Application of Modern Technologies in Language Learning

Abstract of the dissertation for the award of the Educational and Scientific Degree “PhD”

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The dissertation consists of 323 pages. The dissertation consists of Introduction, Six Chapters, Conclusion, Appendix, Bibliography.
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I. General characteristics of the dissertation

I.1. Relevance of the Research

In today's global world, the need to use foreign languages is growing steadily. Proficiency in only one foreign language is no longer considered sufficient. The economy is increasingly in need of skilled and capable people. A search in websites offering vacant positions shows that many employers, when hiring new staff, look for a candidate with at least two foreign languages, and often with more. At the same time, according to the National Statistical Institute at the end of 2017 about 2 million people in the country do not use any foreign language\(^1\).

Constant modernization and improvement of foreign language teaching is necessary and inevitable. Nowadays, technology is becoming a mandatory component in the process of learning and teaching languages. Computers, various types of software, Internet access are now an integral part of the educational context in the 21\(^{st}\) century, as are boards, paper and pens. Only through the introduction of modern, rapidly evolving technologies and the use of non-standard teaching methods will today's teachers be able to attract to learning a generation that starts working with smart devices before being able to read.

Like many other areas of modern life, education is orientating towards digitalization day by day. Specialists from different fields of science are joining forces to facilitate the learning of a foreign language. New tools, methods and approaches are sought in the fields of linguistics, methodology, as well as in the fields of computer sciences and modern technologies.

One of the main and strategic goals of the European Union is equal access to quality education for everyone\(^2\). The education and qualification of a nation is an engine for economic growth, innovation as well as personal and social prosperity. It is quite logical then to ask

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\(^1\) Ref. http://www.nsi.bg/bg/content/3537/%D0%BF%D0%BE%D0%BB%D0%B7%D0%B2%D0%B0%D0%BD%D0%B5-%D0%BD%D0%B0-%D1%87%D1%83%D0%B6%D0%B4%D0%B8-%D0%B5%D0%B7%D0%B8%D1%86%D0%B8

ourselves the question: What should those working in the field of education do in order to prepare successful young professionals who are able to learn foreign languages with speed and enviable ease? It is important that foreign language education be directed towards preparation for a successful individual career, which will lead to the desired economic growth in a global aspect.

Internet, personal computer, smartphone, etc. are often considered factors that distract students during the process of learning. However, they are the necessary tools that can facilitate the educational process and lead to a revolution in the education system. That is why it is necessary to integrate and actively use modern computer technologies in the process of learning a foreign language.

Technologies provide a good learning opportunity, which is why schools need to make their use accessible and incorporate them into their practice. One thing is clear: teachers in the 21st century have to deal with situations and issues that their predecessors have never even imagined. New technological tools provide various ways to access and process the information needed to acquire and teach knowledge. Both students and teachers need to acquire the skills and knowledge to meet these new challenges.

I.2. Motivation for the Research

Eurostat data\(^3\) from 2016 show that the most widely used and studied foreign language in Europe is English, and Spanish comes in fourth place. For this reason, learning and mastering these two widely used foreign languages, represented to varying degrees in the secondary level of education in Bulgaria, is of great interest. Difficulties in learning both languages can be overcome by providing clear and accurate language rules and comparing their implementation in different languages.

Statistics show that more and more students are trying to learn or at least start learning more than one foreign language. Data for Bulgaria show that the percentage of learners of at

\(^3\) https://ec.europa.eu/eurostat/statistics-explained/pdfscache/1151.pdf
least two languages in 2016 is higher than that percentage in 2011\textsuperscript{4}. Regardless of whether they live in Bulgaria, in another country – a member of the European Union, or elsewhere, a lot of people study English, Spanish and Bulgarian as foreign languages. Finding and indicating clear grammatical parallels between these languages would contribute to more efficient and rapid acquisition.

Learning Bulgarian as a foreign language is also a difficult task for people who are not native speakers. A clear presentation of parallels and connections between Bulgarian, English and Spanish would contribute to the increasing number of people who successfully learn Bulgarian as a foreign language.

Until recently, there was not an international certificate in Bulgarian language like Cambridge, TOEFL\textsuperscript{5}, DELE\textsuperscript{6} to certify the knowledge of the Bulgarian language. In order to increase the influence of the Bulgarian language and to ensure its development on a global scale, the Ministry of Education and Science and the Department for Language Teaching and International Students at Sofia University “St. Kliment Ohridski” created a regulation for examinations in Bulgarian language\textsuperscript{7}. Thus, Bulgarian communities living out of their country have the opportunity to certify their proficiency in the Bulgarian language according to the Common European Framework of Reference for Languages. This certificate is already recognized in the United States of America (as of August 2020), and also brings benefits to people who want to continue their education both in the country they live in and in Bulgaria as well.

Another reason for teaching and learning the Bulgarian language is the fact that in the last census in Bulgaria, conducted in 2011, a significant percentage of people do not indicate Bulgarian as their native language. Bulgarian was the native language for 85.2% of the population, Turkish – for 9.1%, and Romani – for 4.2%\textsuperscript{8}.

About 11% of the students in Bulgaria who took part in the PISA\textsuperscript{9} survey in 2009 said they did not speak Bulgarian at home. A possible solution to the problem is to increase the number of Bulgarian language classes at school for students with insufficient language

\textsuperscript{5}TOEFL – Test of English as a Foreign Language
\textsuperscript{6}DELE – Diploma de Español como Lengua Extranjera
\textsuperscript{7}https://www.mon.bg/bg/100605
\textsuperscript{8}http://www.nsi.bg/census2011/NPDOS/Census2011final.pdf
\textsuperscript{9}PISA – Programme for International Student Assessment
proficiency, in order to acquire the necessary language skills for active participation in public life (Koeva, 2017).

Another reason for the present research is the fact that in the process of preparing the dissertation no literature has been found which synthesizes the general characteristics of the temporal systems in Bulgarian, English and Spanish, as well as the experience of teaching and learning them using computer technologies.

Computer technologies provide modern tools for teaching and learning a foreign language. They diversify the learning process and lead to increased attention from learners, which undoubtedly develops their potential. In the current years of significant reforms in the Bulgarian educational system and challenges for improving teaching methods, the active use of modern technologies needs to become a leading and constant pedagogical practice in (foreign) language teaching.

I.3. Object of the Research

The present dissertation has the following object of research: enrichment and optimization of foreign language teaching methods through the application of modern technologies in foreign language teaching. The object of research includes both existing methods for foreign language learning and opportunities for the integration of various modern technologies that will lead to faster and adequate learning of the foreign language, including Bulgarian as a foreign language.

I.4. Subject of the Research

The application of modern technologies for enrichment and optimization of foreign language teaching methods is considered in terms of the interaction of the following components:
The subject of research is the methods for foreign language learning and their synchronous use with modern technologies, as well as the ways in which modern technologies upgrade (foreign) language learning and contribute to faster and more efficient learning.

The research focuses on the temporal systems of Bulgarian, English and Spanish (limited to indicative mood) and the interlingual correspondence in conveying the meaning of the grammatical categories.

The study has researched the attitudes of the first class of students, taught under the guidelines of the new curriculum of the Ministry of Education and Science in Bulgarian schools, to computer-assisted language learning, including mobile devices and Internet technologies, as well as the knowledge of those students, who are native speakers of Bulgarian language and study English or Spanish as a foreign language, for translation from Bulgarian to Spanish and from Bulgarian to English of the temporal categories in indicative mood in the three languages.

I.5. Objectives and Tasks

The main objective this research has is to show the possibilities of modern technologies for increasing the efficiency of (foreign) language learning.

Language learning is seen as learning Bulgarian language (as a foreign language or as different from the native language), as well as learning a foreign language, with the focus of the research being foreign language learning. Increased efficiency means faster and more efficient acquisition of knowledge as a result of the application of more effective methods for teaching and presenting interlingual correlation at lexical, grammatical and semantic level.

The achievement of the main objective is approached comprehensively through the following more specific goals:

- presentation of (part of) the possibilities of modern technologies for effective language learning;
- analysis of students’ motivations and opportunities to use modern technologies in the learning process;
o comparative analysis of main methods for foreign language teaching with a focus on the possible application of modern technologies to develop their strengths and reduce the perceived shortcomings;

o systematic presentation of (consistent) rules for interlingual transfer of the temporal systems in Bulgarian, English and Spanish (general meaning of the categories and correspondence of the forms);

o systematic presentation of (consistent) rules for interlingual transfer of the uses of the temporal categories in Bulgarian, English and Spanish (within the general and the transpositional meanings of the categories);

o application of contemporary methods for analysis and evaluation of acquired knowledge for interlingual transfer at grammatical and semantic level.

The presentation of (part of) the possibilities of modern technologies for effective language learning requires the implementation of the following tasks:

o analysis of the role of modern computer technologies in the process of foreign language learning;

o description of the ways of application of modern technologies in language learning: computer-assisted language learning, internet technologies, mobile devices in foreign language learning.

The analysis of students’ motivations and opportunities to use modern technologies in the learning process requires the implementation of the following tasks:

o formulation of a concept for conducting a survey aimed at the attitudes of students towards the application of modern technologies in education: target group, construction of questions and possible answers;

o organizing and conducting the survey;

o processing of the obtained data and analysis of the attitudes of the students to modern technologies in language teaching.

The following tasks are expected to be performed during the presentation and the comparative analysis of major methods for foreign language teaching:

o description and comparison of foreign language teaching methods which are widespread;
- assessment of the positive and negative characteristics of each of the presented methods from the point of view of modern teaching;

- presentation of appropriate modern technologies, applications and specific examples of teaching or testing materials that can enrich the positive aspects of the methods presented.

The systematic presentation of (consistent) rules for interlingual transfer of the temporal systems in Bulgarian, English and Spanish (general meaning of the categories and correspondence of the forms) requires the implementation of the following tasks:

- presenting the forms and the general meaning in the use of the present, past and future tenses in indicative mood in the modern Bulgarian, English and Spanish languages;

- indicating clearly formulated correspondences in the three languages between the forms when used in their general meaning.

The systematic presentation of (consistent) rules for interlingual transfer of the uses of the temporal categories in Bulgarian, English and Spanish (within the general and the transpositional meanings of the categories) requires the implementation of the following tasks:

- presentation of different cases of use within the general meaning of the temporal categories in Bulgarian, English and Spanish;

- presentation of the transpositional use of the temporal categories in Bulgarian, English and Spanish;

- derivation of (consistent) rules for transfer of semantic information within the use of temporal categories from Bulgarian to English and from Bulgarian to Spanish.

