Internet resources for foreign language education in primary school: challenges and opportunities

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Abstract

The paper explores the challenges and opportunities of developing professional competence of primary school teachers in teaching foreign languages according to the New Ukrainian School concept. The paper analyzes and describes various Internet resources that can facilitate and enhance foreign language learning outcomes in primary school. The paper argues that Internet resources can help modernize foreign language education in primary school and align it with the New Ukrainian School concept. The paper also discusses the importance of training primary school teachers in the methods of organizing distance learning, which is a priority for higher education institutions in the context of continuous education.

Keywords
foreign language education, primary school, Internet resources, distance learning, professional competence

1. Introduction

The education system in Ukraine is undergoing a major reform that aims to create a new philosophy of education, based on changing its paradigm, direction, objectives, content, and pedagogical mindset. The reform is guided by key state documents, such as the Law "On Education" [1], "The State Standard of Primary Education" [2], and the New Ukrainian School (NUS) Concept [3, 4], which define the strategy and main directions of education development in Ukraine in the 21st century. These documents set high standards for teachers and their personal development. Therefore, the professional growth of primary school teachers as competitive specialists is an important component of the continuous education system and relevant for the current stage of development of Ukrainian society.

The education reform involves several aspects, such as adopting new state standards that are based on the key competencies outlined in the Recommendations of the European Parliament and of the Council of Europe [5], which should be integrated into all subjects and are essential for the successful self-realization of individuals; introducing a new approach of "partnership pedagogy" among students, teachers, and parents; increasing the motivation of teachers as leaders of fundamental and systemic changes by increasing their wages, providing academic freedom, and stimulating their professional growth; creating a new school structure; decentralizing management, which will lead to partial autonomy of educational institutions; ensuring fair distribution of public funds to provide equal access for students to quality education; rethinking the role of teachers and students, which is determined by the division of responsibility between them for learning outcomes [3].

These radical changes in the educational process require a new quality of training for pedagogical staff, a scientific rethinking of the values of the system, and the formation of professional competence of primary school teachers [6]. The professional competence is usually divided into two groups: subject-specific (professional) competences, which depend on the subject area, determine the profile of the educational program and the qualification of graduates; and general competences, which are universal, non-subject-related, such as the ability to learn, creativity, knowledge of foreign languages, basic information technologies [7].

The development of a renewed education system requires teachers to effectively master new professional skills, to find solutions for unpredictable situations, to cooperate in teams, to align themselves with specific professional roles and perform them effectively.

Therefore, according to the above mentioned, the main objectives of developing professional competence of primary school teachers are to improve their education at intellectual and general cultural levels, to develop their pedagogical skills in accordance with the strategic goals of the NUS concept as a dynamically developing system.

The purpose of this paper is to address contemporary problems of developing professional competence of primary school teachers of NUS as competitive specialists in teaching foreign languages.

We used the following general scientific methods: analysis, systematization and generalization of scientific literature.

This problem has attracted the attention of many researchers. For example, Kovshar et al. [8], Pavlyk and Lysohor [9], Khyzhniak et al. [10] and others have focused their works on improving the system of training future primary school teachers. The role of person-centered learning as a key condition for developing professional competencies was emphasized by Bennetts [11], Clouston and Whitcombe [12], Denham et al. [13], Derntl and Motschnig-Pitrik [14], Dolezal et al. [15, 16], Harri-Augstein and Thomas [17], Haselberger and Motschnig [18, 19], Korhonen et al. [20], Kyprianidou et al. [21], McGraw et al. [22], Miller [23], Motschnig-Pitrik and Standl [24], Motschnig-Pitrik [25, 26, 27], Motschnig-Pitrik and Rohlíková [28], Motschnig-Pitrik and Derntl [29], Motschnig-Pitrik et al. [30, 31], Motschnig-Pitrik and Figl [32], Peetsma and van der Veen [33], Rowley and Lester [34], Vitsenets [35], Xu and Woodruff [36].

The NUS concept also highlights the problem of using internal resources to increase the effectiveness of students' learning [37].

The main challenge for pedagogical higher education institutions in the context of Ukraine's integration into the European educational space is to prepare a new generation of teachers: the

modern school needs teachers who can unleash the creative potential of students.

According to scholars who study the theory and methodology of vocational training, the preferred form of developing the education system should be the creation of integrative training courses for teachers that reflect the dynamism of the current scientific paradigm [38, 39].

2. NUS requirements and the level of training of primary school teachers

The new school needs a teacher who works in the format of creative searches, based on the achievements of traditional methods and, at the same time, has innovative elements, a teacher who is self-motivated not for reproduction, but for an experiment, research, innovation. At the same time, such a teacher should be responsible for the results of his work – the students' education and upbringing. A modern teacher should make a scientifically and pedagogically sound choice of a curriculum, appropriate didactic means, textbooks and manuals, develop such methodical system of teaching in a subject in order to stimulate students' interest in creative search, to realize the meaningful aspect of certain subject teaching, which provides ensuring that the student's level of education corresponds to the requirements of development of science and practice's current level, that is to be professionally mobile [40, 41, 42].

At the present stage of primary education a significant role is given to the technological approach to the organization of educational activities, that is the use of Internet resources. It is due to the fact that such teaching aids promote purposeful synthesis of methods and open new opportunities in the organization of person-centered educational process.

The current growth rate of scientific information and the educational process's reform require a modern teacher to be able to lifelong learning. The beginning of the information civilization is putting forward an upgrade of the value system for the future generation: from "education for life" to "lifelong learning", that makes the issue of a competitive teacher of educational institution relevant [1].

The formation of primary school teachers and other professionals' competitiveness is a time-delayed process that is based on systemic, activity, competence and other approaches, which facilitates two-way communication between the education system and the labour market, therefore, first of all, the state standards for specialists' training in higher education should be practice-oriented in order to ensure competitiveness.

Higher educational institutions of Ukraine have the task of restructuring the system of pedagogical vocational training in order to develop professional and pedagogical knowledge, skills and abilities which are directed at such an organization of pedagogical interaction that would meet the principles of humanity, democratization, when both a teacher and students are active participants in the pedagogical process during the course of teaching.

