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*Ключевые слова:* средства обучения, наглядные средства обучения, когнитивные процессы и схемы, дидактика, мультимедийные средства обучения.

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*Мақалада тұтас педагогикалық үдерістегі мультимедиялық көрнекі құралдардың рөлі бағаланады. Авторлар оқу материалының мазмұны мен безендіру заңдары сипаттаған. Шығармашылық кесте, интеллект-карталар және т.б. қолдану мүмкіндіктері көрсетілген.*

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*Abstract. The paper evaluated the role of multimedia visual aids in the whole educational process. The author of the laws are content and design of educational material. The possibilities of cognitive schemes, intelligence, maps and other visual teaching aids visualized.*

*D. Sapargaliyev*

## THE TEACHERS' WILLINGNESS TO USE MOBILE DEVICES FOR POLISH LANGUAGE STUDY

**Abstract.** This paper reports results of a survey that identified teachers' willingness to use mobile devices in Polish language learning. We asked 20 teachers from two Polish universities that teach foreign students. The findings of survey showed that a mobile phone is the most widespread mobile device. Teachers noted that suitable files for mobile learning are text and audio. However, some teachers have problems with the use of a mobile phone. We found that most of teachers did not know about mobile learning, but they agreed to create mobile content for the students.

**Introduction.** Mobile learning in the last decade is one of the most rapidly developing branches of e-learning. Many universities are actively implementing mobile learning worldwide. According to Ericsson (2012) report the global mobile penetration reached 85 percent in 2011 and mobile subscriptions are around 6 billion. However, the actual number of subscribers is about 4.1 billion. This is equal to around 60 percent of the world's population. There are excellent conditions for the spread of mobile learning and for strengthen its position in the education. We assume that every year the number of mobile learning students will grow as rapidly as the number of mobile users.

Especially popular today becomes the study of foreign languages with the help of mobile phones and devices. Kukulska-Hulme (2010) argues that language learning is one of the most popular application areas of mobile learning. It provides

fertile ground for the growth of this phenomenon. Meanwhile, Hashemi and Ghasemi (2011) suggest that language learners are more motivated by the individualized learning needs. The authors suggest that mobile devices are appropriate for supporting social contacts and collaborative learning opportunities. Pettit and Kukulska-Hulme (2007) examine how far the devices were embedded in the personal and professional lives of Master course alumni. The findings show the changing relationship between learners and educational institutions, and the role of mobile devices in enabling individuals to engage in learning conversations.

Abdous, Camarena and Facer (2009) rightly point out that Integrating Mobile Assisted Language Learning (MALL) technology into the foreign language curriculum is becoming commonplace in many secondary and higher education institutions. Nevertheless, Kukulska-Hulme (2008) discusses that learners who are not dependent on access to fixed computers can engage in activities that relate more closely to their current surroundings, sometimes crossing the border between formal and informal learning. Author notes that development in mobile-assisted language learning can lead to new perspectives and practices an emphasis on mobility.

Currently, we can find a lot of techniques for the study of foreign languages with mobile phones in different countries. For example, Gromik (2012) describes the process of video creation with a cell phone in the classroom. The author notes that

educators need to understand the benefits and challenges of integrating mobile phone devices as learning tools. Ogata et al. (2008) show a LOCH (Language Learning Outside the Classroom) system named One Day Trip that was developed to assist overseas students to learn Japanese in real life situations with the help of a PDA (Personal Digital Assistant). Fotouhi-Ghazvini, Earnshaw and Haji-Esmacili (2009) design mobile games which served as a platform for exercises, assignments and self-study for language learning. The authors describe the informal framework of learning that provides a ubiquitous tool for adult learners in Iran.

In our study, we attempt to determine the readiness of teachers to use mobile devices for teaching Polish language. The development of mobile learning occurs in Polish universities irregularly. For example, Piotrowski and Pomianek (2006) define the challenge results in the lack of serious mobile learning implementations in Poland. There was a disconnection of mobile devices, either intentionally (when the connection is too expensive) or not (when no infrastructure is provided). Authors point out only few promotional initiatives could be mentioned, for example the website disseminating m-learning activities in Polish language ([www.mlearning.pl](http://www.mlearning.pl)). There are some initiatives and technologies in Poland enable to adapt electronic learning materials for mobile devices. Morgan (2011) describes the MILES interfaces that allow the appropriate for any mobile device and adjust media size according to the any mobile device at Poznan University of Economics.