The following tasks have been implemented in order to demonstrate the application of modern methods for analysis of acquired knowledge for interlingual transfer at grammatical and semantic level:

- formulation of a concept for conducting the pedagogical experiment: target group, target grammatical categories, compiling the questions of the research;

- organizing and conducting the pedagogical experiment;

- analysis of the results of the experiment.
In the future the results of the research could influence the improvement of the methodology for the simultaneous teaching and learning of two, three or more foreign languages. The conclusions can serve as a basis for the development of a new type of software or language applications for various types of smart devices.

As a result of the work on the dissertation the characteristic features of the temporal systems of the three languages are systematized. The main options for translation of the temporal forms among the three languages (Bulgarian, English and Spanish) are indicated. An experiment consisting of sentences in Bulgarian is conducted; each sentence is accompanied by variants for translation into English or Spanish which differ only in the temporal forms used.

The target groups are students – representatives of two language high schools, who are the first class to be taught under the guidelines of the new foreign language curriculum in Bulgaria (2019). The first group consists of students whose native language is Bulgarian and study English as a foreign language, and the second group consists of students whose native language is Bulgarian and study Spanish as a foreign language. Conclusions are derived based upon the answers chosen by the respondents about the mastery of the temporal system in indicative mood in the foreign language and the correct application of the learning material studied.

I.6. Methods

Various modern methods, classifications and description criteria used in contemporary linguistic research have been applied to build the concept of the dissertation. The research is based on descriptive, analytical, tabular and graphical way of working. Electronic resources and reference literature have been studied systematically. The methods used include synthesis and comparison.

Through synchronous comparative analysis we answer the question: “What are the correspondences in the temporal systems in indicative mood in Bulgarian, English and Spanish and what are the modern methods for their more effective acquisition with the help of computer technologies?”. The characteristic features of the temporal systems in the three languages are systematized. The main variants of a given temporal form in Bulgarian translated
into the other two languages are indicated. The conclusions are based on the presented theoretical material, which is supported and substantiated by numerous linguistic data and examples, in connection with the practical orientation of the dissertation.

Statistical methods of research are also applied in the dissertation. The answers to the tests are analyzed in order to draw conclusions about the correct application of the use of temporal systems in English and Spanish from the point of view of foreign language learning. Fisher’s test is used for proportional comparison of correct and incorrect answers, and the data are processed with statistical programs.


I.7. Structure of the Dissertation

The scientific research consists of six separate chapters.

First chapter – Modern Technologies and Their Role in (Foreign) Language Learning in the 21st Century – presents language and computer as two separate and complementary communication systems. Computer technologies and the ways they influence foreign language learning are studied. Special attention is paid to computer-assisted language learning, mobile-assisted language learning and internet technologies which support language learning.

Second chapter – Attitudes of Students towards the Use of Technologies in Language Learning – presents and analyzes the data and the results of a survey conducted among ninth-graders, the main purpose of which is to collect information on the use of technologies, in particular smartphones, in the process of language learning.
Third chapter – *Foreign Language Teaching Methods until the 21st Century and Their Upgrading with the Possibilities Provided by Modern Technologies* – provides an overview of foreign language learning in Bulgaria and the main methods that have had a lasting impact on language learning. The chapter describes how these methods continue to exist nowadays and how they can be used at present in teaching, upgraded by modern technologies.

Fourth chapter – *Temporal Systems in Bulgarian, English and Spanish. Rules for Formation and Interlingual Transfer* – classifies according to different criteria the present, the past and the future forms in indicative mood in the three listed languages. A general definition is given for each of the temporal categories and the system for their formation is described. Rules for transferring the temporal systems are derived in terms of their general meaning and the correspondence of the verb forms in its transmission.

Fifth chapter – *Main, Transpositional and Modal Use of Temporal Categories in Bulgarian, English and Spanish* – presents comparatively and analytically the transpositional uses of the temporal categories, supported by many examples. Correspondences are derived and consistent rules for interlingual transfer of the transpositional uses of the temporal categories are generated. By consistent rules is meant a transfer which is true for each case considered in the scientific research.

Sixth chapter – *Application of Modern Technologies in Assessing the Degree of Acquiring the Interlingual Transfer of Temporal Forms in Bulgarian, English and Spanish* – presents and analyzes the data and the results of a test study. The aim is for the respondents to indicate the correct translation of the respective sentence in Bulgarian, as the possible answer options differ in verb tenses: their forms and uses. The results are analyzed and presented in a descriptive, tabular and graphical manner.
II. Chapter One

Modern Technologies and Their Role in (Foreign) Language Learning in the 21st Century

II.1. Language and Computer

It is known that computers have entered all areas of life in the 20th century and especially in the 21st century. We can no longer imagine performing any activity without the use of information and communication technologies.

Language is an integral part of our daily lives and we often take it for granted. It is inseparably linked to our ability to think, to express feelings and emotions, to communicate with each other. The linguist studies language in many ways – linguistics is a complex science characterized by different forms and aspects.

Natural language is a term used to define human language – for example Bulgarian, English, Spanish, and computer languages are called formal languages, for instance Java and C++ (Kumar, 2012: 1).

Computer processing of natural language is directly related to the development of methods for dealing with practical problems related to language – algorithms, data structures, formal models for the presentation of knowledge and others. Some of the main tasks of this processing are – information retrieval, speech recognition, text-to-speech, automatic character recognition, machine translation, etc.

Nowadays, in order to communicate with a computer, it is usually necessary to submit information in a formal language (which is invisible to users), but if we learn to use natural language, we will facilitate the process of communication with computers and thus they will become more accessible for the user.

In fact, an analogy can be made between the functions of the human brain and the functions of the computer itself. We could roughly compare the human brain to computer
hardware and the human language to computer software. This determines the crucial importance of computer literacy for linguists and for anyone wishing to master a language.

In order to further develop the process of language teaching, it is essential to establish language rules, dependencies and exceptions. They need to be described accurately and consistently, which would make them not only easy and clear to teach, but also to study.

II.2. Computer Technologies and Foreign Language Learning

Information and communication technologies are actively entering language learning, thus becoming an essential element of the learning environment. The wide variety of literature intended for foreign language teachers shows that the computer is the subject of many scientific articles, conferences and publications of various types.

However, the ability to use technical advances does not always correspond to the ability to integrate them into teaching and learning a (foreign) language. Sometimes students have greater technical knowledge than teachers and use computer technologies more skillfully. The teachers in the country should not be limited to using only one method. Today’s students have grown up in the midst of modern technologies. Some researchers call them “digital natives” because they speak the “language” of computers as natives.

The term “digital natives” was coined by M. Prenksy (2001, 1 – 6) to describe people, raised in the age of computers and the internet, opposing it to the term “digital immigrants”, which describes those who embrace new technologies later in their life. The idea of “digital natives” is connected with the role of new technologies in teaching. Teaching without technologies is close to a situation in which learners operate in an unfamiliar language environment, which would set them up to failure (Miller, 2014: 50 – 51).

Because of all this, the creators of new technologies in the field of education are looking for new methods to connect the educational environment with the Internet.

In their work on language and technologies, M. Levy and P. Moore (2017: 19 – 34) conclude that: “The idea of using technologies [...] is important to justify and enrich the learning experience. Blended learning, flipped learning and mobile learning require the necessary
knowledge in technologies so as to be effective and meet expectations [...]. [...] There is no doubt that research in the field of machine translation, augmented reality, speech recognition, artificial intelligence and others will affect our purposes in various ways.”

II.3. Computer-Assisted Language Learning

The practice of using technologies in language learning dates back to the 1960s, known as Computer-Assisted Language Learning. According to K. Beatty (2010: 20), the first computer-based language learning programs created at three universities: Stanford University, Dartmouth University, and the University of Essex, focused on teaching Russian, although they encompassed other languages later, too.

According to a report of the National Statistical Institute (2017: 2) – *Osnovni rezultati ot ızsledvaneto na informatsionnoto obshtestvo v domakinstvata prez 2017 godina* – most active users of computers are young people aged 16 to 24, respectively 82.8% and 88.1% of them use computer or internet every day or at least once a week. This fact lies at the basis of one of the tasks in the dissertation – to study the attitudes of high school students towards the use of modern technologies in the educational process.

II.4. Internet Technologies in Language Learning

At the end of the 20th century, computer-assisted language learning was considered an important pedagogical method. This, together with the advent of the Internet, allows to create and update various web pages. Web 1.0 tools are static in their content, and users are viewers of that content (such as news websites).

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10 Computer-Assisted Language Learning (CALL).
The advent of Web 2.0 tools allows users without any programming skills to create learning resources, which in turn inevitably leads to new methods and approaches that use technologies and integrate them into foreign language learning.

While Web 2.0 technologies focus primarily on humans, Web 3.0 technologies focus on the intelligent connection between humans and machines.

There are opinions that Web 4.0 technologies or “the Intelligent Web” will develop between 2020 and 2030 and that it will be as intelligent as the human brain. At the moment, the network is “emotionally” neutral, which means that the network does not perceive people's feelings and emotions. With Web 5.0 technologies, however, interaction will become a daily habit for many people based on neural technologies. Scientists believe that this network will communicate with us just like we communicate with each other, therefore, they call it “The Symbionet Web”.

II.5. Mobile-Assisted Language Learning

Mobile-Assisted Language Learning is the successor to computer-assisted language learning. A 2015 survey shows that more than 75% of American teenagers have regular personal access to a mobile device connected to the Internet, and 68% of these 75% use the Internet every day.

The present situation in our country is similar to that in America. Information from 2017 of the National Statistical Institute (2017: 1) shows that over 67% of the households in Bulgaria have Internet access, which can be done through various types of devices – such as a desktop computer, a laptop, a tablet, a mobile phone or a smartphone, a game console, a smart TV, an e-book reader, etc.

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12 https://carikesocial.wordpress.com/2017/03/15/the-world-wide-web-from-web-1-0-to-web-5-0/
13 https://flatworldbusiness.wordpress.com/flat-education/previously/web-1-0-vs-web-2-0-vs-web-3-0-a-bird-eye-on-the-definition/
14 Mobile-Assisted Language Learning (MALL)
According to an article by Yu. Arnaudov from 2019, which is based on a survey of the mobile operator Telenor among users of mobile services in 2018\textsuperscript{17}, the number of smartphone owners in the country has doubled in the last five years. It also states that young people between the ages of 15 and 25 are most active in online communication via their smartphones, 91\% of the children between the ages of 7 and 14 have a mobile phone, 88\% of them have a smartphone, and nearly two-thirds use these devices to access the Internet.

A lot of publishers of foreign language learning aids develop applications for smartphones, e-textbooks and notebooks, whose content can be downloaded to the mobile device of each student.