An integral and important part of the formation of the New Ukrainian School in the period of development of primary education is characterized by the significant influence of computer technology, which forms a global information space aimed at the harmonious entry of younger student's personality in the information society [43].

Today, Ukraine is on the path of democratic transformations and technological development in all spheres of society caused not only by the need to renew and change society but also

as a result of interactions and transformations that are taking place in the world. On the way to entering the European educational space, Ukrainian education needs to bring all its components to generally accepted world standards, including computer technology. ICT, in particular distance learning tools, occupy a prominent place in the world's best educational models [44, 45, 46, 47, 48].

The activity of a teacher as a competitive specialist requires new approaches to the professional skills' formation, development of creative abilities, and in general – improving the professional competence of specialists who carry out the educational process.

The determinative purpose of primary education should be to organize a joint search for a solution to problems, not to "convey", "explain" and "show", but to organize students' search activity at a lesson, following the principles which the organizing active forms of work's process is based on, in the context of educational reform: principle of interaction, principle of subject-subject relations, principle of activity, principle of reflection, principle of comfort, principle of combination of collective, group and individual work, principle of integration. Thus, a teacher must become an invisible conductor, be able to hear, notice, correct, support each student, and to organize students' collaboration.

In terms of the New Ukrainian School concept, a teacher (coach, tutor, facilitator) should act as the organizer of the training, who is intended to provide an individual approach to each student. The lessons should be dominated with productive, actively-creative methods that offer independent and creative activity of problematic and practical nature, which aim to give not only knowledge but also the experience of their self-acquisition.

The Professional Standard for Primary School Teachers, developed by the Ministry of Education and Science of Ukraine together with the Ministry of Social Policy of Ukraine, outlines functions, including professional competencies, knowledge, skills and abilities. Information and communication competence involves mastering the basics of digital literacy, the ability to use information technology in education. As all subjects are integrated into primary school, namely "foreign language", "technological", "ICT", they are designed to allow a teacher the opportunity to understand their strengths, knowledge, and the ability to be creative [49].

That is why a primary school teacher must consciously and competently learn new achievements of pedagogical activity, the main of which is the development of the child's personality.

In the market of pedagogical services, a contemporary primary school teacher exposes his/her high professionalism in the possession of Internet resources, the ability to interact, teach, educate, in terms of new social needs. The use of Internet tools in primary school, as practice shows, changes the nervous tension of students, gives the opportunity to change their activities, switches attention to various key issues, lesson topics, in addition, develops children's personal skills such as working in a group, a team, individually, resolve conflict situations, actively listen to others, discuss their own opinions, analyze, make decisions.

According to the state documents that regulate educational reforms (NUS Concept, new State Standard, typical educational programs), a primary education teacher should be oriented in changes of teaching methods and introduction of new educational technologies in the educational process.

The development of a specialist's personality should take place in the conditions of constant transformation, which implies internal activity, which allows going beyond the established standards of personality and social necessity, to realize his/her understanding of content, the

purpose of one's own activity.

Today the professional development of teachers is regarded as a continuous process, which must be carried out on the basis of known, modified or newly created, developed forms and methods of organization of professional development. It is a constant process of choosing and combining different forms, methods, technologies that are most optimal in a particular situation, in a particular place. Therefore, in the organization of training and professional development of pedagogical workers on the available technologies, forms and methods of education, which are introduced in the education system, one should choose those that are most contribute to the formation of professional competence (attitudes, values, knowledge, skills, qualities required for effective professional activity) [2].

Important tasks of teacher's professional growth are not only knowledge and skills' mastering of a certain area that are necessary for professional activity, but also mastering the techniques of self-search information, mastering new technologies, solving previously unknown educational tasks [2].

According to the aforementioned, the development of the teacher's professional competence causes an increase of the problem of postgraduate education, which is considered as a process in Ukraine and is aimed at the comprehensive development of an individual, the systematic updating of students' knowledge, the reorientation of psychological attitudes, the change of thinking stereotypes; the orientation of teacher's motivation for self-development, the formation of value humanistic orientations and reflective culture, the realization of new epistemological strategies of education.

The strategy for implementing a teacher's in-service training plan takes place in the current stage of educational reform in a new way. Approaches to evaluating the results of the educational process are changing, which will provide changes in the mechanisms of pedagogical staff's certification partly and will affect teacher's certification processes, which are just beginning to take form.

3. Foreign language education in primary school: problems and ways to solve them

3.1. Experience of foreign countries in the implementation of early foreign language learning

The teaching of foreign languages at preschool age and at the initial stage of school education is not only about language learning, but also about the general development of personality, which is the main goal of primary school education, as well as language and cultural preparation of children for communication in Europe and providing sustainable foreign language skills [50, 51, 52, 53].

The problems of early foreign language learning are the subject of increased attention of scientists in most countries because early language learning is seen as a way to the declared goal in Europe – the real multilingualism of citizens. Therefore, in the system of general education, students have to learn two foreign languages in addition to their native language, which means that the studying of the first language (mostly English) begins in primary school. Germany,

which has experienced several waves of migration and must accept the country's multilingualism and multiculturalism as a fact, began to introduce early foreign language learning in the 1980s, based on the research of scholars in this field. Among the German scholars who have studied the problem of early foreign language learning, it is worth mentioning first of all the works by Hohenberger and Peltzer-Karpf [54], Kopaczyk and Sauer [55], Pelz [56], Schmid-Schönbein and Fröhlich-Ward [57], Fröhlich-Ward [58, 59], Hufeisen and Jessner [60], Marx and Hufeisen [61], Hufeisen [62, 63]. Ukrainian scientists did not ignore this problem [64, 65, 66]. They agree on the importance of taking into account the needs and desires of children of this age in early foreign language learning and avoiding situations that could cause fear and apprehension. Therefore, most pedagogical approaches to teaching foreign languages at an early age follow the model of children's learning of the native language through imitation mechanisms.