Obviously, that implementation of mobile learning at university needs in identify of teachers' willingness to this type of learning. For example, Chao (2005) studies the teachers' attitudes toward the use of mobile technologies in the classroom. Author rightly point out that a positive attitude toward innovation is crucial and indicative of a state of readiness to sustain or use that innovation. It was described an instrument developed to measure teachers' attitudes toward the use of wireless-mobile technologies in the classroom. Also Uzunboylu and Ozdamli (2011) provide the first findings about teacher perceptions. The authors describe the Mobile Learning Perception Scale that includes dimensions seeking teachers' feedback on three facets of the m-learning. According to the results teachers exhibited above medium levels of perception towards m-learning.

In our study, we attempted to determine the technical and pedagogical aspects of the teachers' willingness to use mobile devices in learning of Polish language. Although, our study is limited by small sample sizes, the findings show that mobile learning has good potential to provide some benefits in language learning.

**Teacher Survey and Results.** This section describes the results of our survey. We have prepared

a paper based questionnaire. This questionnaire contained two closed-ended question and ten open-ended questions. We conducted a survey in an anonymous form.

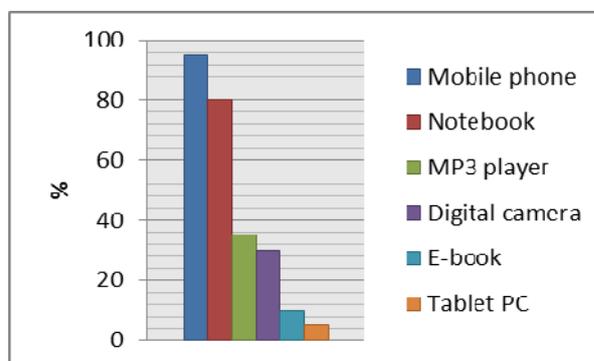
**Purpose.** The purpose of this survey was to identify the teachers' willingness to use mobile devices for Polish language study at universities. We think that the implementation of mobile learning depends on the attitudes and readiness of teachers. In our study, we determined the technical and pedagogical aspects for the successful organization of mobile learning. We created a questionnaire for teachers for determine the willingness of educators to use mobile technologies in teaching.

**Participants.** The participants of this survey were 20 teachers (80% female) from The Centre of Polish Language and Culture for Foreigners "Polonicum" (University of Warsaw) and The School of Polish Language and Culture for Foreign Students (Adam Mickiewicz University). Teachers were in three different age groups (over 42-25%; from 31 to 41-50%; and under 31-25%) and they defined four length of teaching experience (more 10 years – 25%; from 5 to 10 years – 65%; from 1 to 5 years – 10%). The survey was conducted in May and November, 2011.

**Technical Aspects of Using a Mobile Phone for Teaching.** In our study, it was important to determine the equipment of teachers for the possible implementation of mobile learning. We have prepared the following questions that allowed defining the technical aspects of using mobile devices by teachers:

*(Q1) What type of mobile devices do you use every day?*

As it was expected almost all teachers (95%) indicated that they use a mobile phone. Eight in ten (80%) note that use notebook. While a third (35%) of educators defined a MP3 player and a digital camera (30%). One in ten (10%) of teachers define E-book and only 5% point out on Tablet PC (Figure 1).

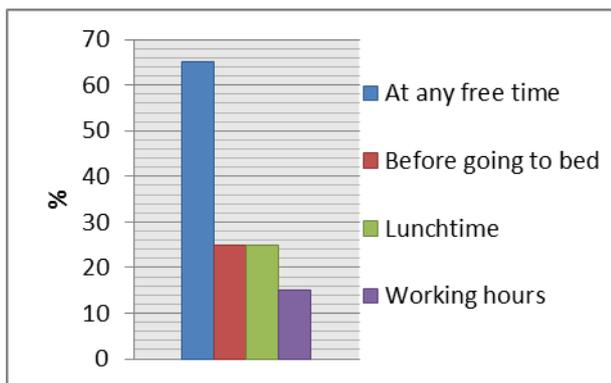


**Figure 1:** Mobile devices of teachers

(Source: Own.)

