

## LEARNING CHINESE USING DIGITAL APPLICATIONS

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In today's world, language proficiency is a necessity, which is why the introduction of innovative teaching methods, including digital resources, helps to improve the quality of teaching and foreign language proficiency among students. The aim of this study is to determine the level of professors' familiarity on the oriental languages and intercultural communication department at V. N. Karazin Kharkiv National University with such online resources as trainchinese, PurpleCulture, GoogleClassroom, to analyze their awareness on the offered online resources and frequency of its introduction into the Chinese teaching process, to find out the correlation between mastering the material, raising interest, increasing students' academic progress and adopting online resources to education. The experiment involved an anonymous survey (filling out a Google Form) among Chinese language teachers. The results of the study showed that all surveyed teachers are familiar with the functionality of the trainchinese and GoogleClassroom applications, while the PurpleCulture application is familiar to fewer respondents. Therefore, it needs further popularization among teachers and students. Based on the survey, teachers of the Department of Oriental Languages and Intercultural Communication of V.N. Karazin Kharkiv National University made his own conclusions, which will help to make changes in the curriculum and diversify the process of conducting classes. The article analyzes the works of foreign scientists who studied digital technologies and mobile applications and their introduction into the educational process. The study focuses on learning Chinese using applications and platforms for personal computers, smartphones and tablets, presented on both the Android platform and iOS. It should be noted that the article also contains a detailed analysis of the advantages and disadvantages of the proposed online resources, the possibility of their use by students with different levels of Chinese proficiency. The article not only reveals the importance of using online resources, but also demonstrates all aspects of the implementation of digital applications in the educational process. All applications and platforms are recommended for educational programs with Chinese language learning.

**Keywords:** teaching methods, digital resources, digital tools, digital media, teaching process, online resources.

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**ВИВЧЕННЯ КИТАЙСЬКОЇ МОВИ ЗА ДОПОМОГОЮ ЦИФРОВИХ ДОДАТКІВ**

У сучасному світі володіння мовами є необхідністю, тому впровадження інноваційних методів навчання, зокрема цифрових ресурсів, сприяє поліпшенню якості викладання та володіння іноземною мовою серед здобувачів освіти. Метою дослідження є визначення обізнаності викладачів кафедри східних мов та міжкультурної комунікації Харківського національного університету імені В. Н. Каразіна у використанні додатків та платформ trainchinese, PurpleCulture та Google Classroom задля встановлення частоти використання вищезгаданих ресурсів та співвідношення між освоєнням матеріалу, заохоченням до навчального процесу, підвищенням рівня володіння китайською мовою серед студентів. Експеримент мав на увазі проходження анонімного опитування (заповнення Google Form) серед викладачів китайської мови. Результати дослідження показали, що усі опитувані викладачі ознайомлені із функціоналом додатків trainchinese та GoogleClassroom, а ось додаток PurpleCulture знайомий меншій кількості опитуваних. Тому він потребує подальшої популяризації серед викладачів та студентів. На основі пройденого опитування, викладачі кафедри східних мов та міжкультурної комунікації Харківського національного університету імені В.Н. Каразіна зробили власні висновки, які посприятимуть внесенню змін у навчальний план та урізноманітненню процесу проведення занять. У статті були проаналізовані праці іноземних науковців, які займалися вивченням цифрових технологій та мобільних додатків та їх запровадженням у навчальний процес. Дослідження фокусується на вивченні китайської мови за допомогою додатків та платформ для персональних комп'ютерів, смартфонів та планшетів, представлених як на платформі Android, так і на IOS. Слід зазначити, що у статті також міститься детальний аналіз переваг та недоліків запропонованих онлайн-ресурсів, можливість їхнього використання здобувачами освіти з різними рівнями володіння китайської. Стаття не лише розкриває важливість використання онлайн-ресурсів, але й демонструє усі сторони впровадження цифрових додатків у навчальний процес. Усі додатки та платформи рекомендовані для освітніх програм з вивченням китайської мови.

**Ключові слова:** методи навчання, навчальний процес, онлайн-ресурси, цифрові інструменти, цифрові медіа, цифрові ресурси.

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**ИЗУЧЕНИЕ КИТАЙСКОГО ЯЗЫКА С ПОМОЩЬЮ ЦИФРОВЫХ ПРИЛОЖЕНИЙ**

В современном мире владение языками является необходимостью, поэтому внедрение инновационных методов обучения, в частности цифровых ресурсов, способствует улучшению качества преподавания и владения иностранным языком среди соискателей образования. Целью исследования является определение осведомленности преподавателей кафедры восточных языков и межкультурной коммуникации Харьковского национального университета имени В.Н. Каразина

в использовании приложений и платформ trainchinese, PurpleCulture и Google Classroom для установления частоты использования вышеупомянутых ресурсов и соотношения между освоением материала, поощрением к учебному процессу, повышением уровня владения китайским языком среди студентов. Эксперимент имел в виду прохождения анонимного опроса (заполнение Google Form) среди преподавателей китайского языка. Результаты исследования показали, что все опрашиваемые преподаватели знакомы с функционалом приложений trainchinese и GoogleClassroom, а вот приложение PurpleCulture знакомый меньшем количестве опрашиваемых. Поэтому он нуждается в дальнейшей популяризации среди преподавателей и студентов. На основе пройденного опроса, преподаватели кафедры восточных языков и межкультурной коммуникации Харьковского национального университета имени В.Н. Каразина сделали собственные выводы, которые поспособствуют внесению изменений в учебный план и разнообразию процесса проведения занятий. В статье были проанализированы труды иностранных ученых, занимавшихся изучением цифровых технологий и мобильных приложений и их внедрением в учебный процесс. Исследование фокусируется на изучении китайского языка с помощью приложений и платформ для персональных компьютеров, смартфонов и планшетов, представленных как на платформе Android, так и на IOS. Следует отметить, что в статье также содержится подробный анализ преимуществ и недостатков предлагаемых онлайн-ресурсов, возможность их использования соискателями образования с различными уровнями владения китайской. Статья не только раскрывает важность использования онлайн-ресурсов, но и демонстрирует все стороны внедрения цифровых приложений в учебный процесс. Все приложения и платформы рекомендованы для образовательных программ с изучением китайского языка.