Due to the experience of learning the first language, children unconsciously use the learning strategies known to them, so this fact should be taken into account, as well as the fact that success in early learning depends not only on a teacher who influences students of this age group both positively and in a negative sense but also from the educational material that is offered. Therefore, the educational material and the format of its presentation should be selected that would meet the expectations of students. It should be noted that scholars and practitioners show the unity of views on determining the goals and tasks of foreign language teaching at the initial stage. In their opinion, they are the following: students enjoy contact with a foreign language; show interest in them; develop speech and hearing skills; in the process of game learning they learn certain rules and language structures; develop the ability to distinguish the melody, rhythm and intonation of another language; develop language consciousness and a sense of one's own and another language; have the opportunity to look into the world of another culture and get acquainted with the way of life of their peers – representatives of another language community; develop a tolerant attitude, openness and willingness to understand "others".

Material that is both educational and entertaining, which fully meets these requirements, is available on the YouTube platform, where you can find multilingual content on various topics, which is easy to didactic [67]. In addition, there are channels that already offer training programs for young children, taking into account their interests and inclinations.

In addition to the German experience, the positive experience of the Finnish education system in the introduction of foreign languages (not one, but several) in primary school and preschool education also deserves attention, because the Finnish model of education is the basis of the New Ukrainian School concept.

The Finnish authorities recognize the importance of learning several languages for children and promote the education of true polylingual personalities. Thus, Finnish education, satisfying the requirements of society, in addition to learning Finnish and Swedish, introduces early foreign language teaching (L3). In 2003, the National Core Curriculum for Early Childhood Education and Care outlined the position of learning a foreign language other than Finnish and Swedish and recommended the introduction of a foreign language from the age of 3, when native language skills are already sufficiently developed [68], which is entirely the result of the study of Tove Skutnabb-Kangas [69, 70, 71, 72] and the scheme of threshold levels, based on the established relationships between the type of bilingualism and intellectual development [73, p. 273].

In December 2012, the first Government Strategy for the National Languages of Finland was

adopted in order to support two national languages (Finnish and Swedish) and to comply with language legislation. The components of the strategy include: increasing the importance and awareness of national languages, the presence of both languages in planning for the future, good knowledge of languages, etc. [74].

Of particular note is the Finnish government's The Key Project for Languages project, which aims to increase and diversify language teaching, namely: integrating early language learning into Finnish education (with a much wider scope than before); providing students with a wider language repertoire; creating a friendly and encouraging attitude to learning foreign languages. The project is supported by the Finnish National Agency for Education. The aim of this project is to find innovative ways of learning and introducing languages for young children that would motivate and be to the liking of students. Moreover, the project aims to find ways to introduce foreign languages in preschools (kindergarten is compulsory for all Finnish students) for very young children aged 4 to 6 and to encourage the natural interest in learning the language, because it is at this age children are particularly sensitive and prone to language learning. In addition, young children are more open to new experiences and other people, more inquisitive and not ashamed to communicate even with limited knowledge of the language they are learning. Also, the project proposes new and innovative ways to integrate language learning in the teaching of other subjects, such as physical education, music and mathematics. In addition to integrating language learning into other subjects, language learning can also take place outside of lessons [75].

Parallel learning and multidisciplinary modular learning are used in Finnish schools. Songs, games and music can be used in the classroom for young children and preschoolers to diversify and intensify the learning process. Another feature of this learning process is the coordinated interaction of the entire educational community and cooperation with parents, by informing them about the usefulness of learning several languages, which will also encourage and induce parents to support their children in learning several languages. Among the advantages of learning foreign languages at an early stage in Finnish education are knowledge of several languages, improvement of memory, development of multitasking skills, prevention or delay of Alzheimer's disease, etc. And most importantly, by introducing early learning of foreign languages, Finnish education creates a "language path" that begins in preschool, continues to form and develop until the end of basic and secondary education, and continues throughout a person's life.

Obviously, the education system in Finland is recognized worldwide. Equality, comprehensive education, early introduction of foreign language learning are considered as value characteristics of Finnish education. By giving priority to the development of multilingual and multicultural competencies of a democratic citizen, Finnish children have the right and obligation to learn three languages: Finnish, Swedish and one foreign language, mostly English (90%). Also, in addition to English, children are encouraged to learn other foreign languages.

3.2. The results of foreign language learning in primary school through the prism of legal documents

The experience of foreign, primarily European countries in the field of foreign language education in primary school and in the context of early foreign language learning has prompted a

revision of key approaches to the organization and content of foreign language learning in the domestic education system. It is possible to demonstrate changes in approaches to teaching in the New Ukrainian School and, accordingly, to consider the issue of proper training of primary school teachers at the current stage of implementation of NUS's ideas in the education system on the example of foreign language teaching.

Foreign languages have become very popular in recent years for a number of reasons. Globalization processes, mobility [76], informatization of society [77] and availability of information in foreign languages, the ability to travel due to visa-free travel regime with EU countries have highlighted the need for foreign language skills, which, accordingly, became an argument in favour of learning foreign languages primarily for parents who previously had an indifferent attitude to this subject. In addition, the practice of teaching foreign languages prompted changes to many Ukrainian regulatory documents, which regulate foreign language education, after the appearance of "The Common European Framework of Reference for Languages" (hereinafter CEFR) and the additional volume to CEFR. These are, first of all, the project "Language Education Concepts", the State Standard for Pre-school Education, The State Standard of Basic Secondary Education, where the issue of teaching foreign languages is arisen.

The State Standard for Primary Education 2020 defines the goal of foreign language education as "the formation of foreign language communicative competence for direct and indirect intercultural communication, that provides the development of other key competencies and meets the various life needs of the learner" [2].

The text of the document states that "the learner: perceives information expressed in a foreign language in the context of direct and indirect intercultural communication, and critically evaluates such information; understands the read foreign texts of different types for information or for fun, uses the read information and critically evaluates it; provides information, expresses thoughts, feelings and attitudes, interacts with others orally, in writing and in real time, using a foreign language" [2]. The requirements are presented in table 1.

