the brain. This research was conducted on 25 monolinguals, 25 bilinguals, who learned the second language before the age of three and have used it regularly ever since, and 33 'late' bilinguals, who started learning the second language between the age of 10 to 15.

John O'Doherty, John Ashburne*, Richard S. Frackowiak, and Cathy J. Price are consistent with previously obtained evidence that the human brain changes structurally in response to environmental demands — for example, the structure is already known to alter as a function of learning in domains other than language and have shown that the degree of structural effect on the brain of examined bilingual individuals is connected to their proficiency in knowledge of the second language. (*NATURE Bilingual Brain*, 2004)

RESEARCH
Research aim

This chapter attempts to analyze subsequent academical choices of high school graduates. The main aim is to examine the impact of CLIL method on the graduates of bilingual schools. The objective of the practical part is to determine the differences as

well as common features of graduates in matters of reasoning behind selection of high school education, experiences from being taught by CLIL method, determination of ensuing educational choices and experience undergoing these different academical options. The data were collected in a survey using a method of questionnaire on a sample of 71 respondents.

Hypotheses

H 1.1 Less than 50% of graduates attending bilingual schools using CLIL come from bilingual households

H 1.2 Majority of graduates were supported by their parents in their decision to attend a bilingual school using CLIL

H 2.1 Majority of graduates of bilingual school using CLIL, who decided to study at a university abroad, picked a country where they can use the target language.

H 2.2 Majority of graduates of bilingual school using CLIL, who decided to study at a university in Slovakia faced certain difficulties associated with the transition.

H 2.3 Majority of graduates of bilingual school using CLIL, feel regression of the target language level abilities since graduating.

H 3.1 Majority of graduates of bilingual school using CLIL, feel influenced in their decision-making process concerning their subsequent university education.

H 3.2 Majority of graduates of bilingual school using CLIL, feel better prepared for their subsequent university education.

H 4 Majority of graduates do not regret attending bilingual high school.

Research sample

In my subsequent research, I aimed and focused on a very specific group of respondents, graduates of high schools implementing the CLIL method, offering bilingual education. I conducted research involving 71 respondents to a questionnaire prepared by me for this specific purpose. These respondents were not specified in age variable or gender. However, 71,8% of respondents identified themselves as women and 28,2% as men. Most of the respondents were graduates from the year 2019, which sums up to 30% of respondents, and the least amount came from the years 2012 and 2014 with a percentage of 1,4. In some cases, graduates added a two-year response, which in numbering I decided to add to the later year of two, as to present result referring to the time of the end of their high school education.

There was no previously ordained specification on the language of bilingual education or place and institution, where the graduates obtained knowledge implementing the CLIL method.

Methodology of the conducted research

In the following research, I aimed to conduct information from high school graduates from schools implementing the CLIL method, bilingual education, while focusing on connected choices to this specific type of education, especially choices concerning further education.

Graph 1. The year of respondents' graduation

Firstly, I constructed a questionnaire containing 32 questions. This questionnaire was subsequently transmitted through the diversity of my social circles to respondents meeting the criteria, in other words, the graduates from high school implementing the CLIL method, teaching by the means of bilingual education. This questionnaire was answered 71 times, by 71 different personas meeting the specific criteria of the research.

After conducting the research, I followed to analyze the results. I decided to look at each question specifically and present obtained results and their connection to previously written research statements or hypotheses showing these results with the help of graphs and charts.

Data analysis
Q6: Before studying at a bilingual school, was your knowledge of the target foreign language on a higher level than your peers'?
In Q6, it was intended to find out what motivation was behind the decision to undergo bilingual education. The aim was to find out the level of foreign language knowledge while enrolling in the CLIL method using school. From the questionnaire, results indicate that 45,1% of individuals answering were beginners in their foreign language knowledge while beginning their studies at the CLIL method implementing institution. 22,5% of respondents considered themselves and their foreign language knowledge in the target language on a higher level than their peers. Other answers show 11,3% considering themselves on the same level, 8,5% answered to know basics from

the target language, 7% having worse knowledge and 5,6% were not able to estimate the level of their knowledge.

Q7: Was the decision to study at a bilingual school vision of your parents or yourself?

In this particular question, the intention was to evaluate, if these graduates were initially motivated by the vision of their parents, their own, or if it was a combination of colliding interests and visions. From what was gathered, it can determined, that 80,3% of students, graduates from bilingual high schools followed their own decision and vision. 11,26% of individuals answered in diverse forms that the decision was mutual and 8,5% of respondents introduced the decision as the vision of their parents.

