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METHODS OF USING QR-CODES IN THE PRACTICAL TRAINING OF FOREIGN LANGUAGES TEACHERS IN THE FORMATION OF METHODOLOGICAL AND INFORMATION COMPETENCIES OF PUPILS

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Abstract

The article uses methods of comparison and classification to determine how to use QR-codes during practical training of students, future teachers of foreign languages. The emphasis is on the motivation factor for using QR-codes as a modern mobile technology. The role of the teacher as the leader and moderator of the process of introduction of mobile technologies in the process of preparation of foreign language teachers is highlighted. The practicality of using QR-codes in the educational process of students, future teachers of foreign languages, was demonstrated. Some methods of using QR-codes in the practical training of foreign language teachers are given. QR technology is one of the most advanced mobile technologies that can be used in the training of foreign language teachers at the present time. When considering the use of QR-codes in an educational context, it is important to see the motivating quality of QR-technologies. The main attention should be paid to the pedagogy of their use, rather than on their own QR-technology, as mobile technologies do not guarantee an independent increase of the motivation in training. The potential of mobile learning depends on the provision and development of pedagogically meaningful opportunities and working conditions in order to increase the effectiveness of learning. The purpose of training foreign language teachers by means of modern technologies should be to develop

learning more focused on the student, and not to associate teaching and learning only on the use of mobile devices. The current state of mobile technology development provides an education with many ways to use them in the learning process. The literature review conducted by us showed that it is possible to distinguish six main ways of using QR-codes in the training of foreign language teachers: 1. Searches 2. Outdoor tasks. 3. Paper-Based Tasks. 4. Educational content created by the student. 5. Educational instructions. 6. Distribution of information.

All these ways of using QR codes in the educational process of training a foreign language teacher can be mixed and combined.

Key words: *informatization of education, mobile technologies, QR-technologies, interaction of teacher and student, professional training of foreign language teachers, independent and individual work of students, research work of students.*

Formulation of the problem. Informatization of a modern society and education is characterized by the improvement and spread of mobile technologies, which are widely used for information transfer and the interaction between a teacher and a student (a teacher and a pupil) in the education system.

Professional training of foreign language teachers is aimed primarily at the formation of specialists with the newest type of thinking that perceive rapidly changing socio-economic, technological and informational realities of the world and an informational worldview based on the understanding of the decisive role of information and information processes in a co-operative human activity.

A significant gap in the professional development of foreign language teachers is their lack of training in the use of modern mobile technologies, which results in a reduction in the effectiveness of the process of teaching pupils. In this regard, teachers must master not only knowledge in the field of modern mobile technology, but be also qualified to apply it in their methodology of professional activities. The achievement of this goal is facilitated by the training and retraining of teachers in the field of informatization of

education in order to achieve two strategic goals: increasing the efficiency of all types of educational activities through the use of modern technologies and improving the quality of training of foreign language teachers in accordance with the requirements of the information society.

The strategic objectives of informatization of education are only partially reflected in the legal field of Ukraine, in particular, in the State National Program «Education» («Ukraine XXI Century» (1993), the Law of Ukraine «On the National Program of Informatization» (1998), the Law of Ukraine «On General Secondary Education» (1999), the Concept of General Secondary Education (12-year-old school) (2001), the Concept of Informatization of General Education Institutions, Computerization of Village Schools (2001), the National Doctrine of Education Development (2002), the State standard of the base (2004), the State Program «Information and Communication Technologies in Education and Science for 2006-2010» (2005), the Resolution of the Verkhovna Rada of Ukraine «On the Recommendations of the Parliamentary Hearings on the Development of the Informatization of Society in the Ukraine»(2005), the Order of the Ministry of Education and Science of Ukraine «Conducting a pedagogical experiment on the training of future teachers and teachers of informatics of information and communication technologies» (2005), the State Standards of Primary Education (2011), the Decree of the President of Ukraine «On the National Strategy for Solving the education of Ukraine in the period up to 2021»(2013) and others.

Analysis of recent researches and publications.

Preparation of foreign languages teachers to the usage of modern technologies is considered by K. Bugayychuk, M. Kerny, V. Kuklev, N. Rashevskaya, S. Shchak and other scholars who emphasize their priority. It should be noted that domestic pedagogical science has accumulated considerable experience in preparing teachers for the use of modern technologies.