**Ключевые слова:** методы обучения, учебный процесс, онлайн-ресурсы, цифровые инструменты, цифровые медиа, цифровые ресурсы.

## 1. INTRODUCTION

The topic of global advance of Chinese language has gained much importance in recent years in the international mass media, and as a result, in an interpretation area [8]. Thousands of undergraduates come to China to get higher education. Chinese language proficiency is required by the employers in different countries [10; 13]. It resulted from the expansion of the cooperation with Chinese companies worldwide. As a consequence, the number of job openings with the Chinese proficiency as a necessary requirement for getting hired is growing each year. Some researchers claim that the knowledge of Chinese will become essential in business and politics in the upcoming years. However, Chinese language is difficult for a representative of Western culture [17]. The main features are difficult phonetics with tones used to distinguish words and writing that requires knowledge of many Chinese characters. It is obvious that mastering Chinese is a time-consuming and painstaking process that requires a complex approach in learning: listening, reading, writing, and speaking. These days mastering languages is a necessity, which is why the introduction of innovative teaching methods, digital resources in particular, contributes to improving the quality of teaching and foreign language skills among learners.

Nowadays, the amount of time spent online is increasing, which leads to an urgent need to use digital tools not only for entertainment, but also for learning and self-development. This is the reason why the teacher needs to be technically

aware of the online resources for the formation of speech and digital competences of the educational recipients. In particular, the main problem faced by foreign language teachers is the selection of the right digital media, because the modern information space is full of low quality content [9].

Therefore, the overall goal is to determine the level of technical literacy of professors of the Oriental Languages and Intercultural Communication Department at V.N. Karazin Kharkiv National University, to analyze their awareness on the offered online resources and frequency of its implementation into the Chinese teaching process.

**Analysis of recent research and publications.** As technology developed, the need to research the possibilities of learning foreign languages using digital tools. A great number of researchers have studied this field outlying the influence on educational process. For instance, Catherine Regina Heil, Jason S. Wu, Joey J. Lee created the article "A review of mobile language learning applications: trends, challenges and opportunities", published in 2016. They aimed at determining pedagogical focus and ability of the applications to adapt to individual needs and level of proficiency. In the article, they pointed out the influence of applications on learning vocabulary in isolation, vocabulary in context, grammar, pragmatics, pronunciation. The results demonstrated that most of the applications focuses on vocabulary in isolation paying little attention to other aspects of learning. The main method for learning languages used in the applications

was flashcards, which is not able to provide the users with all the meanings of the word. Not many applications allowed the users to type words or pronounce them. Grammatical and pragmatical aspects are rather given in the form of phrasebooks. Writing remains the most undeveloped skill if compared to other skills [6].

According to Glenda A. Gunter, Laurie O. Campbell, Junia Braga, Marcos Racilan, Valeska Virgínia S. Souza, the authors of "Language learning apps or games: an investigation utilizing the RETAIN model", published in 2016, the applications are a great tool to master languages. Applications mentioned in the research included a great variety of activities. It was easy to encourage learners to study harder with the help of gamification elements, points, extra lessons competition with friends, for instance. Furthermore, the authors stated the importance of sequenced levels for the learners allowing to develop vocabulary and communication, cognitive, metacognitive skills progressively. However, digital tools cannot be used alone: they should be integrated into and adapted to the traditional educational progress. In this way, learners can receive the knowledge needed [5].

Mohammed Alfadil in his article "Effectiveness of virtual reality game in foreign language vocabulary acquisition", explores the impact of the virtual reality (VR) as a tool to enrich vocabulary of an intermediate school learners. Students participating in the study showed their enthusiasm and motivation to accomplish the tasks. The advantage of VR method of learning is the direct demonstration of words learnt and interaction with the world created by digital technology. The results achieved in the study provide evidence to the statement that students can learn more effectively if put into artificial situations they have to live through. This also draws a conclusion that increase of activities given to the learners increases the vocabulary acquisition [1].

The article "An exploration of the use of mobile applications to support the learning of Chinese characters employed by students of Chinese as a foreign language", written by Amanda Mason and Zhang Wenxin, focuses on the tools that contribute to the learning of the Chinese language. Most of the respondents use at least one application to improve language skills. Nearly half of them uses two or even more digital tools. The results demonstrate two things: beginners usually use applications to listen to pronunciation and to identify components, while intermediate and advanced learners consider

the applications to be the way of memorizing new words. The authors point out that Pleco is one of the most popular application among the learners of Chinese language; however, it is not enough to master the language in detail, as proper learner training is required. Memrise and Skritter tend to be less popular [10].