Q8: Were you supported by your parents in the decision?

We found out that 100% of respondents found support from their parents in their academic ambitions.

Q9: Did you grow up in a bilingual household?

In question number nine, the aim was to observe the percentage of graduates coming from the bilingual household. The numbers are indicate that only 8,5% of my respondents came from bilingual households and 91,5% did not.

Q10: If yes, from which member of your family did the knowledge come?

To follow up on the previous question, the goal was to specify the bilingual household environment from which the respondents came. 25% of respondents gathered their foreign language knowledge from their father, 12,5% from their mother, 12,5% from both of their parents, 12,5% from their grandparents, 12,5% from multiple individuals in the family, and 12,5% from all of the members of the family. 12,5% of the respondents answered this question with a simple "No".

Q11: If you grew up in a bilingual household, which language was the other than your mother tongue, and which language did you decide to study?

In question number 11, to focus laid on observation of connections and similarities that may occur in the connection between the language of bilingual households and the target language from bilingual studies. 30% of the answers weren't answering the asked question, giving answers like: *"-",* or *"Nebol"*. 50% of respondents grew up in households implementing Hungarian language, either alone or in combination with the German language – in 60% of those responses, or English language – in 20% of those responses. The target language of the CLIL method implementing education varied. In 30% of answers, respondents stated one language, which we can assume means studies of the same language as the one they grew up in, which were Spanish and English language. Overall, respondents to this question decided to study English as the target language in 30%, Spanish language in 20%, Russian language in 10%, and Hungarian language as well in 10%. Stated numbers take into account previously mentioned unusable 30% of answers.

Q12: Where did your education follow after graduating high school?

Moving to question number 12, we can find results revealing answers concerning further education, especially the choices of respondents concerning their further education. In 69% of cases, graduates from CLIL method implementing institutions

decided to stay in Slovakia for their consequent academic ambitions – that includes one answer specifying what we ask in the following question. 23,9% of respondents decided to study at a university abroad. 2,8% took GAP year, 1,4% of respondents didn't go to university, and 2,8% of respondents studied both in their mother tongue speaking country and abroad – which contains both Slovakia/Czech and Dutch/Czech combination.

Q13: If you decided to study abroad, is it a country speaking the language of your bilingual studies?

When asked about the connection between the target language of their studies and the country of their further studies abroad, 59,1% of respondents stated that they did not choose the country speaking the language of their bilingual studies. 27,3% stated that they did chose the same language speaking country and 13,6% of respondents did not choose a country speaking the same language, however, they still make efforts in their language knowledge.

Q:14 What is the reasoning behind your decision?

Answers to question number 14 are aiming to gather information about the motivations behind the decision concerning further education. In both cases, for studying abroad and staying in Slovakia, we can observe reasoning such as serious relationship, concrete study program, its exclusivity, rarity, good name, money, non-study related reasons, simply moving out or the lack of satisfaction with the school system.

Q15: Which field of study have you chosen to study?

In question number 15, the focus was to conclude a variety of study programs among responding graduates from the CLIL method-implementing high schools. These programs varied and overlapped in their focus. To summarize this analysis, we can determine, that answers from respondents can conclude to these numbers: 18,3% of respondents chose a program focusing on management, marketing, and/or economics. 13,3% of respondents decided to take on programs connected to medicine, also including physiotherapy or dentistry. 15% of respondents chose from diverse humanitarian studies from psychology to sports. 10% of respondents decide to focus on the more technical program such as Biotechnology or Criminalistics. 8,3% of responding graduates chose programs strongly connected to chemistry and 6,7% is the percentage for all three categories concluding various pedagogical, IT, and language studies. 5% of asked graduates decided to study programs focused on mathematics and 3,3% is the percentage for categories of mass media, architecture, and biomedicine-physics. We can determine great diversity of responses, henceforth the full table of answers is included for finer analysis.

Q16: If you are studying at a university, is the program in other than your mother tongue?

Question number 16 gathers answers for the question: *"If you are studying at a university, is the program in other than your mother tongue?"* For this question, 57,6% of respondents answered *"no"* and 42,4% of respondents answered *"yes"*.

Q17: <u>If you are studying in other than your mothe tongue, is it the target language</u> of your <u>bilingual studies?</u>

The following question in my research questionnaire aims to observe if the respondents studying programs in foreign language study in the target language of their studies. For this question, 58,1% responded to study in the same language as to where their bilingual studies, and 41,9% optioned to not study in the language of their CLIL method implemented education.