Quantitative indicators are also determined. Thus, almost a third of the total number of hours devoted to language and literature training in primary school is devoted to foreign language education. Detailed information is presented in table 2 [2, Annex 12].

Communicative (receptive and productive) skills for students in grades 1-2 and for grades 3-4 are differentiated among the compulsory learning outcomes and other things according to three criteria in annex 3: perception of information expressed in a foreign language and its critical interpretation; understanding what is read to obtain information and its critical interpretation; providing information, expression of thoughts, feelings and interaction with others (orally, in writing). Italicized skills for each of the criteria allow us to trace the dynamics of students' communication skills, but a document that declares intentions does not always guarantee the achievement of the declared level and, unfortunately, does not always reflect the real state of affairs.

It is clear that for each criterion for 1-2 and 3-4 grades students communication skills are written so that there is an obvious progression in the results, however, the requirements for the level of language proficiency in primary school and the realities of both students and teachers, who teach them, indicate the existence of certain contradictions, that makes it impossible to achieve the goal. This is, firstly, the lack of hours devoted to learning a foreign language; secondly, the unwillingness of primary school teachers to use innovative teaching

Table 1

Requirements for compulsory learning outcomes of learners' training in language and literature education (foreign language education) [2, Annex 3].

General learning outcomes of learners	Required learning outcomes of learners	
	1-2 grades	3-4 grades
Perception of information expressed in a foreign language in the context of direct and indirect intercultural communication, and critical evaluation of information		
Perceives oral information	*understands* short, simple questions, statements, requests/instructions and responds to them verbally and/or non-verbally	*identifies* in the oral message information on various tasks on familiar everyday topics
Critically evaluates oral information	*recognizes* familiar words and phrases during the perception of oral information	*understands* the meaning of oral expression in a familiar everyday context
Understanding of read foreign texts of different types to obtain information or for fun, use the read information and its critical evaluation		
Perceives the text	*recognizes* familiar words based on evidence	*recognizes* familiar names, words and elementary phrases in short, simple texts
Analyzes the read information		*defines in the text information* on various tasks on familiar everyday topics
Providing information, expressing thoughts, feelings and attitudes, interacting with others orally, in writing and in real time using a foreign language		
Performs oral interaction	*asks and reports* information about himself and everyday activities, using short word combinations and using gestures if necessary	*communicates* on familiar topics, responds to simple statements about meeting urgent needs and expresses such needs
Orally expresses his/her own thoughts, feelings, attitudes and positions	*describes himself/herself* and *his condition* in short phrases	*tells about* people, the world around and life in simple, separate phrases and *expresses his/ her attitude*
Makes written interaction	*provides the simplest information* about *himself/herself* in writing (note, questionnaire)	*requests and provides personal information* in writing using simple words, short sentences and word combinations
Expresses his/her thoughts, feelings, attitudes and positions in writing	*writes short* phrases about himself/herself	*provides in writing information* about himself/herself, the world around, life, using simple words and expressions
Interacts in real time	*writes short phrases* in real time using a dictionary if necessary	*creates* real-time *simple messages* with a few short sentences

Table 2

The primary school curriculum.

Title of the educational field	Quantity of hours per year				
	1st grade	2nd grade	3rd grade	4th grade	total
Invariant component					
Language and literature, including:	315	350	350	350	
Ukrainian language and literature	245	245	245	245	1365
foreign language education	70	105	105	105	

technologies, as most of those who work in schools are still members of the "old guard", who do not understand the need for a radical change in approaches to learning and do not always or not fully have the skills to use informative learning tools; thirdly, it is about only partial providing of technical needs in primary school by the state, as the use of innovative methods requires considerable "technical" support in the form of teaching aids (computers, multimedia boards, licensed programs, and, most importantly, stable WiFi).

The lack of certain conditions to provide learning outcomes, that are formulated in the State Standard, can be partially compensated by the technical capabilities available in each family (the presence of a computer, a laptop or a smartphone, as well as the Internet) in combination with a well-thought-out organization of independent work, wide offer of on-line resources.

4. Characteristics of Internet resources as a means of providing the results of foreign language learning in primary school

We researched and analyzed online tools for learning English by younger students. Table 3 provides a general description of online tools that are available and most in-demand in Ukraine.

Table 3: General characteristics of online resources for learning English by younger students.

№	Title	Age	Category	Content	Advantages	Peculiarities
1	Study-languages-online.com	4-7	On-line course	Each lesson is dedicated to a specific topic and consists of five or more stages. Exercises, dictionary, phrasebook, theoretical material, comments, games, the ability to check the results of exercises/tasks are available.	There is a free mobile application that does not require registration and available at any time.	Russian-language resource, learning English only.

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Table 3 – continued from previous page

№	Title	Age	Category	Content	Advantages	Peculiarities
2	cam-bridge-club	4-12	On-line course	Classes include theoretical part; practical part; interactive activities for children in English. The received material is fixed by means of games, songs and practical exercises. Children receive certificates of achievement at the end of the course.	Children can study both in groups and individually, lessons are taught by a native speaker. Each English lesson for children online is stored in the parents' personal account.	Courses are paid for, learning English only.
3	Lingua-leo	4-...	On-line service	The effective service for language practice, game techniques, training on current videos, texts and podcasts from the Internet. Training in grammar, listening, reading, speaking and vocabulary are available.	Free, available 24/7 from any gadget, there is a Ukrainian-language version.	Registration is required, additional courses are paid for, English and 19 other languages are offered.
4	Iqsha	3-12	On-line service	English lessons in the form of games for independent learning. Easy, interesting thematic online lessons.	Free 10 lessons a day, it is possible to practice without internet access, using a mobile application, parental control.	Registration is required, you need to pay for further classes and to achieve the best results, Russian-language service, learning English only.
5	Duo-lingo	5-...	On-line service	The interactive service for learning English, both an educational game and an individual motivator. The site offers to understand your level of language and as a result of the test will offer an individual training plan. All training material is divided into 88 topics, to master each of them you need to reach 5 levels (3-6 short lessons on each of which).	Free options are available, no ads. There is a mobile application, there is an opportunity to study offline. The first 7 days you can try the upgraded version for free.	Registration is required, Duolingo Plus version for $ 6.99 per month, learning 4 foreign languages.

