EXPERIENCE ON USING OF MOBILE LEARNING FOR EFFECTIVE TEACHING FOREIGN LANGUAGES IN UNIVERSITY STUDIES

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Abstract

In this paper, we presented the results of introducing a mobile application into the teaching a foreign language. The mobile application was developed by university staff and continues to evolve toward adding new analytics functions for instructors and automatic generation interesting content for students. The experience of implementation showed tangible results in the progress of students which studying through the application 2-3 hours per week and found positive reviews from most of instructors, especially on the analytics of students' homework.

Keywords: Mobile learning, Language learning, Mobile application, Foreign languages.

1 INTRODUCTION

There is a growing trend to use modern technologies and many universities have launched programs to expand the use of mobile learning to promote active and independent learning, develop student responsibility for their studies, increase discipline, motivation and time management. Digital self-education allows students to develop essential skills and competencies for the 21st century, such as digital literacy, good communication skills, creativity and innovation in their field of study, thinking skills (critical, logical, problem solving, etc.) [1].

Mobile learning in a foreign language education provides opportunities to vary the methods of presenting and using educational materials, free and independent access to multimedia materials and resources under the guidance and support of teachers. Mobile learning provides a way to facilitate the educational process using mobile applications and it can turn educational institutions into learning centers that are available at any time [2].

Educational mobile applications and games are especially effective in foreign language education, as they change it from a dull, repetitive process into a more exciting and interactive one. Learning games can be also used to teach foreign language skills such as vocabulary, pronunciation, grammar, listening comprehension, reading comprehension and spelling. Mobile learning motivates students through challenge, curiosity, control, recognition, competition and cooperation [3].

Mastery of foreign languages and their use in everyday life is becoming a necessary skill for university graduates along with IT proficiency. A survey of employers in 2016 revealed that they considered language skill as one of the 10 important qualities of university graduates [4]. In addition, knowledge of a foreign language allows a student to study in exchange programs and academic mobility and provides access to materials and advanced knowledge in this language. To successfully master a foreign language, a student must do every day exercises and practice in this language plunging into the language environment. For this purpose and the provision of digital educational services to our students, the university has created a mobile application “UIB English”. This application allows instructors to track the speed and trajectory of student learning, which topics he successfully mastered and on which he was stuck.

2 METHODOLOGY

Based on the results of a study of new, effective approaches to learning foreign languages based on modern multimedia techniques, the UIB Digital Technologies Laboratory has developed an interactive mobile application that provides a unique opportunity to quickly dive into and engage in the self-study information environment of English [2].

The mobile application as student side frontend of the system was developed for the two most common mobile platforms - Android and iOS. Backend or server side of the application with interface for instructors is created by standard web application programming technologies like PHP, JavaScript, HTML5, CSS and MySQL [5]. At the same time, the application was designed using the MVC
architectural pattern [6], which allows the user interface to be separated from the application logic. Analytic reports about student’s performance and educational content usage are created applying Google Charts service [7] and Apache Cordova framework [8]. General architecture of the mobile application UIB English is presented in figure 1.

3 RESULTS

Upon admission to the university, we conduct testing of students to determine the level of knowledge and proficiency in English. Then student goes into one of the groups with the appropriate level of language mastery and receives the necessary content to learn language at a convenient pace and wherever he wishes. For the year of using the application, we integrated it with LMS Moodle, which is used as a digital learning environment, and we learned to deliver relevant content to students depending on its location.

Students who know English at a good level at the beginning of studies can choose French, Spanish or Chinese as their second foreign language. In the future, we have plans to add new functions to the application and expand it with other foreign languages from the proposed list.

There are three main roles in the application – Instructor, Student and Administrator. Instructor creates assignments for each week in four activities: Vocabulary, Reading, Listening and Grammar (fig. 2). For each type of activity, there are forms for creating topics and subtopics for the hierarchical structuring of the provided content. In addition, instructor can track the progress of each student through the reports and analytics page on completed assignments (fig. 3). The instructor can see the dynamics of the student’s progress and the number of attempts of each completed task with a detailed report on the time spent.

Students should install mobile application from the app store and login using given university account. After logging in to application, the student can see the list of topics and receives the appropriate types of exercises created by the instructor and synchronized by the system. In addition, the application has sections of the Dictionary, Results and Profile to display and control the relevant data. The dictionary will form by the student in the course by performing tasks on memorizing words and is divided into various categories by topic. In the Results category student can receive information about completed exercises and their grades (fig. 4).
Figure 2. Web interface for the instructor’s task creation activities.

Figure 3. Web interface for students’ performance analytics.
Administrators have opportunity to view all possible statistics by levels of language mastery and categories like students, instructors and topics (fig. 5). Student’s performance page can describe statistics about his progress during activity performs (fig. 6).

Figure 4. Examples of mobile application screen.

Figure 5. Report page for administrators of the system.

Figure 6. Student’s activity performance.
4 CONCLUSIONS

Mobile learning is a huge and important step forward in the development of the educational system worldwide. It offers anytime-anywhere learning on the go, fosters engagement and learning flexibility, encourages collaborative learning, and diversifies and supports learning. Mobile learning expands the opportunities for learning and works best as a complement to traditional methods. It increases students’ excitement by doing something novel and new, aids student progress, encourages students to be active learners, contributes to the students’ engagement with the content and builds a thirst for knowledge [9].

Although educational practice should not be determined by technology, the ubiquity of mobile learning has inevitably changed learning and teaching styles. In the era of digital natives it is essential to try to use whenever possible these tools with the purposes of adapting to the students’ new ways of approaching the world and process information, making them feel integrated, motivated and working collaboratively. Mobile devices may foster cooperation, autonomous and informal learning and increase critical thinking. In particular, regarding second language learning, they can be used to help learners develop the skills, both receptively and productively, and reinforce other linguistic aspects, such as vocabulary, grammar and pronunciation [10].

Being a business university, UIB monitors the latest trends in the labor market and develops educational programs in accordance with the modern framework of qualifications and competencies demanded by employers. Important competences are the ability to program and process large amounts of data even for business specialties like digital marketing, financial analyst, convergent journalism, etc. Therefore, the university in recent years has been working on introducing digital technologies and attracting teachers from practice and industry.

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REFERENCES