Q18: <u>How would you evaluate the level of your university program in a foreign</u> <u>language?</u>

Question number 18 intentionally asks respondents to evaluate the quality of the program of their studies. Of responding graduates, 71,4% evaluate their program more or less positively, varying from absolute admiration and incredibility to it being manageable and 28,6% of respondents view their study program quite negatively, honestly admitting lower quality than their high school education.

Q19: <u>If you transitioned from bilingual education into the program in your mother</u> tongue, <u>how was the transition?</u>

Question number 19 is one of the most important and most interesting to analyze. In this question, the intention was to take a look at the transition from bilingual high school education into university studies mainly in the Slovak language. 2,17% stated, that even though this question is not applicable to their particular situation, they suspect the transition to be hard. 65,2% evaluated the transition in a tone hinting it be easy or manageable and 32,6% evaluated it as challenging. As is to be, the answers varied in their intensity, and the analysis comes from summarizing them. On various occasions, answers contain both sides of the spectrum. The big struggle can be identified in the difference in terminology, which was specifically mentioned referring to mathematics and by graduates from English bilingual schools. In some cases, graduates stated to find it easy to transition in terminology due to similarities in languages and even finding it easier to learn the Latin language as a consequence of the CLIL method implementing education. What can be found interesting, is the fact, that in not only the case respondents stated to have struggled more with the difference in the system of learning than with the language.

Q20: <u>What do you see as the biggest challenge in your university studies?</u>

Question number 20 is focusing on gathering information concerning the challenges the graduates are doomed as the biggest ones in the transition from their CLIL method implementing high school education into their further education. Some mentioned this also in the previous question. Question 20 in my research questionnaire contains a diversity of answers which I divided into categories to be summarized. 28,5% of respondents stated the biggest challenge to be connected to the amount of learning, exam period, or the fact that one must selfstudy quite a lot. 26,7% of respondents considered the biggest challenge to be connected to a new environment, a new city, or a new country and the whole challenge in the overall system of working and existing. 19,6% of respondents faced the biggest struggle I time-management, effectiveness, new regime, and new habits. 7,1% of respondents faced no challenges, 5,4% is the amount

gained by both lacking motivation and struggles with language and terminology differences. 3,6% of respondents stated the fear of losing previously gained language abilities and 1,7% is the number for both struggle with concrete specifics program and the overwhelming question of "*What is it that I actually want*?". We can determine great diversity of responses, henceforth the full table of answers is included for the possibility of finer analysis.

Q21: Would you be interested in a short-term study program abroad such as Erazmus +?

This question is trying to determine whether the graduates responding to my research questionnaire would be interested in short-term study programs abroad such as Erazmus +. 68,7% of the respondents stated that they would be interested. 17,4% of respondents do not know if they would be interested and 15,8% of respondents are not interested in short-term programs abroad, containing answers stating that they did not take on this challenge and that they do not feel they want to undergo such program because of already studying abroad.

Q22: If you study in the Slovak language, do you feel regression in foreign language knowledge?

The subsequent question aims to gather information about a question that I am firmly interested in and that is whether the graduates feel regression in their foreign language knowledge. For this particular question, a great number of 76,9% of respondents answered yes, or similarly, thus they feel their knowledge has worsened. 24,2% of respondents do not feel the lessening of their abilities.

Q23: If you study in the Slovak language, do you feel regression in foreign language knowledge?

When asked about possible action towards ensuring or evolving their foreign language abilities, responding graduates had diverse answers. 31,7% of respondents stated to not be working on their language proficiency, including the ones, who stated sadness and regret about this fact and hopes and plans for this in the future. In various cases, respondents connected this truth with highly demanding university studies. From the remaining 68,3% of respondents, who have made the decision to variously invest in their language abilities, we could find a variety of options how. Watching movies gained the most hits with it being chosen 19,5% of the time, followed by intentionally communicating with foreigners and natives with 14,6%. Watching series, watching videos, and reading books each gained 12,1% of the votes. Reading articles had 9,7%, enrolling in language schools 7,3%, using the language in the work environment 4,8%, as well as listening to music and 2,4% was gained by reading studies in a target foreign language. From the gathered information, we can conclude, that respondents feel regression mostly in speaking and talking abilities in their target foreign language.

Q24: Have you encountered a low level of foreign language education at the university?