Rong He and Xiaoge Xu published a work called "Mobile Experience in Learning Chinese: Review and Recommendations", which spotlights the need to examine not only the effectiveness of the applications used to study, but also the learners' experience. Such things as application design and proper organization contribute to the motivation and enthusiasm of the learners. The authors suggest implementing the six stages of mobile experience, previously proposed by Xu (2017). The stages are: enticement, entertainment, engagement, empowerment, enlightenment and enhancement. They should be adapted to different factors, starting from individual needs and tastes to demographic features, but they ought to be taken into consideration, while creating and analyzing digital tools [7].

"A Survey of Mobile Apps for Learning Chinese Vocabulary", written by Chin-His Lin, Keyi Zhou, Shiyun Yang, is a work, that outlines 22 the most popular applications for enriching vocabulary for Chinese learners. The study indicates that most applications are created in a form of either a dictionary or a game, in which the words are structured semantically and special situations are created to demonstrate the proper use of the lexemes. The applications used associations, repetition, word listing. Metacognitive strategies are also used to create a situated learning environment. However, the authors claim that due to the lack of proper explanations, learning goals, practice, the applications cannot provide the knowledge needed for the study [3].

Another research "Mobile English Learning: An Empirical Study on an APP, English Fun Dubbing", created by Sihong Zhang emphasizes on the efficiency of mobile phones to perform as a supporting tool in the educational process. The respondents, who took part in the study, stated that the experience of learning using online resources was never implemented during their school life, and most of them place using mobile phone for learning after calling, taking photographs, listening to music and texting. Nevertheless, they are willing to have more digitalized and gamified educational process. They showed better results in learning while using the application as a part of the experiment conducted in this study [22].



Therefore, modern mobile learning involves the use of mobile technologies either alone or in combination with other information and communication technologies, enabling the user to carry out the training at any time and place [12, p. 111]. The functionality of mobile gadgets provides a multifaceted learning experience: people can use their portable devices to access educational resources, communicate with others, create and store content, and more. Our analysis of mobile applications for learning a foreign language suggests that a significant number of them have been created today, namely: free (Duolingo, Memrise, HiNative) and partially free (BritishCouncil, Drops, Easy Ten, Effortless English, LingQ, Lingualo, WordBit).

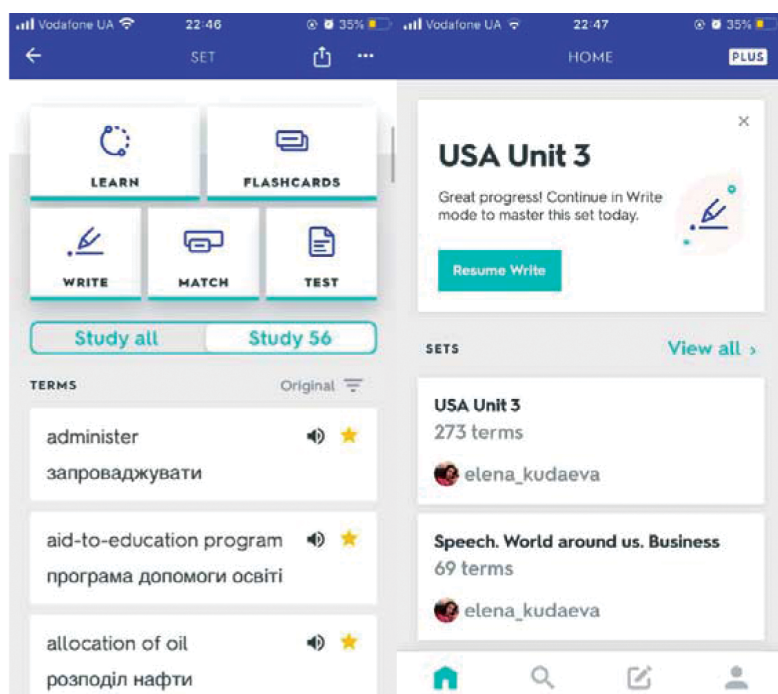
**The purpose of our research** is investigation of the application and the analysis of its functioning at all, on the example of teachers of the Department of Oriental Languages and Intercultural Communication, show the degree of use of various digital application in the process of learning Chinese.

## 2. RESEARCH METHODOLOGY

### 2.1. Research objectives

The research aims were chosen to examine:

- How often university teachers use Internet resources during teaching process;



**Figure 1.** 5 learning modes of Quizlet mobile application and study sets

- Correlation between mastering material, increasing interest, developing language

competences, better academic performance and implementation online resources to educational process.

- Teacher familiarity with the functionality of trainchinese, PurpleCulture, GoogleClassroom.
- Identify whether university teachers are ready to implement the suggested online resources into their practice.
- Drawbacks of the online resources implementation.

### 2.2. Research methods

• For the solution of the tasks and achievement of the research purpose, the following research methods will be used in the complex: *theoretical*: analysis of pedagogical and psychological works, the systematization of the views and achievements of scientists (to identify the state of development of the problem, to define the essence of the basic concepts of research, to develop methodological principles. *Experimental*: questionnaires, observations, analysis of the products of educational activities of participants in the educational process. A questionnaire was chosen as a method of data collection for the study. It was created in Google Docks Forms, containing 11 questions. 7 responses were received during the experiment.

### 2.3. Survey participants

- 7 university teachers (aged 23 to 41) of the Department of Oriental Languages and Intercultural Communication of V. N. Karazin National University participated in the experiment.

## 3. THE ANALYSIS OF THE APPLICATIONS

An analysis of scientific sources showed that mobile applications as a means of passive display of educational material do not have a fundamental novelty in the curriculum, however, their significance for the field of education consists in their interactivity, which provides opportunities for active learning of vocabulary and development students language skills [2; 4; 12].

