

Micro-And Mobile Learning for Vet Students' Mobility

Sławomir Czepielewski

Mescomp Technologies SA (Poland)

slawomir.czepielewski@warsawacademy.com

Abstract

The relations between Spain, Portugal and countries from Eastern Europe show how important is communication nowadays. Especially today, when more than ever VET students from Portugal and Spain are looking for work in the Eastern Europe. This was the main reason for creating the eBridge 2 VET Mobility project, which is a response to the lack of competences in foreign languages and in intercultural skills of VET students. The main objective of the project is to facilitate VET students to acquire language competences, intercultural skills with new technologies. eBridge 2 project encourages especially people from Spain, Portugal, new members of the EU: Poland, Latvia, Czech Republic and aspiring for membership Turkey to bilateral mobility.

The crucial aspect for VET students is the possibility of learning languages with ICT tools. The fact is that students are very skilled users of new technologies, but with one requirement – the materials must be available anytime they want and any place they need. Therefore all materials of eBridge 2 project have been prepared on the teaching platform with the usage of asynchronous e-learning (web application) and with the use of mobile learning (mobile applications). What is crucial, both of them are integrated, however each plays different function. E-learning platform is the basis for teaching and methodological support, while mobile applications follow the topics contained in the platform. Thanks to such combination VET students have very attractive language material which may be used anywhere and anytime they want.

eBridge 2 VET students project enables users to take the advantage of: computer – here they find the teaching materials, grammar part and cultural info and on the other hand mobile devices – here special plug-ins have access to some function and elements of the teaching course. It's worth to add that the material presented on mobile applications has been prepared separately with the use of microlearning methodological assumptions. These materials follow the same learning objectives, but they run in a different methodological and technological form. Materials are prepared in very small portions and adjusted to the capabilities of mobile devices and VET students' mobility. What's more, the applications have additional materials, that allow VET students to use the acquired knowledge in real communication situations.

1. Introduction

Migration within the EU is a phenomenon of intensity increasing year by year. More and more people are choosing to change their place of residence. In practice, each Member State of the European Union thus becomes both the source and purpose of migration. The current economic situation indicates the fact that the increase in the number of migrating people will apply not only to the countries admitted to the EU since 2004, which are still undergoing major economic transformations, but also will be increasingly growing in the countries belonging to the so-called Old Union.

A special migratory group with great potential are young people in the EU. Graduates from vocational schools and students are increasingly interested in working in their chosen professions and searching for it they are willing to change their country of residence. A large proportion of young people through migration also gets money for further education, and youths with vocational education want to go abroad because of better earnings. The situation in the EU, in particular the free movement on labour markets for citizens of the EU, creates favourable conditions for the personal and professional development of young Europeans. Mobility of students, however, is often very limited due to many factors. The most important ones include the insufficient knowledge of foreign languages, lack of orientation in the requirements of the labour market and the fear of finding themselves in a different cultural situation.

The eBridge 2 VET Mobility project (hereinafter referred to as eBridge 2) responds to the need to develop language and intercultural skills of students. The project is addressed to the residents of Spain, Portugal, Poland, Latvia, the Czech Republic and Turkey. The choice of participants was affected by the unprecedented phenomenon in the relations between the Iberian Peninsula and Eastern European countries. Spanish and Portuguese students in search of jobs go to countries



of the former Eastern Bloc. This phenomenon clearly indicates the importance of linguistic communication for the mobility of young people from the EU.

The target group of the project are trainees and apprentices, as well as students with education needed for the European labour market. Foreign students are a potential source of highly skilled immigrants for countries being the destination of migration. Thus, developing the mobility of young people is a win-win opportunity for all participants of the project.

eBridge 2 develops the mobility of young Europeans by supporting professional training in a way to make it easier to work in one of the countries participating in the project. The means to achieve this objective is the development of language and intercultural skills of young Europeans, as well as the promotion of lesser-known languages spoken in Europe in order to enhance opportunities for users of the project to gain experience on the international labour markets.

What does eBridge 2 offer to young people? The key important for young, mobile people is the ability to develop their language and cultural skills via mobile devices. Students are among the highly skilled users of such devices and expect that through them they can achieve a language support they need, available at any time and any place. eBridge 2 realises this need, using a method of micro- and mobile learning when designing a language course.

2. What is microlearning?

Microlearning is a teaching method based on the transfer of small portions of knowledge, which is then repeated and revised according to strictly defined rules. Teaching units run by this method are concentrated in time – they can last from a few seconds (e. g. on mobile devices) up to 15 or more minutes. Microlearning simplifies the process of self-education, as it combines different approaches to learning and is easy to integrate into the rhythm of daily tasks.

What features should microcontents have? From a technological point of view, it is important to use for designing micro-learning units small formats that give the ability to quickly find relevant information. The information on the screen of smartphone, tablet or computer should be visible in its entirety and not require scrolling. When designing such learning materials, small resolutions and capacity of mobile devices must be taken into account. This allows receiving learning materials using any equipment. From the point of view of teaching it is important to clearly formulate the subject, precisely indicating the contents of the lesson, which should be focused on a single issue (sentence, text or dialogue). Microcontent should be also characterised by the autonomy that guarantees its intelligibility without having to refer to additional information. The key issue for microlearning is the teaching context and knowledge of potential learners. The effectiveness of contextual language learning derives from the following characteristics:

- Specificity of encoding information – the transformation and information coding processes work out best when we learn to use language in a specific context.
- Intervals of repeating – learning is more effective when the contents to be learned are spread over time, than when they occur in rapid sequence.
- Knowledge associated with personal experience of the learner and cultural contexts in which he or she grows.