Computer applications are becoming more compact and more mobile. It is said that the mass use of mobile devices (mobile phones, compact portable computers) makes (web-based) language applications even more attractive to a large number of users (Koeva, 2009: 54 – 75). Nowadays, students are computer literate from an early age, as they grow up in an environment where digital technology surrounds them. For these reasons, portable devices are now becoming a popular means of learning and teaching for those who are willing to experiment. It can be argued that mobile devices bring interactivity and dynamics into the classroom and are a modern technology tool, which would decrease the distance between the digital generation and the previous generations and would improve the learning and teaching process.

\textsuperscript{17} Ref. https://www.techtrends.bg/2019/02/22/telenor-smartphone-penetration-bg-2018/
III. Chapter Two

Attitudes of Students towards the Use of Technologies in Language Learning

III.1. Brief Description of the Scientific Research

According to the new foreign language curriculum for Bulgarian schools, introduced by the Ministry of Education and Science\(^1\), in the first high school stage of general education at the end of X grade students have to have reached level B1\(^1\) of acquisition of a foreign language according to the Common European Framework of Reference for Languages\(^2\). For the first year (2020) there will be an external assessment of the level of foreign language acquisition after the tenth grade. Through it, students will be able to obtain for free a certificate of foreign language proficiency at a certain level, which until now they had to pay for.

At the end of the 2018 – 2019 school year, a survey was conducted among the first class of ninth-graders studying under the new curriculum of the Ministry of Education and Science. The students are representatives of two language high schools in Plovdiv. The first group are students whose native language is Bulgarian and study English as a foreign language at Plovdiv Language High School. The other group of students speak Bulgarian as a native language and study Spanish as a foreign language at Ivan Vazov Language High School in Plovdiv.

Modern technologies have been used to carry out the research. The target group was asked to fill in the forms voluntarily and anonymously via their smartphones. The choice of smartphones is due to the fact that most Bulgarian students own one, while schools do not provide a computer, a laptop or a tablet for individual work in class yet. It should be taken into

\(^{18}\) https://www.mon.bg/bg/1698
\(^{19}\) https://rm.coe.int/CoERMPublicCommonSearchServices/DisplayDCTMContent?documentId=090000168045bb6b
account that the Bulgarian school is not sufficiently digitalized and Internet access is not guaranteed everywhere.

The purpose of the survey was to assess the motivation of students in foreign language classes, to obtain information which area of learning English or Spanish poses the greatest difficulties – reading, writing, listening, speaking, grammar, vocabulary, and what is the reason for learning the respective foreign language. The main task of the survey was to evaluate the attitudes of current students in Bulgaria towards the use of technologies in foreign language classes, how often they are online, for what purpose, and whether they think technologies can help them learn a foreign language.

III.2. Contents of the Research

The survey consists of a questionnaire that contains nine questions to the respondent. The survey is the same for both target groups. The main purpose of the questions is to gather information on the effectiveness of foreign language learning with the use of technologies, in particular smartphones. The survey begins with general questions and gradually moves onto more specific ones related to the purpose of the survey.

The first question is about the gender of the respondent – male or female. The second question is: “Why do you study a foreign language?” Here, respondents indicate their own answer as the question is open. The third question is: “Do you feel motivated in foreign language classes?” Three answers are suggested here – yes, a little and no. The fourth question “Which of the following areas of language learning do you find most difficult and problematic?” allows the students to choose among six answers: reading, writing, listening, speaking, grammar and vocabulary. The fifth question: “When are you online?”, suggests four possible answers – always, often, rarely and never. The sixth question to the respondents is: “Do you use a smartphone in class?”. In case their answer is affirmative, with the answer to the seventh question: “For what purpose?” students are expected to indicate the appropriate reason for using a smartphone in class. The eighth question: “What is your opinion about the use of technology in class as a tool for learning and teaching a foreign language?” offers three suggested choices: 1) Technology is
essential for learning a foreign language; 2) Technology could help learn a foreign language; 3) I don’t think technology can help learn a foreign language. The ninth question is about self-assessment of the level of knowledge of the respective foreign language by the respondent: “How do you assess your knowledge of English/Spanish?”. There are five suggested choices which correspond to the marks in the Bulgarian educational system – Excellent (6), Very good (5), Good (4), Average (3), Poor (2).

III.3. Data Analysis Methods

The survey includes quantitative and qualitative data. Quantitative data are nominal or ordinal variables and are presented in number and percentages. Fisher’s exact test is used to establish dominant trends, according to the formula (Eddington, 2016):

\[
p = \frac{(a + b)!(c + d)!(a + c)!(b + d)!}{a!b!c!d!N!}
\]

where a, b, c, d are individual observations;
N is the total number of observations;
! is factorial.

The results are interpreted as statistically significant at an acceptable level of error \( \alpha = 0.05 \) (\( p < 0.05 \)) of high statistical significance at \( \alpha = 0.01 \) (\( p < 0.01 \)).

The data are processed with statistical programs IBM SPSS\(^{21}\), version 26 (2018) and Minitab\(^{22}\) version 18.1 (2017), where SPSS is the main program for analysis, and Minitab is used to analyze summarized data. The choice of statistical methods is made according to the type of

\(^{21}\) https://www.ibm.com/analytics/spss-statistics-software
\(^{22}\) https://www.minitab.com/en-us/
data, the distribution of variables and the main purpose of the scientific research (Ganeva, 2016: 97 – 124).

III.4. Results of the Survey

The author endeavours to encompass a similar percentage of participants of the studied foreign language – 60% with English and 40% with Spanish (the survey was completed by 130 students). The gender ratio is also approximately similar. In the Spanish language group men are 53%, and women – 47%, and in the English language group, the ratio between men and women is 50% : 50%. This way, the collected and analyzed data are comparable for both foreign languages as well as for both genders.

The analysis of the question “Why do you study a foreign language?” shows that in one-third of the answers of all respondents it is indicated that knowing a foreign language provides an opportunity for a better future and helps to achieve the set goals for personal and professional development. Another 6% of the respondents merely like the foreign language they are learning. Taken together, these results represent a significant percentage of the respondents’ responses. These motivations should be used by foreign language teachers to encourage active learning.

According to the data of the survey (16.4% of all participants), the reason why a foreign language is studied is that it is a means of communication with different cultures. About 10% of all students who participated in the survey are motivated to learn a foreign language in order to continue living or studying outside of Bulgaria, which is undoubtedly a factor that should be taken into account.

An equal percentage of the respondents in the survey (8%) expressed their desire to acquire a foreign language by way of relief and because of its worldwide popularity. Definitely the popularity of (foreign) language learning, as well as the dynamically developing world, contribute to this percentage of young people’s responses. The percentage of participants who indicate unclear reason and chance as the reason for learning a foreign language is negligible. They will probably realize the richness of foreign languages in the future.
The results of the third question in the survey (Do you feel motivated in foreign language classes?) prove that the students who took part in the study were motivated in class. In the Spanish language group 60% give a positive answer, and in the English language group the percentage is even higher – 80%. This undoubtedly facilitates the work of their teachers and provides an opportunity to upgrade and improve knowledge and skills in the foreign language. As for the poorly motivated, personalized training can be recommended, in accordance with the personal interest and motivation of the student.

The analysis of the fourth question “Which of the following areas of language learning do you find most difficult and problematic?” indicates that both groups have a relatively equal percentage of difficulty in acquiring the receptive skills – reading and listening. Probably due to the fact that learning a foreign language begins with its lexical system, a similar percentage of respondents from the two target groups indicate vocabulary as a problematic area. It is interesting to note that a larger percentage difference is observed in the acquisition of productive skills – writing and speaking. Almost half of the respondents with Spanish language indicate that they have the greatest difficulties with grammar, while in the English language group, they are only one-fifth of all who took part in the survey. It is recommended that teachers of the respective foreign language should improve the quality of teaching, using modern technologies suitable for improving each of the problematic areas so as to improve the results of the acquisition of grammar in Spanish, as well as speaking and writing in English.

The fifth question: “When are you online?” is asked with the purpose to assess how much time the target groups spend on the internet. In confirmation of the preliminary expectations, the answers always and often reach the highest percentage, because the virtual environment is preferred, familiar and accessible to contemporary students. This proves that foreign language learning should not avoid this environment, but make the most of its opportunities.

The next two questions – №6 (Do you use a smartphone in class?) and №7 (For what purpose?) – are connected with the use of smartphones. In the English language group 58 out of 78 respondents answered positively to the first question, and in the Spanish language group they were 44 out of 52 people. Smartphones and other devices, such as tablets and laptops, are an essential element of the foreign language learning process.

Almost all participants in the study share the opinion that technology could help or is essential for learning a foreign language. The research conducted in the second half of the 2018/2019 school year shows the key role of modern technologies in education, which was put in practice in 2020, when the learning process was conducted online.
IV. Chapter Three

Foreign Language Teaching Methods until the 21st Century and Their Upgrading with the Possibilities Provided by Modern Technologies

The purpose of this chapter is not to provide a complete and detailed overview of all methods used in practice. The aim is to show how different methods continue to adapt and be used in teaching today, upgraded by modern technologies. The methods considered to be the most common and for which there is sufficient and reliable information are presented. Each of them is characterized by its specific features.

Learning a language (native or foreign) involves the application of appropriate and functional methods. Language teaching is a complex activity aimed at acquiring a diverse set of skills and competences (Hadzhieva and Manova, 2020: 21). Over time, various training methods have been proposed and put into practice. One of the few cases of language learning in recent history where technological advances have significantly influenced methodological development is the publication of Visible World in Pictures (Orbius sensualium pictus) by J. A. Comenius, the first fully developed program for teaching vocabulary with pictures (Kenning, 2007: 144).

The endeavour to develop a scientific approach to how a language should be taught is not recent. Over the years, the requirements for foreign language learning have changed, and with them comes the need for new teaching methods and ways to successfully acquire knowledge and skills. As T. Angelova (2004) argues, what is important to look for is “how the new enriches the tradition without erasing it, how the new continues to develop and contributes to qualitatively changed learning.”

In today’s dynamic digital world, modern technologies have an extremely active application in foreign language teaching. According to H. Reinders, it is important to distinguish between “how a computer program works and how to use it in educational context” (Reinders, 2009: 231). Nowadays, the search for an effective formula for teaching a foreign language continues to evolve.
The following methods are successively presented in the dissertation: Grammar-Translation Method; Direct Method; Audiolingual Method; Audiovisual Method; Communicative Approach; Silent Way; Total Physical Response; Community Language Learning; Suggestopedia; Natural Approach. They are analyzed in terms of the possibility to combine with modern language technologies and methods of teaching a foreign language, meeting modern conditions.

IV.1. Grammar-Translation Method

The grammar-translation method was developed in Europe for the purposes of teaching foreign languages at high school. Also known as the grammatical method, the synthetic method, the classical method, and in the United States as the Prussian method, the grammar-translation method dates back to the Middle Ages. It is one of the oldest and most commonly used methods. G. Tangier is considered its main representative.