Table 3 – continued from previous page

№	Title	Age	Category	Content	Advantages	Peculiarities
6	Cambly	4-15	Online service	There is an individual schedule of classes. Each lesson is recorded, and there is an opportunity to watch videos in the personal account any time. In the chat you can write in your native language and receive automatic translation. After 10 hours of private lessons it is possible to get a certificate.	The project provides students with teachers with a British and American accent.	Registration is required, education is paid for, recommended for those who speak a little English, learning English only.
7	English-dom	8-9	Online service	Provides replenishment of vocabulary. An additional learning tool is relevant for children who are already able to perceive information independently. Hovering the cursor over a phrase, word or image, a student sees the correct spelling of the corresponding lexical unit on the monitor and listens to its pronunciation.	Free online simulator.	Registration is required, learning English only.
8	Learn-english-kids.british-council.org	5-...	Online program	The program is represented by the British Council, world experts in the field of English language teaching. There are many online games, songs, stories and activities, online courses.	Free, registration is not required.	The platform is only in English, there is a page for parents.
9	Internet-urok	7-...	Online service	It is designed to help students better to learn better. Offered online English lessons are most relevant to school curricula. There are simulators, tests and questions on knowledge of the passed material.	The topics are supported by video lessons conducted by the best teachers.	Registration is desirable, Russian-language resource, learning English only.

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№	Title	Age	Category	Content	Advantages	Peculiarities
10	Puzzle-English	5-...	On-line plat-form	Independent game training. After each lesson there is a test to check studied material there is an exam , at the end of the topic (10-15 lessons). It is possible to track progress. About 12,000 exercises and simulators are offered and new ones are constantly added.	There is a mobile application and a YouTube channel. There is a plan of perpetual access to all services "Puzzle-English" – you pay once and you use it all your life.	Registration is required, education is paid for, learning English only.
11	Busuu	5-...	On-line plat-form	Profile service for learning English. The site offers partial and full courses. The site has a large number of articles with answers to questions and recommendations.	There is a convenient mobile application.	Registration is required, education is paid for, all material is in Russian, 12 languages are offered for studying.
12	Poli-glotiki	1-12	On-line plat-form	It has two directions: 1) Home-Teacher – the first video lessons of each course in recording are available free of charge; 2) OnlineTeacher – online classes in mini-groups / individually. The communicative approach to language learning.	Free test-simulators, flashcards and textbook pages in a convenient PDF format for demo lessons. There is a YouTube channel.	The platform is Russian-language and opens through VPN, English, German, Spanish, French languages.
13	Memrise	5-...	On-line plat-form	Fun educational videos with native speakers give the necessary theory, online games and exercises allow you to practice. It is enough to spend up to 15 minutes a day in such interactive classes to improve your English.	There is a mobile application. The initial course of 90 lessons (20 minutes each) is free.	Registration is required, The first 3,000 words for free, then – $ 30 per year, it is possible to learn English and 9 other foreign languages.

Table 3 – continued from previous page

№	Title	Age	Category	Content	Advantages	Peculiarities
14	Starfall	4-8	On-line plat-form	There are four sections on the site. 1) ABCs – the alphabet is studied through videos and songs; 2) Learn to read, 15 lessons are offered, where the combination of letters takes place; 3) It's fun to read – learning to read in an entertaining manner, with the help of patter and riddles; 4) I'm reading – a list of fascinating stories for children to read.	Free, clicking on the word in the text, a child hears its pronunciation in a voice of a character.	The menu is only in English, registration is desirable. It is widely used in schools that teach children with special needs and learning difficulties, only English language.
15	Simpler	4-...	On-line plat-form	The application offers to take a test to determine the level of English, and then calculates the complexity of the exercises. Grammar is presented here in the form of visual rules, and new vocabulary is presented through associations.	Learning a language in the form of a game.	There is a mobile application only. Fascinating detective stories, which are used to consoledate knowledge for a fee, learning English only.
16	Cam-bridge English	6-10	On-line games	Cambridge's educational on-line games help to develop language skills and vocabulary. Focused on children who are tired of boring lessons at school.	Free, interesting and colorful, simple and fun tasks in games.	Registration is required, learning English only.
17	Games to learn En-glish	5-...	On-line games	Games of different levels of difficulty, but their task is the same – to help to learn words and to understand grammar.	Free, no registration required.	The platform is in English only.
18	Teremoc	2-12	On-line games	A selection of browser games. Game training in the company of funny characters. Some of the games are based on fairy tales (Little Red Riding Hood, Miracle-Yudo). Participating in simple quizzes, children memorize the sound of letters and their spelling.	Free.	Russian-language resource, learning English only.

Table 3 – continued from previous page

№	Title	Age	Category	Content	Advantages	Peculiarities
19	Nova-kids	4-12	On-line school	Online lessons in the form of games with native speakers according to programs that meet European CEFR standards.	The first lesson is free, there is a mobile application, classes are provided by native speakers.	Registration is required, paid tuition, real-time classes, online school is Russian, learning English only.
20	Skyeng	3-...	On-line school	Online classes are with teachers, interactive materials and exercises are always available online, automatic check of completed tasks.	The first lesson is free, there is a mobile application, there is an opportunity to transfer or cancel your lesson for free. After the full course (60 lessons) there is an opportunity to pass an exam and get a certificate that corresponds to a certain level of English.	Registration is required, paid tuition, real-time classes, online school is Russian, learning English only.
21	English-Dom	5-...	On-line school	50-minute online lessons with Russian-speaking teachers or native speakers, digital textbook is available.	First three lessons are free, there is a mobile application, there is an opportunity to get a certificate after completing the full course.	Registration is required, paid tuition, real-time classes, online school is Russian, from UAH 250 per lesson, learning English only.
22	Preply	5-...	On-line school	There are professional tutors from 185 countries, the opportunity to choose your teacher is based on personal interests and preferences, financial capabilities and even the country. The schedule is free and adjustable in the personal account.	An individual study plan is discussed with a teacher at the first lesson.	Registration is required, paid tuition, real-time classes, it is proposed to study 13 languages.