*(Q2) When do you use a mobile phone frequently?*

During the creation of the questionnaire we deliberately singled out a mobile phone as a main mobile device of teachers. Therefore, the following questions reflect the technical aspects of using a mobile phone. The results showed that three fifths (65%) of teachers use mobile phone at any free time. A quarter (25%) uses it before going to bed and lunchtime. And 15% answer that use this device during working hours (Figure 2).

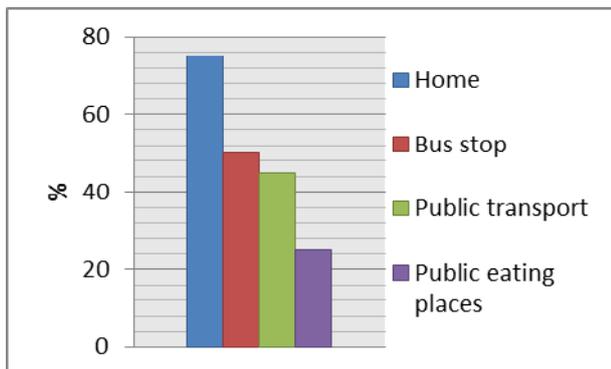


**Figure 2:** Time of using a mobile phone

(Source: Own.)

*(Q3) Where do you use a mobile phone frequently?*

Three quarters (75%) of teachers use mobile phones at home. Meanwhile, half (50%) say that uses it at a bus stop, station and airport. Although half (45%) also point out a public transport as a bus, metro, tram, taxi and other. And a quarter (25%) of teachers says that use in public eating places such as a coffee, restaurant, canteen and other (Figure 3).

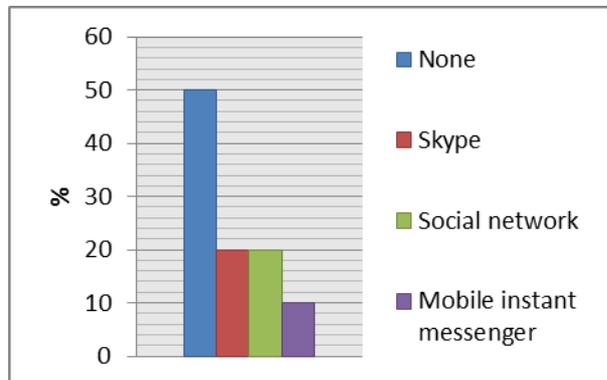


**Figure 3:** Places of using a mobile phone

(Source: Own.)

*(Q4) Which applications (software) do you use/install on your mobile phone?*

Half (50%) of teachers say that do not use any mobile software. While both (20%) of educators use videoconferencing (Skype) and social networks such as Facebook, MySpace or Google+. And only one in ten (10%) teachers says that use a mobile instant messenger service such as Yahoo! Messenger, Facebook Chat, Google Talk and other services (Figure 4)

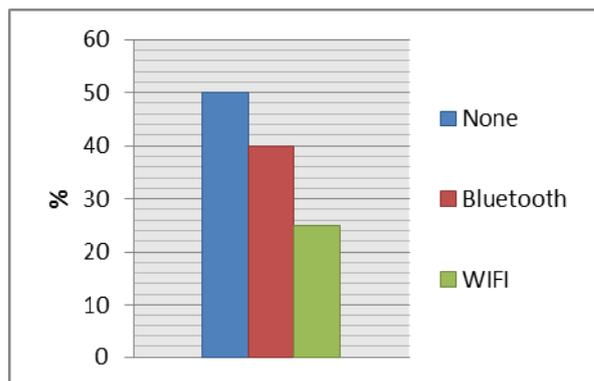


**Figure 4:** Mobile phone applications using by teachers

(Source: Own.)