If we are talking about training a qualified professional in modern society, then this process is not possible without the use of digital teaching aids. The most effective means of teaching foreign languages and Chinese in particular include mobile

applications and online platforms [6; 11; 18; 21]. In this study, we propose to highlight the basic learning platform GoogleClassroom and mobile-digital applications Quizlet, Trainchinese and Purple Culture. The main objective is to define the main pros and cons of using digital applications Quizlet, Trainchinese and Purple Culture and a free web service GoogleClassroom in the educational process of learning Chinese language.

Considering different digital tools for studying that one can use for learning a foreign language, let us focus on Quizlet and GoogleClassroom. It is necessary for us to note that these digital applications can be used in the educational process by both teachers and students.

With the object of determining the effectiveness of the use of the digital applications mentioned above in foreign languages learning process, we should disclose the pros and cons of digital tools for studying in detail.

Having been conducted recently, the analysis of the scientific and methodological literature revealed that Quizlet is a digital mobile and web-based application that allows students to study information via learning tools and games [14]. It was created by Andrew Sutherland in October 2005 and released to the public in January 2007. The main form of representing information is learning modules (called "study sets") composed of terms and their definitions. The application introduces 8 learning modes of which 5 are available in the mobile application interface [16, p. 87].

The advantages of this application include:

- Quizlet provides an application programming interface that allows others to access Quizlet data. Available functions include uploading and downloading flashcards, modifying users' flashcards, and finding definitions created by Quizlet users [15].

- wide functionality allows one to choose a convenient way of remembering information that will correspond to the student's individual characteristics;

- it helps to improve communication between a teacher and a student (enables tracking of learning process).

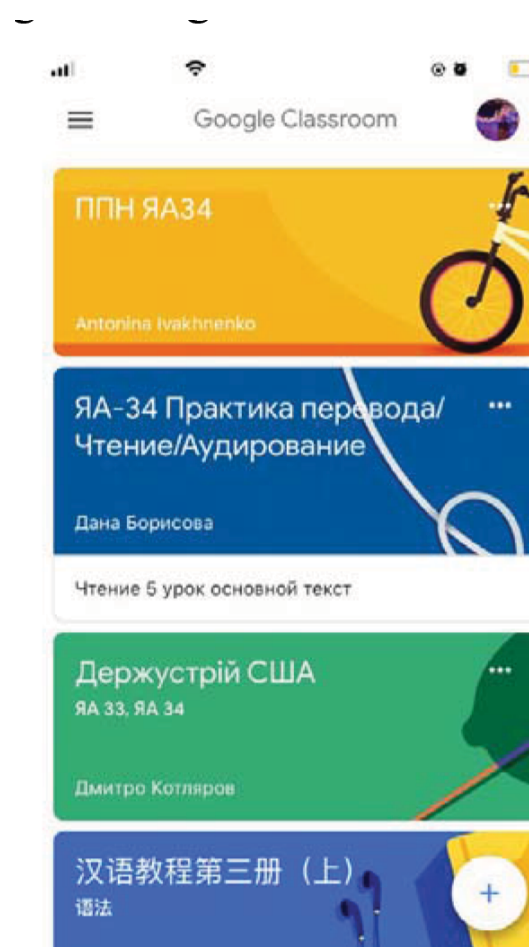
The disadvantages of this digital application include:

- It contains paid content, for example, offline function, free image selection, adding pictures to describe words, removing advertisements are not available;

- module creators can make mistakes;

- only one answer is accepted when performing the task;

- it is not designed to improve the level of spoken language.



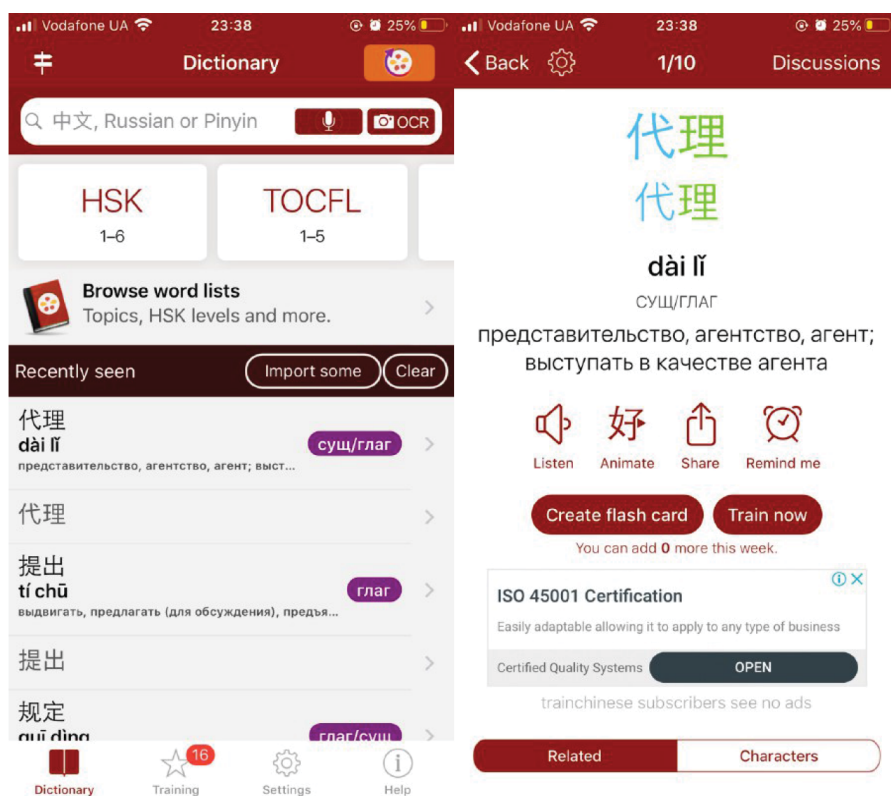
**Figure 2.** Separate folders (called "classes") in Google Classroom