Identification of previously unsettled parts of the problem. At present, the need to introduce modern

technologies into the practice of the work of a foreign language teacher has emerged.

The purpose of the article. Determining methods of use QR-codes as one of the types of mobile technologies in the practical training of foreign language teachers.

Presenting main material. QR-technology is one of the most advanced mobile technologies that can be used in the preparation of foreign language teachers at the present stage. When considering the use of QR-codes in an educational context, it is important to see the motivating quality of QR-technologies. The main attention should be paid to the methods of their use, rather than on their own QR-technology, as mobile technologies do not guarantee an independent increase in the motivation and results of training. The potential of mobile learning depends on the provision and development of methodically meaningful opportunities and working conditions in order to increase the effectiveness of learning. The purpose of training foreign language teachers by means of modern technologies should be to develop learning more focused on the pupil, and not to associate teaching and learning only with the use of mobile devices (B.H.Zhang, C. K. Looi, P. Seow, G. Chia, 2010, c.21).

The current state of development of mobile technologies provides education for many ways of using them in the educational process. The literature review conducted by us showed that it is possible to distinguish six main ways of using QR-codes in the preparation of foreign language teachers:

1. Search tasks (e.g: «Searching for treasures», «Hunting for» Easter eggs «, etc. (Law C., p.86-87; Rikala J., 2014).

2. Outdoor tasks (e.g: «Description of physical objects», «Geocaching for creating tests», «Creating kinesthetic reading activity», etc. (Law C., p.90; Lee J. K.,2011, p.486-89).

3. Paper-based Tasks (for example various test tasks, «Futuristic books», «Bulletin with many references», etc. (Lee J. K., 2011, c.490).

4. Educational content created by the student (e.g: «Portfolio of the passing of the pedagogical practice»,

«Personal profile, site, web page ...») (Mikulski J., 2011; Rikala J., 2014).

5. Educational instructions (e.g: «Create a chart/diagram...»), «Connect the beginning and end of the text», etc.) (Walker C.,2010)

6. Sharing information (e.g: «Virtual Tour on the River of the Thames ...», «Voting on Twitter, FB, VK ... for the best creative work», «Announcement of holding events in a high school, a group, junior school, etc.», etc.) (B.H.Zhang, C. K. Looi, P. Seow, G. Chia, 2010; Walker C.,2010).

The methods of their practical use can be described as follows in the educational process for both like students and pupils.

«Search tasks» allow students/pupils to explore specific thematic areas of study and solve methodological problems that are related to the learning environment, and so on. This type of activity can be organized in the form of collaboration or competition between students/pupils, but it can also be used to support individual/independent learning. Foreign scholars conducted this kind of activity with QR-codes in mathematics, where students studied their communities and created one or several mathematical problems related to their problems. In each place, the students conducted a survey by scanning the code and recording the response (Law C., 2010, p.91-92; Rikala J., 2014). It was discovered that students showed great enthusiasm and interest in such a new approach to solving a problem that was very different from the usual exercises.

First of all, we need to give them the direct instructions how to use QR-codes and after that allow students to search and understand the methodology of using QR-codes in accordance with such types of tasks. For example, we can propose QR-codes for the second-year students from the theme «Intersections» from the discipline «Practice of spoken and written speech»:

here is «hidden» the information about types of intersections:



«Outdoors» using QR-codes allows students to practice the spoken language skills in a variety of topics such as: «Practice of oral and written speech», «English-speaking countries and Ukraine: art, education and international organizations», «Theory and practice of translation», etc. A QR-code can, for example, give foreign language tips when determining types of historical monuments or provide additional information about them. The code can, for example, include references to resources that send students to information about the origin or etymology of the expression or concept that can be found in the current environment (Lee J. K.,2011, c.490). With the help of using QR-codes, students study and define approaches to learning foreign language during the summer practice and share their results with group members through a system of social networks, presentations and discussions. It is found that with the help of QR codes, teachers can create their own guides for individual research, in which students learn more effectively to use different sources of information search and storage, because the code contains detailed information that has a non-direct relation to the subject. It should be noted that the motivating way is to work with QR codes when integrating digital learning data with theoretical materials (Lee J. K.,2011, p.491).