*(Q5) What type of wireless connection do you use on your mobile phone?*

Half (50%) of teachers answer that do not use any wireless connections. Four in ten say (40%) that use Bluetooth and a quarter (25%) of teachers reply that work with Wireless Fidelity (Wi-Fi) connection (Figure 5)



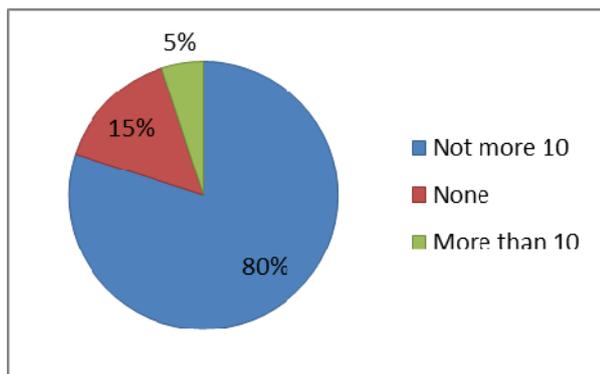
**Figure 5:** Types of mobile wireless connections using by teachers

(Source: Own.)

*(Q6) How many SMS messages do you send daily?*

Eight in ten (80%) of educators say that send not more ten text messages per day. While 15% answer that not send any SMS and only 5% point

out that send more than 10 text messages per day (Figure 6).

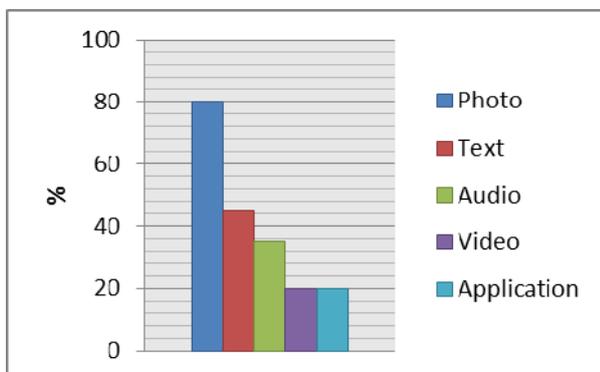


**Figure 6:** Quantity of teachers' SMS per day

(Source: Own.)

*(Q7) What types of files do you transmit from your mobile phone or PC?*

The most teachers, eight in ten (80%) say that transmitted a photo file. Almost half (45%) of educators confirm that transfer a text document. While a third (35%) said it is an audio file. 20% answer that transmitted a video and an application (Figure 7)

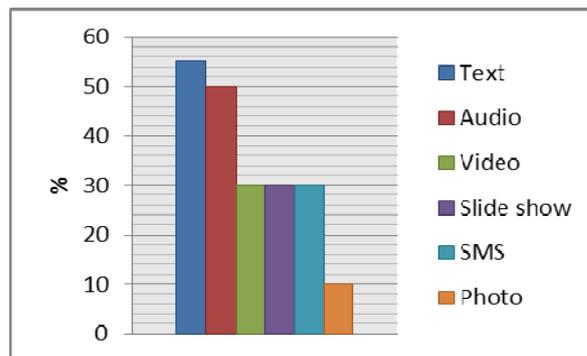


**Figure 7:** Different types of files appropriate for delivering of learning content

(Source: Own.)

*(Q8) What format is better for deliver learning content to mobile devices?*

More than half (55%) educators define a text document as the best format for delivering learning content and half (50%) of teachers mark an audio. While a third (30%) says there are a video, a slide show and a text messaging formats. Only 10% point out a photo as appropriate learning format (Figure 8).

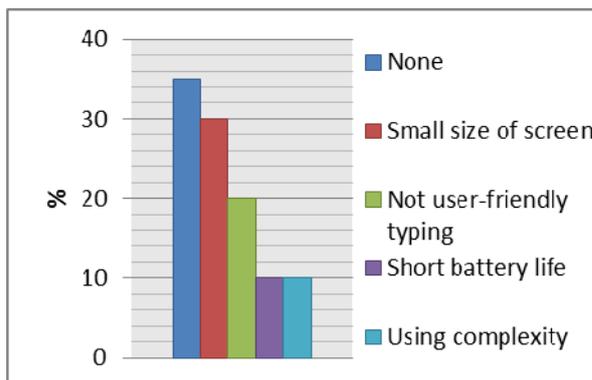


**Figure 8:** Appropriate formats for delivering of learning content

(Source: Own.)