In question 24, the question collected data answering whether the graduates of CLIL method schools encountered a low level of quality of foreign language education at the university. I believe we could call the results quite sad and alarming. Numbers show

that 71,4% of respondents stated positive answer, thus they have encountered a low level of quality. Only 28,6% answered the question negatively.

Q25: <u>To be honest, would you say that your foreign language knowledge is on a higher level</u> than of your university educators?

When asked, if they considered their level of foreign language abilities on a higher level than their educators, 1,5% did not have the target language at their university. 40% optioned not being able to review or compare their foreign language knowledge, 30,8% of respondents answered negatively – their foreign language abilities are worse than their professor's and 21,5% answered positively, they feel as though their level of language knowledge is higher.

Q26: Do you regret attending a bilingual high school?

After undergoing the CLIL method-implementing educational process, do the students regret their decision? That is the question the aim was greatly curious to find the answer for. And the results gathered from my research questionnaire are incredibly positive! 95,8% of respondents stated to not regret their decision, and only 4,2% of respondents do. There were to quite specific answers to this question that go: *"trochu, na bilingválne gymnázium som išla z 8. ročníka ZŠ, teraz by som na bilingválnom gymnáziu ostala prvý rok (ten bol z hľadiska angličtiny najlepší) a potom by som išla na odbornú strednú školu."* stating a new tactic they would have chosen and that is undergoing first year of bilingual education with firm focus on language learning and then transferring into vocational high school, which from CLIL method implementing point of view can be seen as slight regret in the decision, and *"V podstate nie, pretože tá škola a ľudia v nej ma veľmi obohatili, ale niekedy premýšľam, že keby si vyberám znova, asi zvolím iný jazyk. Pretože taliančina je síce krásna, ale menej využiteľná :D."* which states satisfaction with bilingual education and rather reflect on the selection of the target language, in this case Italian, which is beautiful but not so functional.

Q27: <u>Did you feel short for something as a result of attending a bilingual high school?</u>

In question 27, the goal was to observe if the CLIL method could have had a negative effect on the students if they felt a certain amount of deficiency in some aspects in their bilingual studies. The numbers are promising. Only 21,1% of respondents felt this certain amount of deficiency. In three cases, the respondents stated concrete examples of the deficiency they have experienced: *"Francúzsky spôsob rozmýšľania je iný, preto majú často ľudia problémy so Scio testami."* containing more of a cultural indisposition, *"menej voľna, vyssie nároky, ťažšia maturita, ucenie sa aj ked ostatni mali voľno"* talking about the lifestyle choices that must go hand in hand with being taught by CLIL method, and "*Prírodovedné predmety sme mali práveže celkom primárne (keďže sme zistili už počas štúdia že naša škola že bilinguale scientifica). Skôr som to cítila napríklad pri informatike, kde sa k nám stavali ako k ľuďom, čo pôjdu asi na humantárne odbory a teda sme toho veľa nemali. Tiež sme mali o polovicu hodín informatiky menej ako slovenská časť školy*" feeling the deficiency in the amount of IT lessons due to general assumption, that further education of graduates will choose humanities programs. 78,9% did not. and one respondent even stated a

concrete example of where they felt a benefit: *"lepšia individuálna volitelnost predmetov"* stating greater individual freedom in choosing subjects.

Q28: Do you feel influenced by bilingual education in your decision-making process concerning subsequent education?

Question number 28 has a quite interesting focus, it aims to seek whether the asked graduates felt influenced by their bilingual studies in the decision concerning their further education. 45,9% of responding graduates did not feel any influence from their CLIL method implementing studies and 54,1% did. The specification in influence varied. On many occasions, respondents stated to be influenced by the scientific orientation of their school or by the institution itself. Different answers stated the influence of concrete professors, or academic environment, or having more options, for example, to study abroad. In some cases, students wanted to maintain the level of their language knowledge and thus chose school supporting this vision. Respondents stated also the awareness of the great influence the school has, that without it they would not have chosen the path they had. We could also find an answer hypothesizing the fact, that without bilingual education, the respondent might not have had the confidence to study medicine.

Q29: Do you feel that bilingual education made you better prepared for university education?

Despite the fact, that in the previous question 45,9% of responding graduates did not feel any influence from their CLIL method implementing studies, when asked if their bilingual studies made them better prepared for university education, only 14,3% of respondents stated no and the remaining 85,7% believe to be better prepared for their further studies thanks to their specified high school education.

Q30: In what way has bilingual education moved you forward, helped you?