The grammar-translation method is a specific way of learning a foreign language by detailed analysis of its grammatical rules, followed by their application in the translation of sentences and texts from and into the target language.

The main method for studying grammar is the deductive method. “The inductive method presupposes the movement of thought from the particular to the general. It mainly produces productive skills [...]. The deductive method presupposes the movement of thought from the general to the particular. It is used mainly for the formation of perceptive skills [...]” (Penkova, 2013: 136). Students learn grammatical paradigms, morphological and syntactic rules. There are short grammar sections, each of which contains grammatical rules of the studied language, illustrated by examples (Stern, 1991: 454). Students are expected to memorize the rules and to apply them in exercises.

In the grammar-translation method, special attention is paid not only to grammar but also to vocabulary. Vocabulary acquisition is mainly based on the texts used for reading and the words are often grouped in bilingual lists – in the target language and in the native language, i.e. the main way to indicate the meaning of words is their translation.
In Bulgaria between the 1950s and the 1970s the grammar-translation method is the main teaching method. The English textbook for the preparatory class of language schools, used from 1959 to 1975, fully follows the tradition of the grammar-translation method (Shopov, 2005: 38 – 39).

Some of the drawbacks of the grammar-translation method are: practical acquisition of the language is not achieved, but only the acquisition of the formal structure and the grammatical rules; not much attention is paid to the ability to speak; no attention is paid to listening to a foreign language speech; efforts to learn a foreign language are mainly focused on the development of reading and writing skills; minimal attention is paid to phonetics and pronunciation; students do not use the foreign language on a communicative level.

Some effective modern applications for presenting content that can be used to increase the efficiency of the grammar-translation method are: Zoho Show23; Prezi24; Microsoft Sway25; Adobe Spark26; Swipe27.

IV.2. Direct Method

The very name of the method shows that the foreign language is taught directly, without the intervention of the native language. Teachers strive to teach a foreign language in ways that resemble the acquisition of the native language. Students build a new language system and do not compare it with that of their native language, because in the direct method the main focus is on the practical application of foreign language acquisition.

The method originated in France and Germany and was founded by M. Berlitz. G. Noyner and H. Hunfeld (1996: 36 – 46) summarise some of the features, which are included thanks to the reform pedagogy, in the didactic-methodological concept of the direct method, thus: discovery learning by stimulating the independence of the student; emphasis on overall

23 https://www.zoho.com/show/
24 https://prezi.com/
25 https://sway.office.com/
26 https://spark.adobe.com/
27 https://www.swipe.to/
education; a new understanding of the teaches’ role: they are partners in the learning process; new forms of training: work in pairs, group work for mutual problem solving and others.

Proponents of the direct method are of the opinion that learning a foreign language has much in common with learning the native language, i.e. the more the learner is exposed to the influence of the foreign language, the more the possibility for the foreign language to be acquired increases. Just as a child's parents create a language environment for learning the native language at home, teachers must create such a language environment for learning a foreign language in the classroom.

When the teacher introduces a new word or an expression in the foreign language, he presents its meaning through images, demonstrations, synonyms, but never translates them into the native language of the learners. Students actively use the target language and communicate as if they are in a real situation. Therefore, while teaching through the direct method, language acquisition is carried out on the basis of practical situational models.

The practical application of the direct method is aimed at acquiring and consolidating mainly the vocabulary that is used in everyday life. Grammar is taught inductively, not in a systematic way. Students become familiar with examples and from them logically derive the rules of the studied foreign language.

Some of the main advantages of the direct method are: emphasis on communicative skills and other practical aspects (e.g. reading and listening) related to learning a foreign language, as learners produce utterances directly in the foreign language (without the influence of the native language); students understand spoken language and have good pronunciation.

IV.3. Audiolingual Method

The audiolingual method originated in the 1940s and 1950s in the United States, developed by professors at the University of Michigan (Fries, 1945; Lado, 1964).

Unlike the direct method, the audiolingual method is related not only to linguistics but also to psychology, and at a later stage of its development it also includes principles from behavioural psychology – behaviourism. Therefore, the development and formation of the
The audiolingual method is determined by the combination of structural-linguistic models, contrastive analysis, auditory-pronunciation techniques, as well as behavioural psychology. The audiolingual method incorporates a significant number of the characteristics of the direct method, enriching the idea of teaching “linguistic models” in combination with “formation of habits”.

Students imitate their teacher or the recordings he/she provides. They pronounce and repeat many times after the speaker pre-prepared phrases and short dialogues until their full automation, which is one of the new learning techniques introduced by the audiolingual method (Stern, 1991: 464). “Memorizing a dialogue is greatly facilitated when the student is aware of the functional units, such as subject, predicate, direct object, [...], of the utterance” (Quilter, 1966: 13).

The audiolingual method is actively used in the creation of many foreign language textbooks. In the middle of the 20th century, The American Council of Learned Societies produced textbooks in English for native speakers. They contain short excerpts for reading in English (the foreign language), preceded by a list of words. Grammar rules are not given separately from the texts. In his article Predimstva i nedostatatsi na audiolingvalnoto obuchenie, from 1966, D. Quilter writes “the student learns best when he discovers on his own and derives greater benefit from formal grammar analysis” (Quilter, 1966: 7).

In the audiolingual method, four language skills are distinguished, and learning the language happens by acquiring them in the following sequence – listening, speaking, reading and writing.

Some modern applications that could be used for active listening by (foreign) language learners using the audiolingual method are: Audible28; Google Play Books29.

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28 https://www.audible.com/
IV.4. Audiovisual Method

The audiovisual method was developed in France in the 1950s at the same time as the audiolingual method was developed in the United States, but was not influenced by American works (Noyner and Hunfeld, 1996: 63 – 75). P. Rivenk and P. Guberina from the University of Zagreb are considered its creators.

In its essence, the audiovisual method is a method of teaching oral speech in a foreign language and is based on the effective use of means for visual and auditory visualization of the taught content.

G. Noyner and H. Hunfeld claim that pictures are also used in the introduction of new knowledge, in exercises and in the transfer of language material (1996: 63 – 75). Acoustic and visual material are presented simultaneously and this is the essential difference between the audiolingual and the audiovisual method.

In the 1960s and 1970s, technical resources began to be actively used in language teaching. This leads to a skillful combination of sound and picture and gives much better results in learning a foreign language. H. Stern (1991: 468) states that “the direct method replaces the printed text with a script, presented visually by a film tape and acoustically – by a corresponding recording, which introduces a new alternative in language pedagogy. At that time with the introduction of the new technologies, foreign language teaching was enriched.

Based on the concept of F. de Saussure, proponents of the audiovisual method define communication as an object of foreign language learning. Inevitably, there is a significant change in the learning systems and aids used in foreign language teaching. They are beginning to be practically orientated and place significant emphasis on speaking skills and oral communication from the very first pages.

Teachers of a (foreign) language can use: comics or graphic novels, picture books, newspapers, brochures, posters, presentations, e-books, social media posts, movies, animation, websites, advertisements, documentaries, music videos, etc. The following applications that can
upgrade the audiovisual method can be offered to modern teachers experimenting with new information technologies: Stop Motion Studio\textsuperscript{30}; Educreations\textsuperscript{31}; Pixton\textsuperscript{32}.

IV.5. Communicative Approach

The communicative approach was developed in the 1970s. It was first used in the UK and later developed throughout Europe in the 1970s and 1980s. This method is based on the concept that meaning is determined by the social context in which a language is used. The main goal of the communicative approach is for students to learn how to use a language in real life situations in a way that is not only correct, but also appropriate for the relevant social context. As a natural consequence of this, methodologists are beginning to pay attention to the objectives and the needs that determine the learning of a foreign language.

Some of the principles of the communicative approach, summarized by M. Finocchiaro и C. Brumfit (1983: 91 – 93), are: context is very important for conveying and understanding meaning; the purpose of language learning is communication; decent pronunciation is sought; communication attempts are encouraged from the very beginning of the process of learning a foreign language; the use of the native language is acceptable if necessary; translation is used if students benefit from it; the linguistic system of the foreign language is best learned in communication attempts.

The change that the communicative approach introduces is the knowledge in the process of foreign language learning is transmitted and acquired on the basis of a semantically based and not of a structurally based system, i.e. what is sought in the message is its meaning, not its linguistic structure.

Mastering a language is a process accompanied by mistakes. Therefore, students have the freedom to assess the new knowledge they acquire. According to the concept of the communicative approach, making mistakes is part of the learning process.

\textsuperscript{30} https://play.google.com/store/apps/details?id=com.cateater.stopmotionstudio
\textsuperscript{31} https://www.educreations.com/
\textsuperscript{32} https://www.pixton.com/
IV.6. Silent Way

The silent method is believed to have originated in 1972. The method bears the name *silent way* because teachers seek to limit their speech and aim to activate the speaking skill in the students themselves. C. Gattegno, the one who introduced the silent way, considers that “to teach means to serve the learning process, not to dominate it” (Larsen-Freeman, 2000: 52 – 53).

Learning a language by means of the silent way begins with sounds which are presented with the help of the so-called coloured boards or as they are still known in the Bulgarian methodological literature – Gattegno’s sound-colour charts. Relying on the sounds that students already know thanks to their native language, teachers focus on associating foreign language sounds with colour-coded phonemes from certain lexical items. At a later stage, the same colours are used to help students learn the spelling that corresponds to each sound, the correct reading and pronunciation of the words.

Another aid that is introduced by the silent way are the Cuisenaire’s rods (coloured wooden blocks). The teacher creates different speech situations with those rods which provoke students to an activity. Students reproduce a specific language structure, helped by the teacher with a minimum number of guidelines. The main emphasis in learning a language through the silent way is speech.

A positive feature of the method is that understanding of meaning is achieved through perception and not through translation.

The following applications, based on modern technologies, could take part in language teaching nowadays, supporting the silent way: Pronuncian\textsuperscript{33}; ELSA Speak\textsuperscript{34}.

\textsuperscript{33} https://pronuncian.com/
\textsuperscript{34} https://elsaspeak.com/en/
IV.7. Total Physical Response

Total physical response is a method for teaching language through physical (motor) activity. Its founder is considered to be the professor of psychology from San José State University, California – J. Asher.

At the beginning of the learning process, students only listen and do what they are told to do without being able to speak, the same way as young children learn their native language with the help of their parents – they listen before they speak. Similarly to the acquisition of the native language, the four language skills in the foreign language are developed in the following order: listening comprehension; speaking; reading; writing.