*(Q9) Define a problem of using your mobile phone?*

A third (35%) mentions that have not any problems in using of a mobile phone. Slightly less (30%) of educators say that problem is a small size of screen. 20% of teachers mark that have problem with typing the text. And one in tenth define the other problems, there are a short battery life and complexity in use (Figure 9).



**Figure 9:** Main problems in using a mobile phone

(Source: Own.)

### Teacher Attitudes in Use Mobile Devices for Teaching

In our survey, it was important to find out reaction of teacher to implement of mobile learning. We have created the following questions that allowed understand teachers' attitudes in use mobile devices in pedagogical practice:

*(Q10) Have you ever heard about Mobile learning?*

As we supposed the most of teacher (70%) never heard about mobile learning, meanwhile almost a third (30%) of them know about this type of learning (Figure 10).

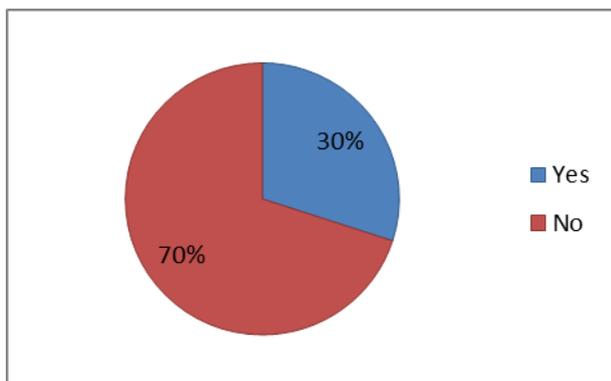


Figure 10: Awareness of teachers about mobile learning

(Source: Own.)

(Q11) Are you ready to create learning content for mobile devices?

The most of teachers (70%) answer that ready to make mobile content for students if it will not take much time. Both 20% of educators want to create learning content for mobile devices because it is interesting and it helps student to acquire new information. 10% of teachers ready to do this only if it will be paid additionally. The other side the survey data shows that only 10% not ready to create mobile learning content because they do not know how to do it. Also 5% educators point out that creating of learning content for students' mobile devices is not effective and not interesting (Figure 11).

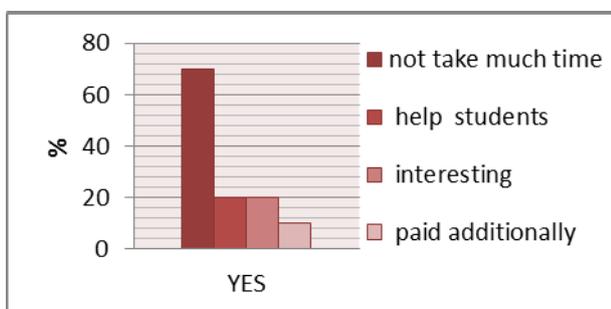
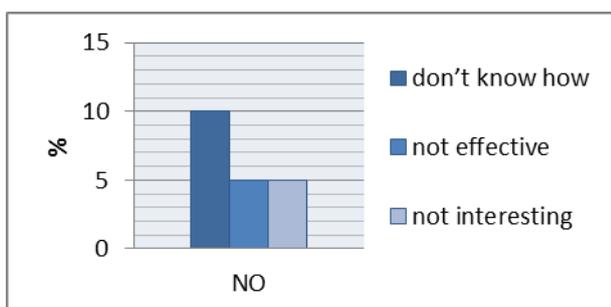


Figure 11: Positive and negative attitudes toward creating of learning content for mobile devices



(Source: Own.)

(Q12) What does "Mobile learning" mean?

At the end of our survey, we asked the teachers to define this type of learning and got following answers: "...learning with mobile devices", "...a way for gather learning materials with using a mobile phone", "...there is learning with using of a mobile phone", "...thanks to this type of learning the lessons may be more interesting and diverse for students. It can easily establish contact with young people", "...there is learning through the active use of technological inventions", "...learn anywhere and whenever you want" and "...there is learning with variety of devices and the use of the information posted on Internet".