3. Mobile learning as a support for language education

In the simplest sense mobile learning (m-learning) is a method of teaching using mobile information and communication technologies. M-learning means learning via wireless and mobile communication devices, i. e. laptops, tablets or smartphones. The only condition is permanent access of these devices to the Internet. Mobile learning combines the possibilities offered by wireless networks, mobile technologies and e-learning. M-learning should be regarded as a specific variety of e-learning.

The mobility of learning should be considered from the perspective of the service receiver that can learn anywhere, at time and place he or she chose, and in terms of technology and tools, design of which allows for the use of learning materials at any time and place. Contemporary pedagogics understands m-learning as a modern form of education that belongs to the constructivist mainstream.

Educational content ready for m-learning must be prepared according to certain rules:

- Mobile technologies are associated with miniaturisation of communication tools, so packets of information should be in the form convenient for receipt in terms of mobile access.
- Dividing the information provided to “learning objects”.
- Learning objects must be designed in a way that enables further combining them into a unified whole with other information resources.

- Learning objects transmitted by mobile devices should be short (to be quickly read) and easy (to be quickly restored from the memory).
- In connection with the media miniaturisation and short time available for learning it is important to be sure that the material designed is multimedia.
- Because of the problems, which may occur when creating an m-learning model uniform for all types of mobile devices, it is important to determine the type of tools intended to be used in the process of mobile learning.

4. Synchronous and asynchronous micro- and mobile learning

In the synchronous method of e-learning the teacher is in contact with the student at the same time, but it's a completely virtual relation. The teacher and the student are in different places, and interact with each other only through ICT tools.

The method of asynchronous e-learning involves the use of ready learning materials by the student and a lack of contact with the teacher. The whole process of education is implemented using a computer within the framework of self-education.

Mobile learning is a method in which the teacher-student relationship virtually does not exist, and even if it does, it is highly objectified. In this method, the student learns by itself (just as in an asynchronous e-learning), but the communication (education) tool is no longer a PC, but a mobile device such as a mobile phone.

Similarly to the dividing of e-learning to synchronous and asynchronous modes, m-learning and microlearning may also exist in two forms. M-learning refers to sending learning materials to the student by the teacher (e. g, using a text message), or by the programmed application. M-learning is asynchronous when the user downloads the learning material by itself. The next step is to install it on a mobile device and to use it both for educational and practical purposes.

What differentiates the asynchronous methods of e-learning and m-learning is a technology and the range of material that can be transferred in the method. E-learning is voluminous and virtually unlimited in a range of media, while m-learning is limited mostly by mobile technology. The determinants of mobile learning are the short time available for education, small amount of material and simple transmission.

In this sense, the mobile learning (especially in the asynchronous formula) favours the use of microlearning, or teaching covering small range of material, which can be learnt in a short time using a mobile device.

5. Mobile and microlearning in the eBridge 2 VET Mobility project

The use of mobile technology in the eBridge 2 project is assumed to contribute to the increase of learning activities, variety of teaching process and popularising the concept of continuous language learning. Since the project mobile modules use microlearning method, the scenario of the course is shortened and consists of three parts: a brief introduction to the subject, a glossary of key words and phrases, and the revising exercises. The lesson, therefore, includes only a general outline of the problem, shows where to find more information and effectively engages the recipient in the learning process.

The eBridge 2 project proposes the users both language learning using asynchronous e-learning (web application), as well as mobile technology (mobile application). Each of the applications plays in the project another role. E-learning platform offers a basis for language learning and methodological support. Mobile applications complement the subjects covered in the lessons provided on the platform. With this combination, students receive an attractive language material ready for use at any time and place.

Therefore, users of the eBridge 2 project can use for learning both computers and mobile devices. The computer applications include learning materials, linguistic terms and some information about the culture, while mobile devices enable the access to carefully selected learning elements. Mobile applications for eBridge 2 are designed to provide an opportunity for contextual language learning – learning material adapted to the situation and the place where the user is located. Teaching modules contain information useful when working, sightseeing, talking on job interviews or shopping. All materials are available for download with the use of computers, from the website of the project or via mobile devices (mobile phones, tablets and other) directly from the websites supporting the operating systems Android and iOS.



Mobile applications using microlearning offer the users courses of Portuguese, Spanish, Latvian and Polish adapted to the needs of students trying to find their place on the international labour market and the realities of life characteristic for the target country. The primary concern of the project creators was to prepare language support in professional and personal situations. Thus, learning contents focus on cultural issues, everyday life, culture and work environment in Spain, Portugal, Poland, Latvia, the Czech Republic and Turkey. Common access to mobile phones gives the user a possibility of immediate use of language material contained in phone memory. Therefore, a mobile phone can serve as a hand-held dictionary or phrase book.

6. Summary

Statistics indicate that around 75 % of the world's population has an access to a mobile phone. This number illustrates the potential of technology for micro- and mobile learning. Mobile learning offers the content that is carefully selected in order to meet the expectations of the user, while being at the same time interesting, accessible and visually aesthetic. M-learning also inspires developers and users, encouraging them for creative approaches in teaching, the assimilation of information and the advised supplement of their knowledge. It's because mobile learning offers applications, tools and knowledge that help the learners to find themselves in the realities of the modern information society.