Total physical response is a productive approach in pedagogy, but it is used mainly in the initial stage of foreign language learning, and in most cases it is combined with other methods to achieve more satisfactory results. The method affects the “overall personality” of the student, his intellectual and emotional side (Shopov, 2013: 109).

It is easy, fast and stress-free to assess students using the method of total physical response in foreign language learning. The only thing to do is to follow the actions and reactions of the students after a command has been given. If the commands are executed correctly, it means that students understand and have acquired the necessary material. Hence, body language is also important. This is the main feature of the method – through motor activity memory is enhanced, because physical activity, combined with mental activity, improves memory.

Any application that combines foreign language and body language, foreign language (and native language) with different non-verbal ways of conveying meaning can participate in giving a lesson presented with the help of the method of total physical response and upgraded through modern technologies.
IV.8. Community Language Learning

J. Richards and T. Rodgers (1986: 114) present a therapeutic technique borrowed from psychoanalysis and adapted for the purposes of foreign language learning, in which the learner acts as a “client” and the teacher – as a “counselor”.

Client (learner) u counselor (knower)

<table>
<thead>
<tr>
<th>Psychological counseling (client and counselor)</th>
<th>Community Language Learning (learner and knower)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Client and counselor agree to counseling.</td>
<td>Learner and knower agree to language learning.</td>
</tr>
<tr>
<td>Client articulates his/her problem.</td>
<td>Learner presents to the knower (in L1) a message he/she wishes to deliver to another.</td>
</tr>
<tr>
<td>Counselor listens carefully.</td>
<td>Knower listens and other learners overhear.</td>
</tr>
<tr>
<td>Client evaluates the accuracy of counselor’s message restatement.</td>
<td>Learner repeats the L2 message form to its addressee.</td>
</tr>
<tr>
<td>Client reflects on the interaction of the counseling session.</td>
<td>Learner replays and reflects upon the messages exchanged during the language class.</td>
</tr>
</tbody>
</table>

C. Curran’s concept is based on the fact that students work in small groups, cooperate with each other and the success of everyone in the team is due to the individual contribution of each of its members. Everyone takes responsibility for their own learning. The teacher and students build a community based on trust. Neither side (teacher – students) dominates the
learning process – they cooperate, i.e. they work in an environment of cooperation, not in an environment of competition. Teachers function as “language counsellors” since they are aware of the situation students are going through and, through understanding and support, help them on the way to overcoming difficulties, directing their energy towards productive learning.

IV.9. Suggestopedia

The founder of suggestopedia – G. Lozanov – believes “a foreign language can be learned at a much faster pace. Memorization during learning by means of suggestopedia is accelerated 25 times compared to learning by means of traditional methods” (Lozanov, 1978: 27). The reason this does not happen is that people set up psychological barriers that hinder learning. In the 1960s, the method of suggestopedia appeared in Bulgaria (Shopov, 2013: 119).

Suggestopedia aims to increase the potential for memorization by preventing students from feeling that they will not be able to acquire a language and all the other negative emotions that would interfere with learning through suggestion.

Essential elements of suggestopedia are theater and music. Baroque music is considered appropriate, whose characteristic rhythm helps one to perceive and memorize a large amount of material more easily. This is so because it contributes to calming the mind and the heartbeat. Proponents of suggestopedia believe that dramatization and playing various roles free one’s personality from psychological barriers, removes inhibitions, unlocks the imagination and supports productive learning.

IV.10. Natural Approach

The natural approach to learning a foreign language is a method by S. Krashen and T. Terrel which originates in 1980s and 1990s (Krashen, Terrel, 1983: 18).
The concept of the natural approach is based on the differences in the two main concepts in the development of language competence: acquisition (implicit and unconscious process focused on meaning) and learning (explicit process focused on form or grammar) (Dimitrova et al., 2012: 123). For the efficient use of the language, the process of acquisition should be activated, while the process of learning, i.e. the accumulation of linguistic knowledge, cannot lead to normal or “natural” use of the language.

S. Krashen and T. Terrel (1983: 58) summarize the methodological guidelines for foreign language teachers using the natural approach as follows: the aim of learning is the acquisition of communication skills; understanding precedes production; productive skills are developed in the presence of understandable input information; learning activities must create opportunities for language acquisition; the learning environment must ensure that the affective filter is lowered.

IV.11. Conclusion

In his article There Is No Best Method – Why? the researcher N. S. Prabhu from the National University of Singapore states “there is no single method which is best for all students, as there are important variations in the teaching context – relating to social situation (language policy, language environment, linguistic and cultural attitudes, economic and ideological factors, etc.), educational organisation (instructional objectives, constraints of time and resources, class-size, etc.), teacher-related factors (status, training, belief, autonomy, skill, etc.), and learner-related factors (age, aspirations, previous learning experience, attitudes to learning, etc.). Different methods are suitable for different people or different teaching contexts (Prabhu, 1990: 161 – 176).

Using one method in practice does not usually lead to significant and satisfactory results. A universal method to replace all the others does not exist yet. Teachers should use a combination of different methods and techniques that correspond to the respective teaching and learning process. In their practice, teachers can skillfully combine different methods with modern technologies in order to achieve the set goals more easily and integrate students in foreign language learning more successfully.
Elements of each teaching method have their application and opportunity for effective combination with modern technologies in foreign language teaching. The successful implementation and application of digitalization in the learning process depends on many factors - human, legal, linguistic, global.

V. Chapter Four

Temporal systems in Bulgarian, English and Spanish. Rules for formation and interlingual transfer

This chapter illustrates the temporal systems in indicative mood in Bulgarian, English and Spanish. Its main aim is to give short, precise and clear definitions for each of the temporal meanings and to present the formation of the temporal systems in each of the three languages. The affirmative indicative declarative forms in the three languages are described comparatively. In the last part of the chapter the correspondences between the three temporal systems are summarized. The main reason for choosing the temporal systems as a demonstrative phenomenon is the fact that the author of the dissertation is not aware of studies that present and compare at the same time the temporal systems in Bulgarian, English and Spanish. The proposed comparison would make the process of teaching and learning one, two or more foreign languages easier.

In view of their forms, verb tenses in Bulgarian, English and Spanish are divided into simple and complex. The corresponding verb form (phrase) of the simple verb tenses consists of only one form of the main verb. In Bulgarian such tenses are present, imperfect, and aorist, in English – present simple and past simple, and in Spanish – presente, pretérito imperfecto, pretérito indefinido, futuro simple, and condicional simple. All other tenses in the three languages have complex verb forms (phrases) – i.e. in addition to the form of the main verb, they also have a form of at least one auxiliary verb.
In modern linguistics it is assumed that the Bulgarian language has a 9-member temporal system, which was first defined by Yu. Trifonov (Trifonov, 1905: 155 – 192 and Trifonov, 1908: 1 – 40). This system was established and imposed in Bulgarian linguistics and in the teaching of the Bulgarian language by L. Andreychin (Boyadzhiev, Kutsarov, Penchev, 1998: 382). The Bulgarian temporal system in indicative mood is presented by V. Stankov in his book Stilistichni osobenosti na balgarskiya glagol (Stankov, 1980: 41 – 43).

Despite the fact that it was proposed more than forty years ago, V. Stankov's classification can successfully serve to achieve one of the goals of the current dissertation – to compare the temporal systems in the three languages: Bulgarian, English and Spanish. The members of the Bulgarian temporal system are defined as follows (Stankov, 1980: 41 – 43):

1) Present – “the action coincides with the moment of speaking”.
   
   *e.g. пише* (pishe)

2) Aorist – “the action took place at a certain moment or period before the moment of speaking”.
   
   *e.g. писа* (pisa)

3) Imperfect – “the action is contemporary to a past additional moment of orientation”.
   
   *e.g. пишеше* (pisheshe)

4) Present Perfect – “the action was performed before the moment of speaking, but without information for the specific moment or period in which it took place”. In addition, the forms in their main meaning express the simultaneity of the result of the action with the utterance (Kutsarov, 2007: 252).
   
   *e.g. писал e* (pisal e)

5) Past Perfect – “the action is past compared to a past moment of orientation”. I. Kutsarov formulates the dependence that the forms signal actions (or results of actions), oriented to the past moment (Kutsarov, 2007: 254).
   
   *e.g. беше писал* (beshe pisal)

6) Future – “an action that will be performed or will be in progress after the moment of speaking”.
   
   *e.g. ще пише* (shte pishe)
7) Future in the Past – “the action is future compared to a past moment of orientation”.

*e.g. щеше да пише* (shteshe da pishe)

8) Future Perfect – “the action is past compared to a future moment of orientation”. In addition, the forms express the sequence of the result of an action in relation to the utterance (Kutsarov, 2007: 253).

*e.g. ще е написал* (shte e pisal)

9) Future Perfect in the Past – “the action is past in relation to a certain moment, which in turn is future in relation to another past moment of orientation”. An additional feature is that the forms express the sequence of the result of an action in relation to a past utterance (Kutsarov, 2007: 252).

*e.g. щеше да е написал* (shteshe da e pisal)

A lot of authors, among whom K. Kabakchiev (1998: 125), claim that the English verb has a 16-member temporal system in indicative mood.

1) Present Simple – “expresses incomplete actions (states) regardless of the meaning of the verb and the other words and expressions. Present Simple expresses mainly repetitive (including habitual), valid for a longer period or general actions and conditions” (Kabakchiev, 1998: 137 – 138).

*e.g. he works* – ‘работу’ (raboti)

2) Present Continuous – “expresses incomplete actions taking place at the present moment or period” (Kabakchiev, 1998: 150).

*e.g. he is working* – ‘работи’ (raboti)

3) Present Perfect – “expresses actions already taking place or performed which are relevant for the present moment and add an additional element in the overall interpretation of the action in the sentence and the result of the action” (Kabakchiev, 1998: 157).

*e.g. he has worked* – ‘работи’ (e rabotil)

5) Past Simple – “expresses various types of actions and states – complete or incomplete, short-term or long-term, single or repeated, repeated a limited or an unlimited number of times” (Kabakchiev, 1998: 140), performed before the moment of speaking.

*e.g. he has been working – ‘работил’ (e rabotil)*

6) Past Continuous – “expresses incomplete actions, specifically performed in a past moment or period, which is either explicitly indicated or implied by the context” (Kabakchiev, 1998: 151).

*e.g. he worked – ‘работу’ (raboti)*

7) Past Perfect – expresses actions that were performed before a certain moment in the past. “An earlier past is its main meaning, and its frequent use is going back when talking about the past in order to clarify that something has already happened” (Swan, 2008: 427) before that past moment.

*e.g. he had worked – ‘бееше работил’ (beshe rabotil)*

8) Past Perfect Continuous – “expresses an incomplete action” (Kabakchiev, 1998: 169), which lasted until the past moment we are thinking about, or just before it (Swan, 2008: 427).