Other digital tool that can stand the users in good stead while learning a foreign language is GoogleClassroom. Google Classroom is a free web service, developed by Google for schools, that aims to simplify creating, distributing, and grading assignments in a paperless way. The primary purpose of Google Classroom is to streamline the process of sharing files between teachers and students. It is free and affiliated with other Google services. We would like to outline that this point makes the using process easier. In particular, its main tasks include the creation of an online platform for spreading of foreign language learning tasks and provision of important information to the students (assessments, chatting, etc.).

The advantages of this web service include:

- Systematicity and arrangement;
- a simple interface that saves time to master this program;

- auto save of materials and information in Google Cloud Service;
- the opportunity of timely tasks review, assessment and comments;
- the opportunity for a teacher to determine the deadline for submitting a test.



**Figure 3.** The interface of the dictionary and a word flash-card

The disadvantages of GoogleClassroom include:

- Gmail mailbox is required;
- Inability of creating a test to check knowledge.
- Inability of editing of assignments once they are released [20].

Trainchinese is worth paying attention to. The application consists of a free and complete dictionary, thousands of vocabulary lists, example sentences, audio recordings, measure words and character animations. It is available for both IOS and Android users. The app creators claim Trainchinese to be a high quality service to facilitate the learning of languages, to be very easy to use and accessible at any time in any place [19].

The main characteristics of the application are:

- the opportunity to learn the meaning of the word using Russian, Chinese or Pinyin;

- if learners start to search the word needed, they will immediately see the Chinese character, transcription, translation, part of speech and measure word (also known as classifier, it denotes people and things and are divided into classes of money, time, people, mass);

- the application provides stroke order animation;

- using internet connection, one can listen to audio recordings of Chinese words;

- moreover, there is a function "Other meanings" featuring additional semantic aspects of a lexeme;

- another advantage to mention is Training mode that allows those, who receive education to create their own sets of flashcards;

- furthermore, users can choose to use Simplified, Traditional characters or both;

- it is also possible to change the way a character looks depending on the tone (the characters are available in different colors and there are settings of tone marks written above Chinese characters);

- if needed to cause complications, either the characters can be left unchanged or phonetic transcription can be adjusted;

- besides, another benefit to point out is the speed of stroke order animation;

- in addition, Training mode featuring flashcards may also be configured.

The disadvantages of Trainchinese include:

- Bad quality recording of some words
- Inability of listening to a word pronunciation off-line
- In-app purchases

Last but not the least is Purple Culture. It is a free online pinyin converter. However, there are some other pros mentioned below:

- Characters can be written in different colors, each color represent a certain tone.

- The word list demonstrates all the words used in the text. Transcription, definition in a chosen language and traditional characters are also given. Among other advantages of this tool it would be great to highlight the following:



Home :: Chinese Tools :: Talking Chinese to Pinyin/Zhuyin Converter

## Talking Chinese to Pinyin/Zhuyin Converter Like 193 Share

Add our Pinyin converter bookmarklet to your bookmark, to quickly convert selected Chinese text from any webpage to Pinyin. [Click here for more information.](#)

**Figure 4.** Interface of an online pinyin converter Purple Culture

1. The list of words can be downloaded in different formats including PDF, CSV, Excel;
2. It is possible to print the word list without downloading it;
3. Test (paid content);
4. Tasks created automatically to memorize the words;
5. Games created in PDF format to provide gamification of the educational process;
6. The list of the words selected by the user.
  - The text tasks combine the next:
    1. Chinese practice worksheet;
    2. Filling the gaps;
    3. Making up sentences with the words given.
  - Settings offers:
    1. The opportunity to make an audio recording and download it which would help the learners to practice listening skills;
    2. High-quality translation of either the whole text or its paragraphs into different languages;
    3. Audio speed setting, speaker's gender option;
    4. Division of the lexemes according to the level of HSK.

Having conducted the analysis of pros and cons of digital applications Quizlet, GoogleClassroom, Trainchinese and Purple Culture we can conclude that the use of this services can positively influence the process of learning a foreign language. The sources of the Internet can stand as an invaluable and immense basis for improving the quality of students' education, meeting their professional and personal interests and needs. Moreover, the programs mentioned above allow to train different types of language activities and unite them in different combinations, form linguistic skills, create communicative situations. It

would be unfair not to mention that fact that the use of digital resources in the educational process provides many opportunities for a foreign language teacher, but it is necessary to cogitate about their goals and evaluate the effectiveness of the use of certain studying resources. However, one should not forget about traditional teaching methods that have withstood the tests of time and proved to be effective ones. The combination of traditional teaching methods with the latest technologies can make educational process more flexible and dynamic, which will definitely contribute to high results in learning foreign languages and development of an individual's key competences.