### Discussion

Obviously that the most common and affordable mobile device for teachers is a mobile phone. This is due to the availability and popularity of this type of mobile devices, as well as user-friendliness. We attempted to determine the time, which can be used to support teaching of students and checking of students' tasks. The survey data shows that most teachers use a mobile phone in any free time (all day), as well as during a lunch break (afternoon) and bedtime (late evening).

According to the survey, in most cases teacher determine of their houses as a place where they use a mobile phone more often. We think that teachers at home are convenient to use a mobile phone for teaching purposes (for example, the creation of mobile learning content). Also, the teacher pointed the places associated with the expectation of public transport. These data show that teachers use mobiles on the move and the vehicles are suitable places for using a mobile phone in learning purposes.

As we explained in the survey, half of the teachers do not use additional applications on mobile phone. We think that this is due to the fact that teachers are using a mobile phone generally for calls and SMS messages. It is important to show teachers how to install additional software on a mobile phone. However, some teachers said that use social networking applications and video conferencing. The use of such applications probably can help to organize a special learning group in social networks or the development of speaking skills by video.

The findings showed that almost half of the teachers do not use any wireless data transmission from mobile device to other device or PC. But teachers use Bluetooth and Wi-Fi for wireless connection. This is a good indicator of teachers' awareness of the potential of wireless networks. We deliberately did not ask about GPRS, since we are interested in networks that do not require payment. If, for example the use of Bluetooth can be used within a one classroom for the transfer of educational information (10 meters), the Wi-Fi can

be used with a large number of students to exchange information and to obtain educational content (100 meters). It depends on the conditions and technical equipment of the university.

We tried to find out how often the teachers send text messages. The survey showed that most teachers send no more than 10 messages a day. We suppose that using of text messages, especially in language learning can be a good writing tool for teachers and students.

In our study we found that the teachers have experience in the transfer of files between different types of mobile phones or personal computers. The data showed that most teachers send photos, as well as about half of them transmit text documents and audio files. These files can be widely used in the study of foreign languages (creating vocabulary cards, texts and audio for the development of speaking and listening skills). However, teachers indicated that the appropriate file types for delivering of educational information are audio and text documents.

It is important to note that almost a third of teachers do not have any difficulties in using a mobile phone. At the same time, some teachers point out that mobile phone has a small screen and is inconvenient for typing text. These issues relate to the fact that many models of phones (not smartphones) have not enough size of screens for comfortable reading.

The most important thing for us is that teachers are ready to create learning content for students. This is a good indicator of readiness and of teachers to introduce mobile learning.

### Conclusion

Generally, we should say that the teachers play an important role in process of mobile learning's implementation. We think that teachers should determine the effectiveness of mobile learning by in practice. The willingness of teachers to mobile learning should be formed under the influence of all of capabilities and limitations in m-learning. This will avoid the negative perceptions and biased vision of the problems in mobile learning's implementation. The main result in our study is that teachers are ready to accept mobile learning and they motivated to use mobile technologies for convenience of students' learning a foreign language.

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Мақалада оқыту үдерісі барысында поляк тілін үйренуде оқытушылардың мобильді құралғыларды қолдану даярлықтарын айқындаудағы сауалдардың нәтижесі берілген. Сауалнамаға екі поляк университетінің шетел студенттеріне поляк тілін оқытатын 20 оқытушы қатысқан. Нәтижесінде ұялы телефон оқытушылар арасында ең кең қолданыстағы құрал болып табылған.

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В статье представлены результаты опроса о готовности преподавателей к использованию мобильных устройств в процессе обучения польскому языку. В анкетировании участвовало 20 преподавателей, которые обучают иностранных студентов в двух польских университетах. Результаты опроса показали, что сотовый телефон является самым распространенным мобильным устройством среди преподавателей.

По мнению преподавателей, наиболее подходящими форматами файлов для мобильного обучения являются текст и аудио. Тем не менее у некоторых преподавателей существуют некоторые проблемы в использовании сотового телефона. Также мы выявили, что большинство преподавателей не знают о феномене мобильного обучения. Тем не менее преподаватели выразили готовность создавать учебный контент для мобильных устройств.