*e.g. he had been working – ‘бееше работил’ (beshe rabotil)*

9) Future Simple – “expresses, just like Past Simple and Future Simple in the Past, actions (states) of various types – complete or incomplete, short-term or long-term, single or repeated, repeated a limited or an unlimited number of times, which are future compared to the moment of speaking” (Kabakchiev, 1998: 146).

*e.g. he will work – ‘ще работи’ (shte raboti)*

10) Future Continuous – “expresses incomplete actions that will be performed at a future time or period, this time or period being explicitly stated or implied by the context” (Kabakchiev, 1998: 154 – 155).

*e.g. he will be working – ‘ще работи’ (shte raboti)*

11) Future Perfect – an analogue of Past Perfect with the difference that the moment in question in which the completion of the action matters is located in the future
(Kabakchiev, 1998: 163), i.e. expresses actions that will be done before a certain point in the future (Swan, 2008: 217).

*e.g. he will have worked* – ‘ще е работил’ (shte e rabotil)

12) Future Perfect Continuous – an analogue of Future Perfect with the difference that the action can be incomplete and in process until the future moment in question (Kabakchiev, 1998: 170).

*e.g. he will have been working* – ‘ще е работил’ (shte e rabotil)

13) Future Simple in the Past – expresses, just like Past Simple and Future Simple, actions (states) of various types – complete or incomplete, short-term or long-term, single or repeated, repeated a limited or an unlimited number of times, which are future compared to a specific past moment (Kabakchiev, 1998: 147 – 148).

*e.g. he would work* – ‘щеше да работи’ (shteshe da raboti)

14) Future Continuous in the Past – an analogue of Future Continuous with the difference that the action is future compared to a past moment (Kabakchiev, 1998: 156). It expresses incomplete actions that are future compared to a past moment.

*e.g. he would be working* – ‘щеше да работи’ (shteshe da raboti)

15) Future Perfect in the Past – “an analogue of Future Perfect with the difference that the moment in question and at which the completion of the action is important is future compared to a past in relation to the present moment” (Kabakchiev, 1998: 165), i.e. expresses actions that will be performed before a certain moment in the past, and the result of the action itself will be visible in the past moment.

*e.g. he would have worked* – ‘щеше да е работил’ (shteshe da e rabotil)

16) Future Perfect Continuous in the Past – an analogue of Future Perfect Continuous with the difference that the action is incomplete and in progress until the past moment in question (Kabakchiev, 1998: 170).

*e.g. he would have been working* – ‘щеше да е работил’ (shteshe da e rabotil)
The dissertation relies on the suggested Bulgarian translation of the names of the temporal categories in Spanish, made by A. Mitkova and B. Kyuchukova in 2002.

L. G. Torrego proposes the following classification of the temporal categories in indicative mood in modern Spanish (Torrego, 2011: 147).

1) Presente – it is used to express an action happening at the moment of speaking or in the very near future, it describes repetitive or constant actions and situations35.

    *e.g. escribe* – ‘пише’ (pishe)

2) Pretérito Perfecto – it is used to express an action that has already happened but has an effect in the present situation.

    *e.g. ha escrito* – ‘писал е’ (pial e)

3) Pretérito Imperfecto – expresses a past action which has an unspecified beginning and ending.

    *e.g. escribía* – ‘пишеше’ (pisheshe)

4) Pretérito Pluscuamperfecto – expresses an action performed before another past action.

    *e.g. había escrito* – ‘беше писал’ (beshe pial)

5) Pretérito Indefinido – expresses an action which happened in the past and was completed or interrupted.

    *e.g. escribió* – ‘написа/писа’ (napisa / pisa)

6) Pretérito Anterior – expresses an action performed immediately before another past action; it is not used in modern language, but it is found mainly in literary texts.

    *e.g. hubo escrito* – ‘беше написал’ (beshe napisal)

7) Futuro Simple – expresses an upcoming action or the likelihood that something will happen soon.

    *e.g. escribirá* – ‘ще пише’ (shte pishe)

35 The ten definitions of the temporal categories in Spanish are taken from https://www.unprofesor.com/lengua-espanola/los-tiempos-verbales-en-espanol-2749.html
8) Futuro Compuesto – expresses a future action that will end before another future action begins.

*e.g. habrá escrito – ‘ще e nucal’ (shte e pisal)*

9) Condicional Simple – expresses a hypothetical situation or action as well as a kindly asked question; desire.

*e.g. escribiría – ‘щеше да пуше’ (shteshe da pishe)*

10) Condicional Compuesto – an analogue of Condicional simple, but in this case the action is over.

*e.g. habría escrito – ‘щеше да e nucal’ (shteshe da e pisal)*

Until the middle of the 20th century, Condicional Simple and Condicional Compuesto were considered a separate mood (conditional), but modern Spanish grammar considers them tenses and includes them in indicative mood. For this reason, these categories are presented as members of the temporal system of indicative mood in Spanish.

The following correspondences between the temporal categories in Bulgarian, English and Spanish can be inferred as a basis for effective foreign language learning:

- Present in Bulgarian corresponds to Present Simple and Present Continuous in English and to Presente in Spanish.
- Aorist in Bulgarian corresponds to Past Simple in English and to Pretérito Indefinido in Spanish.
- Imperfect in Bulgarian corresponds to Past Continuous in English and to Pretérito Imperfecto in Spanish.
- Present Perfect in Bulgarian corresponds to Present Perfect and Present Perfect Continuous in English and to Pretérito Perfecto in Spanish.
- Past Perfect in Bulgarian corresponds to Past Perfect and Past Perfect Continuous in English and to Pretérito Pluscuamperfecto in Spanish.
- Future in Bulgarian corresponds to Future Simple and Future Continuous in English and to Futuro Simple in Spanish.
- Future in the Past in Bulgarian corresponds to Future Simple in the Past and Future Continuous in the Past in English and to Condicional Simple in Spanish.
Future Perfect in Bulgarian corresponds to Future Perfect and Future Perfect Continuous in English and to Futuro Compuesto in Spanish.

Future Perfect in the Past in Bulgarian corresponds to Future Perfect in the Past and Future Perfect Continuous in the Past in English and to Condicional Compuesto in Spanish.

The table below shows the correspondences between the forms of the temporal systems of the three languages in order to facilitate their teaching and learning.
Comparison of the English, Spanish and Bulgarian temporal categories in indicative mood

<table>
<thead>
<tr>
<th>English</th>
<th>Spanish</th>
<th>Bulgarian</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Present Simple</strong></td>
<td><strong>Present</strong></td>
<td><strong>Present</strong></td>
</tr>
</tbody>
</table>
| 1. I talk  
2. you talk  
3. he/she/it talks  
1. we talk  
2. you talk  
3. they talk | 1. canto  
2. cantas  
3. canta  
1. cantamos  
2. cantáis  
3. cantan | 1. пиша  
2. пишеш  
3. пише  
1. пишем  
2. пишете  
3. пишат |
| **Present Continuous** | **Pretérito Perfecto** | **Present Perfect** |
| 1. I am talking  
2. you are talking  
3. he/she/it is talking  
1. we are talking  
2. you are talking  
3. they are talking | 1. he cantado  
2. has cantado  
3. ha cantado  
1. hemos cantado  
2. habéis cantado  
3. han cantado | 1. писал съм  
2. писал си  
3. писал а/о е  
1. писали сме  
2. писали сте  
3. писали са |
| **Present Perfect Continuous** | **Pretérito Indefinido** | **Aorist** |
| 1. I have been talking  
2. you have been talking  
3. he/she/it has been talking  
1. we have been talking  
2. you have been talking  
3. they have been talking | 1. canté  
2. cantaste  
3. cantó  
1. cantamos  
2. cantasteis  
3. cantaron | 1. висах  
2. виса  
3. писа  
1. писахме  
2. писахте  
3. писаха |
| Past Continuous | 1. I was talking  
2. you were talking  
3. he/she/it was talking  
1. we were talking  
2. you were talking  
3. they were talking |
|---|---|
| Pretérito Imperfecto | 1. cantaba  
2. cantabas  
3. cantaba  
1. cantábamos  
2. cantabais  
3. cantaban |
| Imperfecto | 1. пишех  
2. пишеше  
3. пише  
1. пишехме  
2. пишехте  
3. пишеха |
| Past Perfect | 1. I had talked  
2. you had talked  
3. he/she/it had talked  
1. we had talked  
2. you had talked  
3. they had talked |
| Pretérito Pluscuamperfecto | 1. había cantado  
2. habías cantado  
3. había cantado  
1. habíamos cantado  
2. habíais cantado  
3. habían cantado |
| Past Perfect Continuous | 1. I had been talking  
2. you had been talking  
3. he/she/it had been talking  
1. we had been talking  
2. you had been talking  
3. they had been talking |
| Futuro Simple | 1. I will talk  
2. you will talk  
3. he/she/it will talk  
1. we will talk  
2. you will talk  
3. they will talk |
| Futuro Simple | 1. cantaré  
2. cantarás  
3. cantará  
1. cantaremos  
2. cantaréis  
3. cantarán |
| Future | 1. ще пиша  
2. ще пишеш  
3. ще пише  
1. ще пишем  
2. ще пишете  
3. ще пишат |
| Future Continuous | 1. I will be talking  
2. you will be talking  
3. he/she/it will be talking  
1. we will be talking  
2. you will be talking  
3. they will be talking |
| Futuro Compuesto | 1. habré cantado  
2. habrás cantado  
3. habrá cantado |
| Future Perfect | 1. ще съм писал  
2. ще си писал  
3. ще е писал/а/о |
|---------------------------|--------------------------|------------------------------|-------------------|------------------|---------------------------|--------------------------------------|----------------------|--------------------------|
| 1. I will have been talking  
2. you will have been talking  
3. he /she/it will have been talking  
1. we will have been talking  
2. you will have been talking  
3. they will have been talking | 1. I would talk  
2. you would talk  
3. he /she/it would talk  
1. we would talk  
2. you would talk  
3. they would talk | 1. I would be talking  
2. you would be talking  
3. he /she/it would be talking  
1. we would be talking  
2. you would be talking  
3. they would be talking | 1. cantaría  
2. cantarías  
3. cantaría | 1. щях да пиша  
2. щеше да пишеш  
3. щеше да пише | 1. I would have talked  
2. you would have talked  
3. he /she/it would have talked  
1. we would have talked  
2. you would have talked  
3. they would have talked | 1. I would have been talking  
2. you would have been talking  
3. he /she/it would have been talking  
1. we would have been talking  
2. you would have been talking  
3. they would have been talking | 1. habría cantado  
2. habrías cantado  
3. habría cantado  
1. habríamos cantado  
2. habrías cantado  
3. habrían cantado | 1. щях да съм писал  
2. щеше да си писал  
3. щеше да е писал/а/o |
VI. Chapter Five
Main, Transpositional and Modal Use of Temporal Categories in Bulgarian, English and Spanish

In Chapter V of the dissertation, parallels will be drawn among the uses of the temporal forms in indicative mood in Bulgarian, English and Spanish. The aim is to describe the correspondences in uses in view of their teaching, without claiming that every detail and specific case of use will be indicated. The cases of use presented will be limited to indicative declarative sentences. In particular, temporal categories will be presented in such a way that they are more understandable to anyone who studies them, so that they can draw parallels and comparisons which will make the process of their acquisition easier. There are a number of similarities in the use of the temporal systems in the three languages considered which will be presented here. The meaning of each one of the temporal categories is described in Chapter Four.