#### 4. THE RESULTS

The following are the results of a survey of Chinese language teachers at the Department of Oriental Languages and Intercultural Communication at V.N. Karazin National University. Teachers of the department took part in the survey in the amount of 7 and they were asked the following questions:

##### Question no. 1: Please specify your age.

The purpose of this question is to determine the number of age groups among teachers that prevails at the Department of Oriental Languages and Intercultural Communication at V.N. Karazin National University. The results displayed that 1 respondent aged 23 years (14.3%), 2 respondents aged 24 years (28.6%), 1 respondent aged 27 years (14.3%), 1 respondent aged 30 years (14.3%), 1 respondent aged 35 (14.3%), 1 respondent aged 41 (14.3%).

The results for question no.1 showed that the survey participants belong to the group of prime working age [1].



Please specify your age?

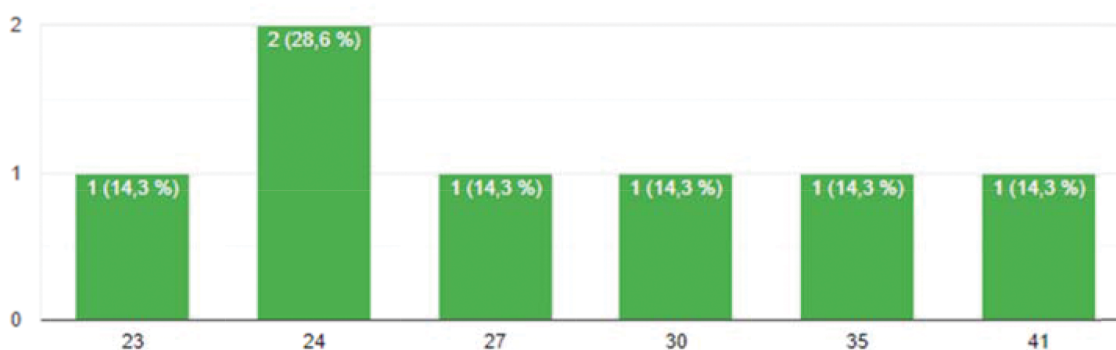


Figure 5. Respondents' age

**Question no. 2: Do you use any online resources during classes? (Specify your favorite ones)**

The question was designed to find out whether the teachers of the Department of Oriental Languages and Intercultural Communication use online resources during classes. The survey showed that all 7 respondents (100%) use online resources in the process of teaching.

**Do you use any online resources during classes? (Specify your favorite ones)**

Чи використовуєте Ви будь-які онлайн-ресурси під час проведення занять?  
(за бажанням вкажіть улюблені джерела)  
7 ответов

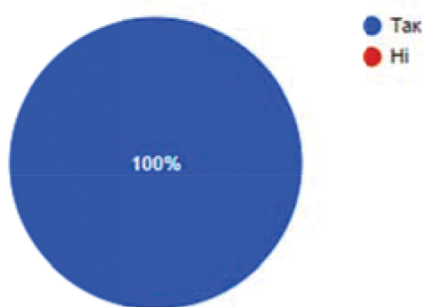


Figure 6. Usage of online resources

**Question no. 3: How often do you use online resources during classes?**

The frequency of using online resources during classes is limited to 4 answers: every time (28,6%), 1-2 times per 2 weeks (28,6%), 1-3 times per one month (28,6 %), once per semester (14,3 %). Thus, the teachers of the Department of Oriental Languages and Intercultural Communication of V. N. Karazin

National University have different opinions concerning the frequency of using online resources during classes.

**How often do you use online resources during classes?**

Як часто Ви використовуєте онлайн-ресурси на заняттях?  
7 ответов

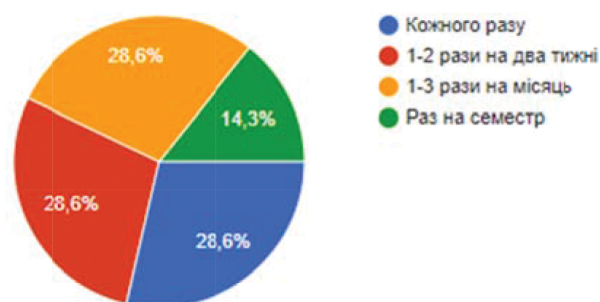


Figure 7. The frequency of using online resources during classes

**Question no.4: Do you have all the necessary conditions in the university classrooms for applying online resources into the educational process?**

The question about providing university teachers with all the necessary conditions for using online resources during the classes has 3 answer options: yes, the conditions are quite suitable for me (0%), yes, but the number of such classrooms is limited (71,4%), no (28,6%). The results of the survey show that none of the respondents is completely satisfied with the availability of the necessary conditions in the university classrooms for applying online

resources into studying process. It may be concluded that the university does not have enough equipment to make using of online resources during classes possible.

### Do you have all the necessary conditions in the university classrooms for applying online resources into studying process?

Чи необхідні умови в аудиторіях для використання онлайн-ресурсів під час занять  
7 ответов