Question 30 offers a deeper look into concrete examples of in how the graduates view the CLIL method implementing education has shaped them, helped them, pushed them. This question concluded a great diversity of answers. This time around, there are 0% of answers stating no influence, shaping and help. The recognition of influence was varied and it can be determined that bilingual education, education at an institution implementing CLIL method impacts the individual one aspect. As was determined, undeniable differentiation in responses occured, henceforth the full table of answers is included for finer analysis.

Q31: Do you see yourself as a confident student?

Taking into account the hypothesis, that bilingualism could have a certain amount of influence on the brain, I aimed to analyze if the respondents to my research questionnaire consider themselves confident students. For this particular question, 66,2% of graduates answered yes. On some occasions, paradoxically, quite unconfidently, stating answers like not anymore, or depending on if it is an exam period. 33,8% of asked graduates said no.

Q32: Have you ever faced an academic challenge that you did not believe you could overcome?

In the last question of my research questionnaire, I asked the graduates whether they have ever faced an academic challenge that they did not feel competent enough to overcome, with the intention of broadening the previous question. Despite the previous high percentage in academic confidence, only 22,9% of respondents did not feel as though they have ever faced such a challenge, 14,3% were not able to answer ad 62,9% of respondents gave a positive response regarding ever facing an academic challenge that seemed too challenging.

Conclusions

H 1.1 Less than 50% of graduates attending bilingual schools using CLIL come from bilingual households

Based on the data collected from the questionnaire, H 1.1. was confirmed.

H 1.2 Majority of graduates were supported by their parents in their decision to attend a bilingual school using CLIL

Based on the data collected from the questionnaire, H 1.2 was confirmed. 100% of the responding graduates from bilingual high schools implementing the CLIL method were supported by their parents.

H 2.1 Majority of graduates of bilingual school using CLIL, who decided to study at a university abroad, picked a country where they can use the target language.

Determining from preciously obtained data from survey questionnaire, the H 2.1 was denied. However, the data also show that when choosing program in other than mother tongue, responding graduates in majority chose program in target language.

H 2.2 Majority of graduates of bilingual school using CLIL, who decided to study at a university in Slovakia faced certain difficulties associated with the transition.

Based on the data collected from the questionnaire (see Question 19, 20), H 2.2 was confirmed. The challenges in transition greatly varies (see Table 6) from language barriers to differences in system and contained adjusting to new amount of work as well as new environment, country, town, school, etc.

H 2.3 Majority of graduates of bilingual school using CLIL, feel regression of the target language level abilities since graduating.

Determining from preciously obtained data from survey questionnaire, H 2.3 was confirmed. Collected data also provide variety of steps these responding graduates from CLIL method-implenting high school take to evolve in their language abilities (see Question 23).

H 3.1 Majority of graduates of bilingual school using CLIL, feel influenced in their decision-making process concerning their subsequent university education.

Determining from preciously obtained data from survey questionnaire (see Question 28), H 3.1 was confirmed. The collected data determine variety of positive influneces the bilingual high schools implementing CLIL method do have.

H 3.2 Majority of graduates of bilingual school using CLIL, feel better prepared for their subsequent university education.

Determining from preciously obtained data from survey questionnaire, H 3.2 was confirmed.

H 4 Majority of graduates do not regret attending bilingual high school.

Based on the data collected from the questionnaire, H 4 was confirmed. The collected data prove variety of positives impacts, henceforth the responding graduates are less likely to regret their decision.

Pedagogical implications

Taking into account all gathered information, we can confidently determine, that the CLIL method-implementing education, bilingual education is efficient, broadly favored and successful. Graduates from such school can easily and concretely pinpoint various positive effects of undergoing such an educational process had on them and the benefits not only in academic fields but in daily life.

As is understandable, these studies may also progress into some negative consequences. If I can so bravely propose some ideas as to what can be done to make graduates even more proficient in their further studies, I would suggest these propositions: Offering graduates from bilingual high school extra-curriculum activity during their high school studies, where they would have a chance to encounter specified field terminology before transitioning into Slovak universities, instituting more high-quality university program in foreign languages, so academically gifted individuals would not have the need to go study abroad to undergo highquality education or face possible regression in their foreign language abilities. High school could offer their graduates an association gathering them and giving them time and place to practice their language skills, specifically speaking abilities in form of monthly meaning on their ground. I would also humbly suggest for schools to pay equal attention to all various scientific and humanitarian subjects, so the students would not have to face deficiency in any fields while following their ambition to undergo bilingual education.

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