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The Usage of m learning for adult education in Serbia

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Abstract

As the answer to the need of full integration and participation of older persons in community, different types of long-life education are provided in Serbia. Education process of adults in Serbia is held though the several types of training. Since the older people are most interested in computer science, arts and foreign languages, we made a survey about the possibility of their participation in long-life education using the mobile platforms and devices. The study was held on 347 participants, age 60-75 years. The main conclusions concerning the rate of understanding and accepting new mobile platforms are presented in the paper.

Keywords: m learning; mobile devices; long-life education

1. Introduction

You need to learn as long as you do not know something, and as long as you live.

Euripides

Older people have to be given the opportunity to learn something new or update their existing knowledge in various fields of human life. They have to have the opportunity to have fun, travel, to affirm them presenting their works in numerous exhibitions, and to participate in collective exhibitions.

In the period of demographic socially-economic and scientific-technological transforms, with the different challenges, awaiting us in the future, the importance of education and learning adults enormously increased. Conception of adult education is the idea, as well as the process, having a remarkable impact on all areas of human life and society. It is grown to build a better society, but also authentic, responsible individuals, leading to achieving...
the vision of learning society, as the essential civilization characteristic of the human race.

In this sense, learning methods that are evolving nowadays and are improved through the usage of mobile platforms, have to be also presented to older people. The m learning definitely range from a generation of toddlers just as comfortable with touchscreens as they are with books, to college-aged men and women, to middle-aged and elderly professionals hoping to earn new skills in their spare time to secure a new job in turbulent economic times.

The development of m learning is driven by initiatives in innovative directions, mostly driven by the need of continuous learning. Up until now, most people regarded “education” to a finite time in their lives. Education had an expiration date, and then working life began. This model, has become less relevant by the way of our lives in the connected age. The availability of tablets and other touch-enabled devices has radically reduced the perceived complexity of computers, helping older users to more easily communicate with their middle-aged children and grandkids via email, Facebook, Twitter, and Skype. Also, the range of m learning materials does not need to be limited to higher education but can easily encompass valuable, practical know-how, from grandmothers showing how to prepare traditional recipes to companies demonstrating how to install solar panels.

The m learning has much business potential, but the most rewarding aspect of these solutions is that students of any age or background can have a chance to pursue knowledge that is meaningful, relevant, and realistic to achieve in their own lives.

2. Long-life education

Andragogy, or adult education is not just a theory of adult learning, it is an educational ideology that is based on established paradigms of learning and teaching. As one of the most famous pioneer of adult learning or a long-life learning was Malcolm Knowles. Knowles identified the six principles of adult learning outlined below.

- Adults are internally motivated and self-directed
  Older people as adult learners often resist learning when they feel others are imposing information, ideas or actions on them (Fidishun, D, 2007.). The role of a modern approach of education is to encourage a student to the more self-directed and responsible learning, as well as to develop the student's internal motivation to learn and achieve knowledge.

- Adults bring life experiences and knowledge to learning experiences
  Adults like to participate in education process based on their existing base of knowledge arose from life experience, and want to insert it to their new learning experiences

- Adults are goal oriented
  Adult students become ready to learn when "they experience a need to learn it in order to cope more satisfyingly with real-life tasks or problems" (Fidishun, D, 2007.).

- Adults are relevancy oriented
  Adult students want to know the relation between the subjects that they are learning, and the achievements of that learning. The m learning helps adult students more easy to evaluate their observations and practical experiences, in the real time process.

- Adults are practical
  The usage of m learning moves from classroom and textbook mode to real, or simulation of a real situation, so they can recognize how their learning experience works on solving problems. The m learning gives an explicit way to understanding the learning is useful and applicable to the job and real life problems.

- Adult learners like to be respected
  It is important to keep in mind that the adult student is still developing occupational therapy clinical practice skills. However, with the theory and principles of adult learning in mind, you can facilitate the learning approach of the student to move from novice to more sophisticated learning methods. This facilitates greater integration of knowledge, information and experience; the student learns to distinguish what is important when assessing and working with clients; how to prioritize client needs, goals and caseload; when rules can be put aside and how/when the approach to occupational therapy practice and professional communication emerges from strict modeling of behavior into a unique therapeutic and professional expression of self. (Fidishun, D, Lieb, S. 2007.).
Knowles' theory of andragogy is an attempt to develop a theory specifically for adult learning (Knowles, M., 1984). Knowles emphasizes that adults are self-directed and expect to take responsibility for decisions. Adult learning programs must accommodate this fundamental aspect.

Andragogy makes the following assumptions about the design of learning: (1) Adults need to know why they need to learn something (2) Adults need to learn experientially, (3) Adults approach learning as problem-solving, and (4) Adults learn best when the topic is of immediate value.

In practical terms, andragogy means that instruction for adults needs to focus more on the process and less on the content being taught. Strategies such as case studies, role playing, simulations, and self-evaluation are most useful. Instructors adopt a role of facilitator or resource rather than lecturer or grader.

Knowles provides an example of applying andragogy principles to the design of personal computer training (Knowles, M., 1984):

1. There is a need to explain why specific things are being taught (e.g., certain commands, functions, operations, etc.)
2. Instruction should be task-oriented instead of memorization -- learning activities should be in the context of common tasks to be performed.
3. Instruction should take into account the wide range of different backgrounds of learners; learning materials and activities should allow for different levels/types of previous experience with computers.
4. Since adults are self-directed, instruction should allow learners to discover things for themselves, providing guidance and help when mistakes are made.