The use of the temporal forms is presented comparatively, analyzing main, transpositional and modal uses of well-established uses of the temporal forms in indicative mood in the three languages considered.

In the current chapter of the dissertation the terms *main*, *transpositional* and *modal use* of temporal categories are used.

The main meaning of the temporal category, which manifests itself in various cases determined by the context is called *main use*.

In morphology, *transpositional uses* of temporal categories can be perceived as a grammatical metaphor: “one form is used instead of another by some analogy between the two” (Marovska, 1998: 155).

With the term *modal use* of the temporal category we express the possible and/or necessary completion of an action expressed by the verb form of the temporal category.

To express actions happening at the moment of speaking or actions which are in progress in Bulgarian we use Present, in English – Present Continuous, and in Spanish – Presente or more frequently the periphrasis *estar + gerundio*. 
1) Дядо Коледа, пиша ти писмо, защото бях много послушен тази година.
(Dyado Koleda, pisha ti pismo, zashtoto byah mnogo poslushen tazi godina.)

2) Monica is driving to her office at the moment. //
Моника шофира към офиса си в момента. (Monika shofira kam ofisa si v momenta.)

3) Ahora ella está hablando por teléfono. //
Сега тя говори по телефона. (Sega tya govari po telefona.)

To express actions which started in the past and continue at the moment of speaking in Bulgarian we use Present, in English – Present Perfect, and in Spanish – Presente.

4) Уча в университет от няколко седмици.
(Ucha v universitet ot nyakolko sedmitsi.)

5) They have known each other for four months. //
Познават се от четири месеца. (Poznavat se ot chetiri mesetsa.)

6) Vivo aquí desde hace diez años. //
Живея тук от десет години. (Zhiveya tuk ot deset godini.)

To express repeated actions which refer to the present moment and are the temporary main occupation of the subject in Bulgarian we use Present, in English – Present Continuous, and in Spanish – Presente.

7) Чета интересна книга.

8) I’m looking for a new flat these days. //
Тези дни си търся нов апартамент. (Tezi dni si tarsya nov apartament.)

9) Busco piso o casa pero ahora estoy hablando contigo. //
Търся апартамент или къща, но в момента говоря с теб.
(Tarsya apartament ili kashta, no v momenta govorya s teb.)

To express future actions in time clauses in Bulgarian we use Present, in English – Present Simple, and in Spanish – Presente.

10) Когато напишеш есето, ще изляза. (Kogato napisha eseto, shte izlyaza.)

11) When it stops raining we will go out. //
Когато спре да вали, ще излезем навън. (Kogato spre da vali, shte izlezem navan.)
12) Nos **vemos y decidimos** luego. //

**Išč se vidim i iče rešim** после. (Shte se vidim i shte reshim posle.)

13) Cuando **tenga** tiempo, te llamaré. //

**Когато имам** време, ще ти се обадя. (Kogato imam vreme, shte ti se obadya.)

To describe actions completed at periods of time which are not over at the moment of speaking or to express actions finished just before the moment of speaking in Bulgarian we use Aorist, in English – Present Perfect, and in Spanish – Pretérito Perfecto.

14) Тъкмо **паркирах**. (Takmo parkirah.)

15) I **have** just washed **my hair**. // Тъкмо си **измих** косата. (Takmo si izmih kosata.)

16) No están en casa porque hace poco han **salido**. //

Не са вкъщи, защото преди малко **излязоха**.

(Ne sa vkashti, zashtoto predi malko izlyazoha.)

To express actions which finished in the past (the past moment is over and does not include the moment of speaking) in Bulgarian we use Aorist, in English – Past Simple, and in Spanish – Pretérito Indefinido.

17) Онзи ден **купих нов хладилник**. (Onzi den kupih nov hladilnik.)

18) I **travelled** to London a year ago. //

**Пътувах** до Лондон преди година. (Patuvah do London predi godina.)

19) **Anoche los chicos vieron una película muy divertida.** //

Снощи момчетата **гледаха** един много забавен **филм.**

(Snoshti momchetata gledaha edin mnogo zabaven film.)

To describe two simultaneous past actions – the long action (the action which is not over at the past moment, also known as background action) in Bulgarian is in Imperfect, in English – in Past Continuous, and in Spanish – in Pretérito Imperfecto; while the short action (the action which interrupted the long action) in Bulgarian is in Aorist, in English – in Past Simple, and in Spanish – in Pretérito Indefinido.

20) **Говорех с брат ми, когато започна да вали.**

(Govoreh s brat mi, kogato zapochna da vali.)
21) I was having dinner when the phone rang. //

Вечерях, когато телефонът звънна. (Vecheryah, kogato telefonat zvanna.)

22) Leía el libro cuando entró mi hermano. //

Четях книгата, когато влезе брат ми. (Chetyah knigata, kogato vleze brat mi.)

To express a past action and a present result emphasizing on the action itself in Bulgarian we use Present Perfect, in English – Present Perfect, and in Spanish – Pretérito Perfecto.

23) Вътре съм ти загърнала в един зелев лист малко сирене. (A. Karaliychev) (Vatre sam ti zagarnala v edin zelev list malko sirene.)

24) He has repaired the car. // Той е поправил колата. (Toy e popravil kolata.)

25) Han hecho sus deberes. //

Написали са си домашната. (Napisali sa si domashnata.)

To express actions completed before a definite past moment in Bulgarian we use Past Perfect, in English – Past Perfect, and in Spanish – Pretérito Pluscuamperfecto.

26) Той беше учил английски език дълги години, затова говореше толкова добре. (Toy beshe uchil angliyski ezik dalgi godini, zatova govoreshe tolkova dobre.)

27) She had cleaned the house. It looked perfect. //

Тя беше изчистила къщата. Изглеждаше чудесно. (Tya beshe izchistila kashtata. Izglezhdashie chudesno.)

28) Cuando él llegó a la oficina, sus colegas ya se habían ido. //

Когато той пристигна в офиса, колегите му вече си бяха тръгнали. (Kogato toy pristigna v ofisa, kolegite mu vechе si byaha trgnaли.)

In subordinate conditional clauses to describe an unreal past situation in Bulgarian we use Past Perfect, in English – Past Perfect, and in Spanish the verb form is in subjunctive mood of Pretérito Pluscuamperfecto.

29) Ако си беше взел билет, нямаше да пропусне премиерата. (Ako si beshe vzeli bilet, nyamashe da propusne premierata.)

30) If I had bought a car, I wouldn’t have walked to school last year. //
Ako си **бяха купили** кола, нямаше да ходя пеш до училище миналата година.

(Ako si **byah kupil** kola, nyamashe da hodya pesh do uchilishte minalata godina.)

31) Si **hubiéramos pagado** la excursión, **habríamos visitado** a nuestra tía. //

Ako **бяхме платили** екскурзията, щяхме да посетим леля си.

(Ako **byahme platili** ekskurziyata, shtyahme da posetim lelya si.)

To express an action which will be in progress at a future moment in Bulgarian we use Future, in English – Future Continuous, and in Spanish – Futuro Simple.

32) Утре по това време **ще пътувам** за Мексико.

(Utre po tova vreme **shte patuvam** za Meksiko.)

33) **Don’t call me! I will be cooking** the shrimps. //

Не ми звъни! **Ще готвя** скаридите. (Ne mi zvani! **Shte gotvy** skaridite.)

34) A **estas horas mañana por la mañana firmaré mi contrato.** //

По това време утре сутрин **ще подписвам** договора си.

(Po tova vreme utre sutrin **shte podpisvam** dogovora si.)

In the main clause (the result) in conditional sentences which describe unreal present or future situations in Bulgarian we use Future in the Past, in English – Future Simple in the Past, and in Spanish – Condicional Simple.

35) **Ако имах възможност, щях да оправя** нещата.

(Ako imah vazmozhnost, **shtyah da opravya** neshtata.)

36) **If Clara had a dog, they would go to the park every evening.** //

Ако Клара имаше куче, **щях да ходят** в парка всяка вечер.

(Ako Klara imashe kuche, **shtyahah da bodyat** v parka vsyaka vecher.)

37) **Si tuviera dinero, saldría** cada noche. //

Ако имах пари, **щях да излизам** всяка вечер.

(Ako imah pari, **shtyah da izli zam** vsyaka vecher.)

To express an action which will have finished at a definite future moment in Bulgarian we use Future Perfect, in English – Future Perfect, and in Spanish – Futuro Compuesto.
38) Но нали след десет такива години, по тавани и хазаи, обичта отдавна ще е изчезнала. (S. Stratiev)

(No nali sled deset takiva godini, po tavani i hazai, obichta otdavna shte e izcheznala.)

39) The building company will have finished renovating the main square by Friday. (M. Суон и К. Уолтър) //

Строителната компания ще е приключила с обновяването на главния площад до петък. (Stroitelnata kompania shte e priklyuchila s obnovyavaneto na glavniya ploshtad do petak.)

40) Cuando llegues, ya habré preparado la cena. // Когато се върнеш, вече ще съм приготвил/а вечерята. (Kogato se varnesh, veche shte sam prigotvil/a vecheryata.)

New, yet undescribed in grammar books cases of use of the temporal forms in the three languages were found and correspondences among them were formulated. In order to achieve a thorough visual representation of the similarities between the temporal systems in Bulgarian, English and Spanish in indicative mood, the stereometric figure below will be used. It was proposed and introduced in linguistics by G. Gerdzhikov (1973: 142), later borrowed from I. Kanchev (2000: 53) and enriched for the purposes of Spanish linguistics. It is supplemented and expanded in the current dissertation with the temporal categories in the English language.
Correspondences between the temporal systems in Bulgarian, English and Spanish in indicative mood
VII. Chapter Six  
Application of Modern Technologies in Assessing the Degree of Acquiring the Interlingual Transfer of Temporal Forms in Bulgarian, English and Spanish

Chapter six presents and analyses the data from a basic experiment for comparative assessment of the acquisition of the temporal categories and the interlingual transfer of their forms at grammatical and semantic level in Bulgarian, English and Spanish.