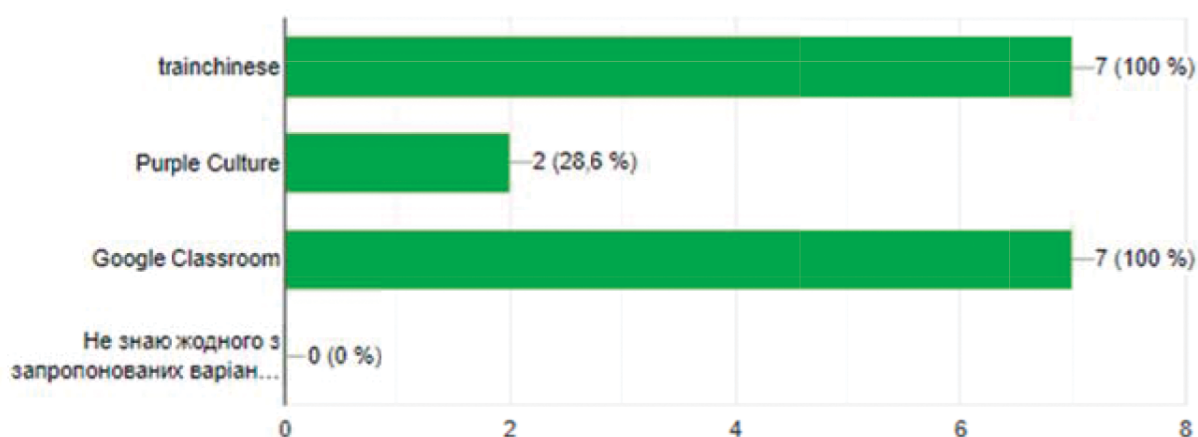


**Figure 8.** The availability of the necessary conditions in the university classrooms for applying online resources into studying process

### Question no.5: Which application are you familiar with?

The purpose of the question is to establish with which app functionality the teachers of the Department of Oriental Languages and Intercultural Communication are well known. The question is limited to 4 answer options:

Із функціоналом якого додатка Ви добре знайомі?  
7 ответов



**Figure 9.** The functionality of application

trainchinese (100%), PurpleCulture (28,6%), GoogleClassroom (100%), I do not know any of the suggested options (0%).

The results of the survey showed that trainchinese and GoogleClassroom applications are the most popular among teachers, as all the respondents are familiar with the functionality of these applications. Only 2 respondents are familiar with PurpleCulture.

### Which application are you familiar with?

### Question no. 6: Did you notice that students are more prepared for the class and better perceive information (extracurricular educational material, evaluation criteria, clearly set deadlines etc.) if sent via Google Classroom?

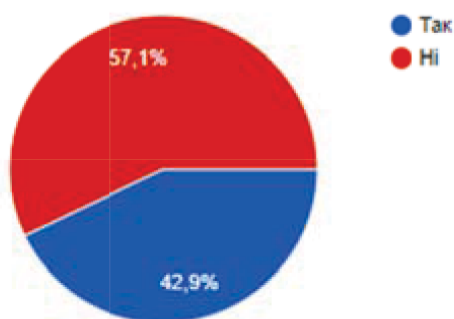
4 respondents (57, 1%) believe that students are more prepared for the class and better perceive information when sent via Google Classroom. 3 respondents (42.9%) suppose that the use of Google Classroom does not affect the quality of the preparation and perceiving of information by students.

Survey results show that most teachers notice a correlation between the form of submission and the acquisition of the information, namely the use of the Google Classroom online resource. However, a large percentage of teachers still do not see any positive change in students' acquisition of information when using Google Classroom.

**Did you notice that students are more prepared for the class and better perceive information (extracurricular educational material, evaluation criteria, clearly set deadlines etc.) if sent via Google Classroom?**

Чи помічали Ви, що студенти більш старанно готуються до занять та краще володіють інформацією (допоміжні матеріали для позакласного ознайомлення, критерії виконання та оцінювання робіт, чітко прописані у додатку дедлайни тощо), якщо вона надіслана через Google Classroom?

7 ответов



**Figure 10.** The correlation between using Google Classroom and perceiving information

**Question no.7: Have you noticed increasing of the interest among students in the topic of the lesson, while using online resources?**

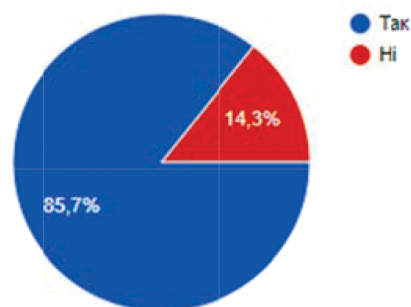
6 respondents (85.7%) admit keen interest of students in the topic of the lesson while using online resources. 1 respondent (14.3%) does not see any positive changes and increasing interest.

The results of the survey showed that most teachers of the Department of Oriental Languages and Intercultural Communication have noticed increasing interest among students while using online resources. It can be concluded that the use of online resources in the teaching process does have a positive effect on increasing interest in the material of the lesson.

**Have you noticed increasing of the interest among students in the topic of the lesson while using online resources?**

Чи помічаєте Ви підвищення зацікавленості у темі заняття серед студентів у випадку використання онлайн-ресурсів?

7 ответов



**Figure 11.** Increasing interest among students in the topic of the lesson, while using online resources

**Question no. 8: Do you agree with a point of view that the use of such applications may boost development of students' language competences?**

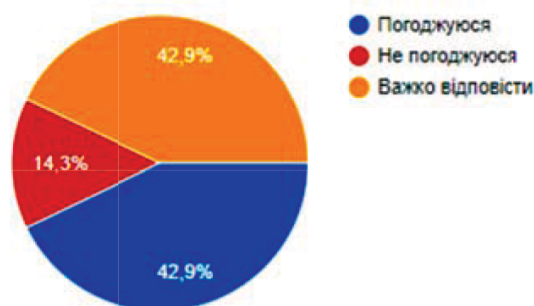
The question is limited to 3 answer options: agree (42,9%), disagree (14, 3%), it is difficult to tell (42,9%).

The results of the survey displayed that the most teachers of the Department of Oriental Languages and Intercultural Communication do not agree or cannot give a clear answer to the question concerning correlation between the use of applications and development of language competences. Thus, it may be deduced that this question needs further research.