3. The m learning and mobile platforms

The m learning refers to the ability to access educational resources, tools and materials at any time, from anywhere, using a mobile device (World Economic Forum Report, 2010). Mobile technology devices for m learning range from basic mobile phones to tablet PCs, and include PDAs, MP3 players, memory sticks, e-book readers and smartphones. Following the latest trends in education, and the need to access education for all ages, different mobile applications are developed. The m learning can include:

1. Simple SMS messaging
2. Multimedia live classroom sessions
3. Web and podcasting to audio
4. Text recaps of lessons
5. Educational video games
6. Logical reasoning and problem solving aptitude games
7. Multiple choice tests to reinforce content learning
8. Audio- to-text or text- to- audio applications
9. Mobile whiteboards for interactive discussions

Because of m learning’s ubiquity and diversity, it offers fascinating opportunities for new learning modalities. The m learning process in Serbia is based on the several types of mobile platforms and devices, that are usually provided by a telco operators. In Serbia, m learning process would be provided on smartphones, PDAs, tablets, or other more advanced mobile devices, using, most frequently, the Android OS.

The Android O.S. has evolved very quickly with the numerous updates and new versions. During the time period of android rule in market, new applications were developed, especially in the educational processes.
Android is one of the largest installed base of any mobile platform for mobile devices that are able to achieve new apps, games, and other digital content (N. Slavković, A. Savić, 2013.). Android becomes a world mobile platform for creating apps for different purpose. Android users everywhere can reach to the open apps marketplace. It also provides tools for creating apps that look very nice and user friendly on each device. Google Play is the premier marketplace for selling and distributing Android apps. Beyond growing customer base, it helps to build visibility and engagement across everyone’s apps and brand. As apps rise in popularity, Google Play gives them higher placement in weekly "top" charts and rankings, and for the best apps promotional slots in collections (N. Slavković, A. Savić, 2013.).

With Google Play for Education, teachers and administrators can browse content by curriculum, grade, and standard ― discovering the right content for their students. Google Play for Education is the best way for any kind of a class group using Google’s classroom-ready tablets to find apps, videos and books for any classroom. Designed just for educators, Google Play for Education makes it easy to discover teacher-approved tools and content that meets the individual needs of today’s students.

Over 30 million students of all ages, faculties, and staff are already using Google Apps for Education and other Google services. Many of these schools are excited to take advantage of tablets with Google Play for Education and they look to bringing your apps into their classrooms, especially apps using Google sign-on. Google Play for Education brings the innovation of Android technology into classrooms. School districts can set up and deploy large numbers of devices in just minutes or hours rather than days. Powerful browsing tools let educators quickly discover apps, videos, and other content— with many recommended by teachers and categorized according to familiar Core Curriculum standards. After finding apps they want to use, educators can push them instantly to student devices over the air. They can send the apps to individuals or groups of any size, across classrooms, schools, or even districts. (developer.android.com/distribute/googleplay/edu/about.html, https://www.google.rs/edu/training/more/tablets/level1.html).

4. The research in Serbia

Research was held in Serbia, through application form, where 347 people, aged 60-75 years, (who are willing to attend the variety of online courses and lessons), answered several questions, concerning topics related to m learning.

First question was: Choose one preferred answer as lessons activity you would like to participate in. The research showed that 41 participants showed interest in dancing lessons, 60 in recreation (mostly yoga) lessons, 73 in art lessons, 94 in computer science and 79 in foreign languages lessons, Fig.1.

Second question was: Do You use a mobile phone or other mobile device? The 291 of participant have mobile device, and 56 of them have not any mobile device, Fig.2.
Third question was: Do you use smartphone, tablet PC, laptop, or other mobile device, to access the internet? The answers were: smartphone – 24%, tablet PC - 18%, laptop or notebook -30%, and 28% use other devices, PDA, iPod, etc. Fig.3.

Fourth question was: How do you use the internet? The answers were: go online - 37%, use broadband at home - 63%. Fig 4.

Fifth question was: How often do you access the Internet? The answers were: every day -74%, once a week - 8%, twice a week- 5%, between three and six days a week- 13%. Fig 5.
Sixth question was: What are your most often smartphone or other mobile device activities? The answers were: send and receive text or MMS messages -78%, accessing the Internet- 55%, listening music - 42%, watch the video contents - 33%, send and receive e-mail – 30%, download apps- 21%. Fig.6.

5. Conclusion

Mobile Learning serves as a new way of interconnecting everything and everyone: teachers, tutors, students, study groups, social networks, gaming communities, content creators and more, in a trusted way for sharing information and knowledge. Most of all, it redefines formal and informal learning and creates new platforms to reach the 140 million children and adolescents who are currently not enrolled in school [5]. Because mobile devices are typically carried at all times, individuals have immediate and constant access to libraries of the most current electronic textbooks, journals, magazines and other digital assets. Mobile applications in banking and health have already successfully combined economic and social returns. Mobile Learning has the potential to do the same, it's just the matter of time.

In Serbia, adults older people aged over 60, are, so-called, late technology adopters, but their participation into digital era is developing in every coming day, leading to the fast implementation of m learning process for adults education.

Our research was provided among 347 people who attend to participate in m learning process for further education. According to that research, most frequent fields of interest are computer science, and language lessons. This fact leads to the conclusion that could be very easy to implement the m learning education programme for the mentioned fields of interest. Most of participants, 291 of them, have mobile device, but the broadband at home is often way to access the internet, than mobile access. From the data about the frequency and types of the mobile activities, it can be concluded that adult people in Serbia have opportunity to develop their digital literacy in the purpose of adult education. Thus they will become an important subjects leading to overall quality of learning in modern society.
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