Table 3 – continued from previous page

№	Title	Age	Category	Content	Advantages	Peculiarities
23	English show	5-17	On-line school	The site offers several course options. The full course consists of a minimum of 30 lessons. Each lesson lasts 45-60 minutes. There is an opportunity to track the dynamics of knowledge in the personal account. Studying is according to the program of Oxford University, as well as an application for daily practice with foreigners.	"English show" has one of the best YouTube channel that contains many useful materials.	Registration is required, paid tuition, real-time classes, online school is Russian, learning English only.
24	Doma. uchi	6-14	On-line school	Individual 30-minute classes with a teacher. You can choose the frequency, pace and place of classes yourself. Emphasis is made on vocabulary and listening.	The first lesson is free.	It is Russian-language resource, from 720 per lesson, learning English only.

Thus, online courses, online schools, online games, online services, online platforms should be singled out among the online resources for learning English by younger students. Some are free, but most of them require registration and are paid for. These online resources are designed to learn one (English) language or three and more languages, some have a mobile application. Outlined online tools for learning foreign languages by younger students can be both individual and group. Online schools give an opportunity to track learning outcomes, to control, to communicate with native speakers, to get a certificate.

Learning foreign languages in primary school is "the formation of students' communicative competence, which is provided by linguistic, speaking and socio-cultural experience, that are agreed with the age capabilities of primary school children" [78]. Teaching students foreign languages requires the development of communicative activities, that are divided into productive (speaking, writing) and receptive (listening, reading). The following classification (table 4) gives an opportunity to find out the presence or absence of listening, reading, writing and speaking skills in the analyzed media content, as these skills are the psycholinguistic basis of communicative foreign language competence and are needed for further improvement.

The Common European Framework of Reference for Languages identifies three basic components of communicative competence: linguistic, sociolinguistic, pragmatic [79]. The development of linguistic competence of primary school students needs special attention, because the motivation to learn foreign languages is formed, the language system is mastered and the basis of knowledge, skills, practical skills is laid at the initial stage of learning foreign languages, also psychological preconditions are created for the formation of personality and further study of

Table 4

Classification according to the development of skills.

No.	Title	Development of listening skills	Development of reading skills	Development of writing skills	Development of speaking skills	Additional features
1	Study-languages-online.com	+	+		+	Memory development
2	cambridgeclub	+	+	+		Disclosure of a child's talent
3	Lingualeo	+	+		+	
4	Iqsha	+	+			
5	Duolingo	+	+	+	+	Development of logic
6	Cambly	+	+	+	+	
7	Englishdom	+			+	
8	Learnenglishkids.british-council.org	+	+	+	+	
9	Interneturok	+	+	+		
10	Puzzle-English	+	+	+	+	
11	Busuu	+	+	+	+	
12	Poliglotiki	+	+		+	Development of memory, attention
13	Memrise	+			+	
14	Starfall	+	+			Emphasis on research, play and positive reinforcement
15	Simpler	+	+		+	
16	Cambridge English				+	
17	Games to learn English	+	+		+	Entertainment
18	Teremoc		+			Memory development
19	Novakids	+	+	+ (in the presence of a special pen-Novakid)	+	Development of attention
20	Skyeng	+	+	+	+	
21	EnglishDom	+	+	+	+	Result control
22	Preply	+	+	+	+	
23	English show	+	+	+	+	
24	Doma.uchi	+	+		+	

«+» – the development of the specified competence is available.

« » – the development of this competence is absent or insignificant.

Table 5

Classification according to the development of communicative speech competence.

No.	Title	Lexical	Grammatical	Semantic	Phonological	Orthographic	Orthoepic	Socio-linguistic
1	Study-languages-onlinecom	+	+		+	+	+	+
2	cambridgeclub	+	+	+	+	+	+	+
3	Lingualeo	+	+	+	+		+	+
4	Iqsha	+	+	+		+		+
5	Duolingo	+	+	+	+	+	+	+
6	Cambly	+	+	+	+	+	+	+
7	Englishdom	+		+	+	+		+
8	Learnenglishkids.british-council.org	+	+	+	+	+	+	+
9	Interneturok	+	+	+	+	+	+	+
10	Puzzle-English	+	+	+	+	+	+	+
11	Busuu	+	+	+	+	+	+	+
12	Poliglotiki	+	+	+	+	+		+
13	Memrise	+		+	+			+
14	Starfall	+		+	+			+
15	Simpler	+	+		+			
16	Cambridge English	+		+				
17	Games to learn English	+	+	+	+	+		+
18	Teremoc	+		+		+		
19	Novakids	+	+	+	+	+	+	+
20	Skyeng	+	+	+	+	+	+	+
21	EnglishDom	+	+		+	+	+	+
22	Preply	+	+	+	+	+	+	+
23	English show	+	+	+	+	+	+	+
24	Doma.uchi	+		+	+			+

«+» – the development of the specified competence is available.

« » – the development of this competence is absent or insignificant.

foreign languages. In the following classification (table 5) we have identified the components of linguistic competence, namely: lexical, grammatical, semantic, phonological, orthographic, orthoepic competences, as the formation of these competencies is the basis for the development and implementation of all other competencies and competences.

According to the Common European Framework of Reference for Languages, sociolinguistic competence has the following components: linguistic markers of social relations, politeness conventions, expressions of folk-wisdom, register differences, dialect and accent [79]. Analyzing Internet technologies for learning foreign languages by younger students, we singled out sociolinguistic competence as a general component, taking into account the development of knowledge and skills that are required, namely: politeness rules, use and choice of greetings, address forms, conventions for turntaking, use and choice of expletives, expressions of folk-

wisdom. The considered Internet technologies do not provide the development of the ability to recognize linguistic markers of social structures, dialect and accent, for example: social class, regional provenance, national origin, ethnicity, occupational group, etc. and have a relatively neutral register of language acquisition.