**Do you agree with a point of view that the use of such applications may boost development of students' language competences?**

Чи погоджуєтесь Ви з думкою, що використання подібних додатків може посприяти розвитку мовних компетенцій серед студентів?

7 ответов



**Figure 12.** Correlation between development of language competences and the use of applications

**Question no.9: Have you noticed better academic performance among students after implementation of online resources in teaching process?**

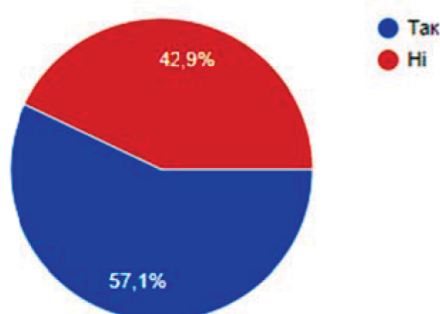
4 (57,1 %) respondents have noticed better academic performance among students after implementation of online resources in teaching process; 3 respondents (42,9%) have not seen any positive changes.

The results of the survey showed the most respondents notice connection between providing online resources into teaching process and students' better academic performance.

**Have you noticed better academic performance among students after implementation of online resources in teaching process?**

Чи помітили Ви підвищення успішності серед студентів після впровадження онлайн-ресурсів у навчальний процес?

7 ответов



*Figure 13. Connection between providing online resources into teaching process and students' better academic performance*

**Question no. 10: Are you going to implement suggested online resources into your teaching process in the near future?**

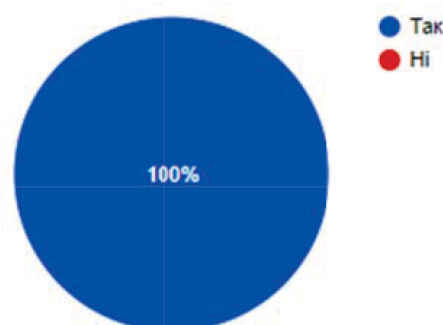
7 respondents (100%) are ready to implement suggested online resources into their teaching process in the near future.

The results of the survey showed that all the teachers are planning to use suggested online resources in their practice.

**Are you going to implement suggested online resources into your teaching process in the near future?**

**What difficulties do you think may occur with the implementation of online resources?**

Чи плануєте Ви у найближчому майбутньому впровадити запропоновані онлайн-ресурси?  
7 ответов



*Figure 14. Implementation suggested online resources into educational process*

This question needs full and detailed response. 5 respondents shared their opinion regarding drawbacks of online resources implementation. Such responses were got in the survey.

1. I do not see any drawbacks yet.
2. They (online resources) can be used only as an addition to the main material.
3. Students do not want to fulfill tasks individually and attentively. Also some students assume that such way of learning does not provide for their obligations to the teacher and the university.
4. Lack of the necessary material resources.
5. The students with lack of motivation do not fulfill the tasks; it is impossible to check acquisition of all the language competences; lack of necessary equipment to implement online resources into educational process.

**5. CONCLUSIONS AND PROSPECTS FOR FURTHER RESEARCH**

The sources of the Internet are considered to be an invaluable and immense basis for improving the quality of students' education, meeting their professional and personal interests and needs. The programs mentioned above allow to train different types of language activities and unite them in different combinations, form linguistic skills, create communicative situations. It is necessary to point out that the use of digital resources in studying process provides a foreign language teacher with many opportunities.

The research is aimed at determining the level of professors' familiarity on the oriental languages



and intercultural communication department at V. N. Karazin Kharkiv National University, analysis of their awareness on the offered online resources and frequency of its introduction into the Chinese teaching process.

In the context of this research, we managed to determine that all the interviewed professors on the oriental languages and intercultural communication department at V. N. Karazin Kharkiv National University use online resources in the process of teaching Chinese, although with varying frequency. None of the respondents were completely satisfied with the necessary conditions in lecture halls for using online resources. Therefore, it can be concluded that the university does not have enough equipment to conduct classes with online resources within its limits.

The results of the research show that all the interviewed professors are aware of the functionality of such applications as trainchinese and GoogleClassroom, notwithstanding the application PurpleCulture is familiar to only 28.6% of the respondents. As a consequence, it needs further promotion among professors and students.

Most of the interviewed teachers see the correlation between mastering the material, raising interest, increasing students' academic progress and adopting online resources to education. However, the results of the poll showed that a majority of teachers on the oriental languages and intercultural communication department at V. N. Karazin Kharkiv National University do not agree or cannot give an exact answer on the question about

the correlation between using digital applications and developing of language competencies. For this reason, the issue requires careful research in the future.

The main conclusion that can be drawn is that the use of digital resources in the studying process provides a foreign language teacher with many opportunities, but it is necessary to cogitate about the goals and evaluate the effectiveness of the use of certain studying tools. Online resources can be used as a supporting element in education, in addition to the main material.

Needless to say that one should not forget about traditional teaching methods that have withstood the tests of time and proved to be effective ones. The combination of traditional teaching methods with the latest technologies can make educational process more flexible and dynamic, which will definitely contribute to high results in learning foreign languages and development of an individual's key competences.

This provides a good starting point for discussion and future research. Further studies should investigate the correlation between the use of the offered applications and development of students' language competencies, ie. a majority of respondents disagreed with this statement or did not provide a clear answer. In future we plan to involve more professors in our study and determine why the use of online resources does not have a positive effect on enhancing students' language competencies.

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