VII.1. Brief Description of the Scientific Research

The experiment was conducted at the end of the school year 2018 – 2019. Participants in the current research are students from the first class of ninth graders who took part in the survey presented in Chapter II. The aim of the new curriculum of the Ministry of Education and Science, which the Bulgarian students follow, is for students to acquire the foreign language they study up to level B1 according to the Common European Framework of Reference for Languages at the end of the first high school stage of their education, i.e. at the end of X grade. With regard to temporal systems, students in English and Spanish have to have mastered all temporal forms at the end of that stage. For this reason, the author of the dissertation focused on the study of the level of acquisition and the correct use of the temporal forms in the three languages.
VII.2. Data Collection Methods

The research is divided into two parts in accordance with the foreign language studied by the respondents. It represents a practical task that consists of twelve sentences in Bulgarian. Each of them is accompanied by four options for translation into English for one of the groups and into Spanish for the other. The aim is for the respondents to indicate the correct translation of the respective sentence in Bulgarian. The four possible answers differ only in verb tenses, their forms and uses. From the answer chosen by the respondents, conclusions are drawn about the acquisition of the temporal systems in indicative mood in the foreign language and the correct application of the rules learned.

The practical task in the scientific research is dedicated to the temporal forms in indicative mood. Data is collected through smartphones using Google forms. The aim is to assess the acquisition of the temporal categories, their forms and uses (either alone or in combination with other verb tenses). The sentences are divided into three sections for both groups participating in the scientific research (English and Spanish).

The first sentence aims to assess one of the uses of Present Simple in English or of Presente in Spanish and comment on a current event or action. The simultaneity of the situation with the verb action is expressed.

The second sentence approves the use of Present Continuous in English and Presente in Spanish to express future actions which are planned or arranged in advance and there is great certainty for their completion.

Another sentence aims to assess the joint use of Past Continuous and Past Simple in English and Pretérito Imperfecto and Pretérito Indefinido in Spanish. The English Past Continuous and the Spanish Pretérito Imperfecto refer to a longer “background” action or event, while the English Past Simple and the Spanish Pretérito Indefinido are used to express the shorter action or event which occurred in the middle of a longer one or interrupted it.
VII.3. Practical Task Results: English Language

The group of students learning English demonstrated a high level of competence regarding the correct use of the temporal categories which are the subject of the research. The percentage of correct answers varies between 87.20% and 98.70%.

Eight out of twelve sentences show a degree of acquisition of the respective temporal category and its specific use in the range between 95% and 98.70%. These include the following temporal categories and specific uses: 1) Present Continuous expressing an arranged future action; 2) Present Perfect; 3) Past Simple describing a series of past actions; 4) Past Continuous; 5) Past Simple expressing politeness; 6) Future Simple; 7) Future Continuous; 8) Future Perfect.

In the following four sentences the degree of acquisition is below 90% and varies between 87.20% and 89.70%. The relevant temporal categories and specific uses include: 1) Present Simple expressing sports commentaries; 2) Present Simple expressing timetables (trains, planes, etc.); 3) Past Perfect; 4) Future Continuous in the Past.

The results proved that the representatives who participated in the research had achieved the parameters of the temporal systems acquisition required by level B1, which should have been covered by the end of the first stage of their secondary education.
<table>
<thead>
<tr>
<th>Verb tense</th>
<th>Percentage of correctly selected translation in descending order</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Present</strong></td>
<td></td>
</tr>
<tr>
<td>o Arranged future action</td>
<td>98.70%</td>
</tr>
<tr>
<td>o Perfect (past action connected with the moment of speaking)</td>
<td>97.40%</td>
</tr>
<tr>
<td>o Sports commentaries</td>
<td>89.70%</td>
</tr>
<tr>
<td>o Timetables (e.g. trains, planes)</td>
<td>89.70%</td>
</tr>
<tr>
<td>o <strong>Average result</strong></td>
<td>93.88%</td>
</tr>
<tr>
<td><strong>Past</strong></td>
<td></td>
</tr>
<tr>
<td>o Describing a series of past actions</td>
<td>98.70%</td>
</tr>
<tr>
<td>o Continuous</td>
<td>97.40%</td>
</tr>
<tr>
<td>o Expressing politeness</td>
<td>94.90%</td>
</tr>
<tr>
<td>o Perfect</td>
<td>87.20%</td>
</tr>
<tr>
<td>o <strong>Average result</strong></td>
<td>94.55%</td>
</tr>
<tr>
<td><strong>Future:</strong></td>
<td></td>
</tr>
<tr>
<td>o Simple</td>
<td>98.70%</td>
</tr>
<tr>
<td>o Continuous</td>
<td>97.40%</td>
</tr>
<tr>
<td>o Perfect</td>
<td>97.40%</td>
</tr>
<tr>
<td>o Continuous in the Past</td>
<td>89.70%</td>
</tr>
<tr>
<td>o <strong>Average result</strong></td>
<td>95.80%</td>
</tr>
</tbody>
</table>
VII.4. Practical Task Results: Spanish Language

In the group of students learning Spanish the degree of acquisition of the temporal categories and their specific uses varies in a much wider range: between 62.70% and 94.10% compared to the group of students learning English.

Four sentences show a degree of acquisition over 90%: 1) Presente expressing commentaries of a current event; 2) Futuro Simple (prediction); 3) Futuro Simple expressing actions which will be in progress in the future; 4) Condicional Simple expressing an action in progress at a past moment.

In four sentences the degree of acquisition varies between 80% and 90%. The following temporal categories and their specific uses are included here: 1) Presente expressing an arranged future action; 2) Pretérito Perfecto; 3) Pretérito Imperfecto; 4) Pretérito Pluscuamperfecto.

A degree of acquisition between 70% and 80% is observed at: 1) Pretérito Indefinido and 2) Pretérito Imperfecto (politeness).

With a degree of acquisition between 60% and 70%, the following two temporal categories and their specific use could be outlined: 1) Presente expressing timetables and 2) Futuro Compuesto.

The obtained, summarized and analyzed results show that the temporal system in Spanish appears to be more difficult to master than the temporal system in English.
<table>
<thead>
<tr>
<th>Verb tense</th>
<th>Percentage of correctly selected translation in descending order</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Presente</strong></td>
<td></td>
</tr>
<tr>
<td>o Commentaries of a current event (e.g. sports event)</td>
<td>92.20%</td>
</tr>
<tr>
<td>o Arranged future action</td>
<td>88.20%</td>
</tr>
<tr>
<td>o Timetables (e.g. trains, plains)</td>
<td>66.70%</td>
</tr>
<tr>
<td>o <strong>Average result</strong></td>
<td>82.36%</td>
</tr>
<tr>
<td><strong>Pretérito</strong></td>
<td></td>
</tr>
<tr>
<td>o Perfecto</td>
<td>88.20%</td>
</tr>
<tr>
<td>o Imperfecto</td>
<td>86.30%</td>
</tr>
<tr>
<td>o Pluscuamperfecto</td>
<td>84.30%</td>
</tr>
<tr>
<td>o Indefinido</td>
<td>78.40%</td>
</tr>
<tr>
<td>o Imperfecto (politeness)</td>
<td>74.50%</td>
</tr>
<tr>
<td>o <strong>Average result</strong></td>
<td>82.34%</td>
</tr>
<tr>
<td><strong>Futuro</strong></td>
<td></td>
</tr>
<tr>
<td>o Simple (prediction)</td>
<td>94.10%</td>
</tr>
<tr>
<td>o In progress</td>
<td>94.10%</td>
</tr>
<tr>
<td>o Condicional Simple expressing an action in progress at a past moment</td>
<td>90.20%</td>
</tr>
<tr>
<td>o Compuesto</td>
<td>62.70%</td>
</tr>
<tr>
<td>o <strong>Average result</strong></td>
<td>85.27%</td>
</tr>
</tbody>
</table>
VIII. Conclusion

The dissertation presents (part of) the possibilities of modern technologies for effective (foreign) language learning. In particular, these are computer-assisted language learning, internet technologies and the potential of mobile devices. The analysis of the role of modern technologies in the process of foreign language learning shows that the virtual environment is preferred, familiar and accessible to contemporary students, and digital devices are an important feature of the process of (foreign) language learning. The conclusion is that modern pedagogical practices for language teaching should not avoid digital devices and the virtual environment, but make the most of their potential.

A comparative analysis of the main foreign language teaching methods has been conducted. As a result, their positive or negative features are characterized and appropriate up-to-date technologies and applications are proposed to enrich the presented methods in a contemporary way.

The scientific research presents the forms and the general meaning of the temporal categories in indicative mood in the modern Bulgarian, English and Spanish languages. As a result, rules for interlingual transfer of forms and general meaning have been inferred.

Consistent rules for transferring semantic information while using temporal categories in Bulgarian, English and Spanish within the general meaning of the categories, as well as in transpositional and modal use have been systematically generated.

A linguistic and pedagogical experiment has been conducted in order to demonstrate the application of modern methods for analysis of acquired knowledge of interlingual transfer at grammatical and semantic level. The results and the conclusions from this experiment can influence the methodology of simultaneous teaching of several foreign languages and become a basis for the development of new language applications for various smart devices.
IX. Contributions of the Dissertation

The contributions which the current research offers can be divided into theoretical and practical.

The theoretical contributions are as follows:

Presentation, description and analysis of (part of) the possibilities of modern technologies for effective language learning and in particular of computer-assisted language learning, internet technologies and mobile-assisted language learning.

Research and presentation of the functions of modern technologies with a view to their application for enriching and improving the foreign language teaching methods.

Upgrading basic teaching methods that have had a lasting impact on (foreign) language learning at the beginning of the 21st century with ideas for active integration of modern technologies in the process of (foreign) language teaching.

Formulation of clear and consistent rules for interlingual transfer at grammatical and semantic level of temporal categories in modern Bulgarian, English and Spanish (general meaning of the categories, correspondence between the forms, uses within the general meaning, transpositional and modal uses of the categories).

Definition of undescribed in grammar books uses of the temporal categories in indicative mood in modern Bulgarian, English and Spanish.

The practical contributions are as follows:

Formulation of an experiment and analysis of the motivation of students learning a foreign language to use modern technologies in the learning process. The analysis shows that modern technologies, virtual environment and digital devices are desirable elements in the process of (foreign) language learning.

Formulation of an experiment for comparative assessment of the degree of acquisition of temporal categories and their interlingual transfer at grammatical and semantic level from Bulgarian to English and from Bulgarian to Spanish. The data analysis of the experiment provided a comparative characteristic of language competence related to the use of temporal forms in Bulgarian, English and Spanish.
X. List of Articles Related to the Dissertation


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