The pragmatic competence is also absent in the suggested classification (table 5), as the development of discourse, functional and design competences is absent or insignificant in the proposed Internet resources.

The proposed classification clearly shows the presence or absence of the development of certain communicative speech competence in the studied Internet tools for learning English by younger students.

5. Requirements for professional competence of primary school teachers and ways to improve it

With the formation of the New Ukrainian School, the requirements for the professional competence of teachers have significantly increased, as the loss of the ability to regulate the pedagogical process leads to the inhibition of the harmonious development of interaction with students. The need for professional self-development of a teacher involves the creation of conditions for the implementation of his/her own educational trajectory. The primary task of postgraduate education as an organic part of continuing pedagogical education should be to stimulate self-education and professional competence of teachers [79].

We understand the professional competence of a primary school teacher to implement the tasks of the concept of the New Ukrainian School as the ability of a specialist to apply theoretical knowledge in planned and unforeseen pedagogical situations [49].

Society's need for competent primary school teachers with an arsenal of information technology (able to receive, process and use information with the help of computers, telecommunications and other means of communication) is becoming a leading factor in modern educational policy.

The mobility of a primary school teacher and his/her lifelong learning should help in changing the educational area and in the creation of a school that combines theoretical and practical knowledge of skills namely.

The practice of educational process's realization in the conditions of modern primary school proves that a successful teacher must master not only the theory and techniques of students' personality development, a specific analytical and diagnostic culture, but also be able to predict students' achievements, both educational and personal.

Today, more than ever, the effectiveness of teachers' work depends on the level of professional training and other components of pedagogical professionalism. Diagnosis, prediction, development of author's programs, optimization of all aspects of the educational process are becoming the norm of pedagogical activity in educational institutions of Ukraine.

The new society is forcing a teacher to be a creative, competitive, self-affirming personality. The future of our country depends on how much a teacher will be ready for such challenges because education in the age of high technology is a factor of stabilization, effective economic development and prosperity of a country, its competitiveness and national security.

The modern professional activity of a primary school teacher is based on his/her results of

pedagogical activity as a highly professional specialist, who is acquainted with the modern world requirements for the educational process of the primary level of education; prepared for the organization of educational activities of younger students as a pedagogical (partnership) interaction, that is aimed at the development of each individual and individual's preparation for solving life-giving tasks.

Today, the professional competence of primary school teachers – is the ability to pedagogical activity, the organization of educational process in primary school at the level of modern requirements; the ability to work efficiently, solve standard and problematic professional tasks effectively that arise in the process of education, upbringing and development of primary school students. The basis of this ability is the unity of theoretical and practical of a teacher's readiness to do the pedagogical activity, which is come out in the presence of knowledge, skills, values of attitudes to professional activity's system [1].

Savchenko [80] considers that content and fundamentality are the core of professional competence, which should provide advanced training of a specialist. The academician concludes that it is necessary to update the content of methodological training of teachers according to the principle of integrity, systematic and integration; taking into account those processes that determine the activities of modern primary schools. In addition, it should be taken into account the need for the changes that have taken place in society and are related to scientific and technological progress, enhanced integration processes, informatization and computerization.

According to the State Standard of Primary Education and the New Ukrainian School Concept, the components of the professional-pedagogical competence of primary school teachers are:

- professional knowledge;
- professional art and skills that are necessary for successful completion of job responsibilities;
- business and personal qualities that contribute to the fulfilment of his/her own strengths, abilities and capabilities in the process of fulfilling their functional and official responsibilities;
- general culture that is necessary for the formation of a humanistic outlook, the definition of spiritual values, moral and ethical principles of personality;
- motivation for professional activity [2].

The psycho-pedagogical competence of a teacher in the aspect of the New Ukrainian School concept should include awareness of the individual characteristics of each student, his/her abilities, strengths of will and character; awareness of "the parent-student" communication processes; knowledge of how communication processes contribute to or hinder the achievement of the desired pedagogical results; realization of own optimal choice of teaching methods, search for possible ways of self-improvement.

The professional growth of a teacher as a competitive specialist should be aimed at implementation of the New Ukrainian School's conceptual principles and focused on the development of two major innovations – the competence paradigm of education and pedagogy of partnership.

The educational reform implementation plan provides continuity of realization of its conceptual provisions (1-4 grades), taking into account the appropriate (distance) resource software at

each stage of teaching a younger student (online learning platforms, online textbooks, multimedia boards, media technologies), which requires a teacher to improve his or her skills in the system of continuing education and in the context of social change [81].

This is due to the presence of primary level teachers' stereotypes of thinking that negatively affect the development of younger students; uncertain readiness to innovate, problematic use of active teaching methods, game technologies.

The professional growth of a modern teacher's personality is directly related to the need for modernization of school, scientific, methodological and research work and its improvement.

As a rule, the methods and forms of traditional educational activities are reduced to unilateral influence of a teacher, the role of which is a clear presentation of information. As practice shows, the information-reproductive teaching methods of a descriptive nature are dominated in general education institutions. Problematic and practical methods are mostly used for illustration and clarity, the reproduction of past experience predominates. Individually-collective forms of the organization of training are usually used, according to which the material is assimilated individually, but at the same pace for the whole group [43].

Improving the effectiveness of English lessons in primary school, by strengthening the informational, communicative and emotional saturation of the educational process, is an urgent need of leading modern methodists (Flynn [82], Goh and Fang [83], Hashim and Yusoff [84], Järvinen and Twyford [85], Niyazova and Muratova [86], Pokorna [87], Reid [88], Xu et al. [89]).

The task of a primary school teacher is to make a proper English lesson's plan in order to prevent a decline in children's interest in such types of work that involve student's mobility, such as online games, staging songs and stories, colloquialisms, riddles, fairy tales. Their purpose is to relieve emotional tension during distance learning, to rest eyes, to relax different muscle groups. According to didactics in primary school, it is recommended to take dynamic breaks during classes. Their organization gives students a real opportunity to move, relieve intellectual, physical fatigue, during which children invisibly name and repeat the typical movements of animals, performing poems, speeches, counters in foreign languages.