This QR-code shows the rules about such notion as «Closure rates» and using it outdoor we can train not just this simple rule when we are teaching our pupils how to behave on the street but we can show the methodology how to use QR-codes for solving such tasks to our students too:

«Paper-based Tasks» can contain QR-codes with links to multimedia resources such as audio materials or video clips in the case of listening to exercises on such disciplines as: «Practical phonetics», «Terminology of the main foreign

language», «Stylistics», «Education of English-speaking countries» and others.



For example QR-codes from the theme «London» from the discipline «Practice of spoken and written speech» for the second-year students.

This QR-code presents the students the part from the poem «London» by Catman Cohen which they can use for preparing their independent work, presentations, posters, etc.

Usage of paper-based tasks QR-codes can also direct students during the self-assessment process (Mikulski J., 2011).

For example, a QR-code on a sheet can be sent a student to a web-page, showing the right answers and they can independently check their level. American researchers have shown how QR-codes can be used while listening to exercises. They noticed that QR-codes are a very effective and flexible way to get resources anywhere, anytime, at a convenient time for students (Walker C., 2010, p.2-3].



The «educational content» created by the student demonstrates reports or other materials on the Internet and provides an opportunity to share their work using QR-codes. For example, students can record book reviews and attach a QR code on the inside of the book's cover, or they can write children's books and record their reading, and then add QR-codes with audio links to create an interactive foreign language source (Walker C., 2010).

Through the «methodical instructions» teachers can provide guidance and information to students on how to perform certain tasks in such disciplines as: «Methodology of

studying a foreign language (English) in elementary school», «Technologies of teaching English in elementary school», «Terminology of the main foreign language» and others. For example, in a classroom, QR-codes can be placed on different equipment, such as different kinds of didactic material, posters, maps, etc. This approach also supports student self-education (Rikala J., 2014).

«Sharing information» with the help of QR-codes is a very convenient way of organizing various activities of extra-curricular activities or independent work on various disciplines and students' research work.

For example, when voting for a selected team, it is enough to scan the QR code of this command. That is, there is no need to write a message or fill out a form.

The main forms and methods of ICT, which are appropriate for use in organizing independent work with students, are: web quests, QR-codes, QR-quests, Google services, blogging, virtual tours, Intel-projects, multimedia presentations, the use of an interactive whiteboard, educational forums, educational resource databases, virtual libraries, the creation of an electronic portfolio, educational materials library, comics, doodles, word clouds, etc.

Conclusions and perspectives of further research.

All these ways of using QR-codes in the educational process of preparing a foreign language teacher can be mixed and combined. The prospects for further research are seen in the study of methods for using QR-codes in the educational process of preparing foreign language teachers.

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процесу впровадження мобільних технологій у процес підготовки вчителів іноземних мов. Продемонстровано практичність використання QR-кодів у освітньому процесі навчання студентів, майбутніх фахівців іноземної мови. Наведено деякі методи використання QR-кодів у практичній підготовці вчителів іноземної мови.

Ключові слова: *інформатизація освіти, мобільні технології, QR-технології, взаємодія викладача і студента, професійна підготовка вчителів іноземних мов, самостійна та індивідуальна робота студентів, науково-дослідна робота студентів.*

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МЕТОДЫ ИСПОЛЬЗОВАНИЯ QR-КОДОВ В ПРАКТИЧЕСКОЙ ПОДГОТОВКЕ УЧИТЕЛЕЙ ИНОСТРАННЫХ ЯЗЫКОВ В ФОРМИРОВАНИИ МЕТОДИЧЕСКИХ И ИНФОРМАЦИОННЫХ КОМПЕТЕНЦИЙ УЧЕНИКОВ.

Аннотация

В статье на базе методов сравнения и классификации определены способы использования QR-кодов во время практического обучения студентов, будущих учителей иностранных языков. Освещена роль преподавателя как руководителя и модератора процесса внедрения мобильных технологий в процесс подготовки учителей иностранных языков. Продемонстрировано практичность использования QR-кодов в образовательном процессе обучения студентов, будущих специалистов иностранного языка. Приведены методы использования QR-кодов в практической подготовке учителей иностранного языка.

Ключевые слова: *информатизация образования, мобильные технологии, QR-технологии, взаимодействие преподавателя и студента, профессиональная подготовка учителей иностранных языков, самостоятельная и индивидуальная работа студентов, научно-исследовательская работа студентов.*