The current changes in society have a decisive influence on the structure and content of pedagogical education, they orient teachers of higher educational institutions to enhance their mobility by differentiating requirements to the level of education. The rapid changes in society and technological advances are so high that it becomes very difficult to train a specialist who, after graduating, would be able to work in the chosen area of activity without continuing self-improvement, continuous general and professional development.

The focus on the humanization of education in the teaching of foreign languages is present in the orientation of the learning process on the development of the personality of the younger student. Internet tools that stimulate children's creativity and create real conditions for students to achieve practical results play an important role in the development of students' speaking skills.

Technological actions in language learning are a set of actions from determining the purpose of language personality formation, preliminary design of a language learning model to the implementation of tasks in practice. The use of Internet resources in the system of language education is the educational systems that meet the latest advances in didactics, linguistics, theory and practice of language learning.

The need to use Internet tools in language learning is due to the contradictions between

the lack of opportunities in the traditional education system and modern social needs. The objective need for the use of Internet tools in the study of languages is the strengthening of the communicative aspect in the formation of language personality and the intensive development of information technology. The use of Internet tools has broad prospects for use in foreign language learning, as they easily combine a number of technologies: game, interactive, project, technology for the development of critical thinking, technology for the development of critical thinking, early and intensive learning technologies [87].

The use of Internet tools in primary school has its own specifics: it is necessary to take into account the age, individual and psychological characteristics of primary school children. All parts of working with Internet tools require careful monitoring by a teacher, as both theoretical and practical knowledge and skills of younger students are still small. Working with the use of elements of distance learning requires a clear formation of aims, tasks and algorithm of actions: finding information for systematization, generalization, adaptation in future use.

Therefore, special attention in the new paradigm of education in general, and continuing education of primary school teachers, in particular, should be paid to the technologization of the content of the learning process. Such education will become the means of information-modernized perception of the world by a younger student.

Postgraduate education centers are designed to regulate the needs of teachers in their professional growth. Every year there is an opportunity to undergo advanced training (within 50 hours) in order to acquire skills and abilities of free orientation in information flows, the use of various online learning platforms.

The leading direction of the postgraduate educational centers' work (according to the New Ukrainian School Concept) is the unified mechanism of reorientation of training's creation in relation to the updated content, forms and methods of teaching. The creative use of traditional methods and forms, together with the introduction of innovative mechanisms, should facilitate the development of modern approaches in the formation of teacher's professionalism throughout life.

The effectiveness of teachers' further continuing education will depend not only on basic professional training but also on the implementation of daily practical training tasks, improvement of professional skill, level of research work, individual characteristics and actual teacher's needs.

Continuing education should be aimed at developing cognitive skills, the ability to create an individual plan for professional self-development (to construct personal knowledge) independently, the ability to navigate the information space, to generalize and integrate new information from various sources in the process of theoretical and practical learning, the ability to improve yourself constantly.

Modernization of the system of pedagogical staff's professional development, improvement and modernization of postgraduate pedagogical education, as a whole, is one of the most urgent tasks facing the educational sector in Ukraine today. A powerful tool that can increase efficiency and accelerate the pace of its implementation is the monitoring of modernization processes in the sphere of postgraduate education, as well as conducting relevant sociological researches. Such scientific intelligence will allow to branch leadership, individual institutions and other institutions to obtain information about the course of development of postgraduate pedagogical educational system systematically, that is necessary for making management decisions on its

improvement, timely elimination of shortcomings, as well as to provide feedback to direct consumers of educational services, identify their real needs, expectations, and attitudes.

The system of in-service training of primary school teachers in the context of education reform promotes the intensification of educational process, improvement of its efficiency and quality of results; the systematic integration of subject tasks, development of experimental research skills; the building of an open education system that provides each participant with his/her own trajectory of self-education; the formation of teachers' information culture.

The conditions for teachers' professional development during in-service training under the conditions of the NUS Concept are:

- diagnostics of professional competence of educators;
- providing a differentiated approach to the pedagogical staff's in-service training;
- introduction of innovative training technologies;
- updating the content of educational and professional programs;
- introduction of information and communication technologies in the educational process;
- providing practical orientation of in-service training courses;
- feedback organization [3].

The main areas of solving the implementation of training courses according to the concept "online", with different versions of programs that provide the opportunity to study and improve new information technologies, information culture as part of professional competence, the use of multimedia technologies that facilitate learning and memorization of learning material, because their use individualizes the learning process. Programs of advanced training courses for primary school teachers in Kryvyi Rih State Pedagogical University are designed for the needs of teachers of different categories in accordance with the teaching experience and meet the requirements of a teacher in his/her acquaintance with the potential of modern technologies, ability to use them in practice. A student of a group of primary school teachers takes a set of tests to check the level of professional competence at the final stage, this allows mobile, impartial and objective modular control (60 / 30 hours programs).

6. Conclusions and future work

The current demands of society require that primary school students receive a high level of education, which can only be achieved by primary school teachers who are highly professional and competent.

Such teachers should not only have a solid educational background in mastering professional knowledge and skills that correspond to the state of the art in psychological and pedagogical sciences, but also be aware of the purpose and objectives of their professional work in a coherent system of continuous education, be adaptable, responsive to the changes in the social situation of younger students' development; seek self-improvement, self-realization and civic engagement in the context of NUS.

The main goal of all educators today should be to improve the quality of online education. The key factor for improving this quality is the introduction of effective changes in educational

institutions, which can only be carried out by competent teachers who are willing to enhance and work on their own professional development constantly.

Therefore, learning in accordance with the needs of modern society cannot be conceived without a distance mode of learning. Distance learning draws on the best global methodological experience using the most advanced and effective pedagogical technologies. Such learning offers opportunities for using in the educational process: flexibility, modularity, parallelism, a large amount of educational information, efficiency, innovation, social equality. Developing professional competence of primary school teachers in the method of organizing distance learning is a priority for advanced training courses for teachers.

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