FUTURE TREND OF EDUCATION – MOBILE LEARNING PROBLEMS AND PROSPECTS

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This article describes a mobile learning development and future trends of education, where mobile devices are used for educational activities. The main focus of this article is to find out the problem of the incorporation of mobile learning into mainstream education and training. Find out the answer that how we can implement M-learning in mainstream education. The goal of this article is to present flexible teaching solutions which will enable access to information using different devices, and support learning in a variety of situations.

Keywords: Trend of Education, m-Learning, Mobile devices, Flexible teaching

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แนวโน้มของการศึกษาในอนาคต : ปัญหาและโอกาสของการเรียนรู้ผ่านอุปกรณ์เคลื่อนที่

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มหาวิทยาลัยราชภัฏพิบูลสงคราม

บทความวิชาการนี้บรรยายถึงพัฒนาการของการเรียนรู้ผ่านอุปกรณ์เคลื่อนที่และแนวโน้มของการศึกษาในอนาคต ที่มีการนำอุปกรณ์เคลื่อนที่ในรูปแบบต่างๆ มาใช้ในการพัฒนากิจกรรมทางการศึกษา โดยจุดมุ่งหมายหลักของการศึกษาครั้งนี้เพื่อ 1) ศึกษาปัญหาและอุปสรรคจากการบูรณาการการเรียนรู้ผ่านอุปกรณ์เคลื่อนที่ ที่นำมาใช้กับการจัดการศึกษาและการฝึกอบรม 2) เพื่อศึกษาแนวทางในการนำ M-Learning เข้ามาใช้ในการจัดการเรียนการสอนอย่างจริงจัง และ 3) เพื่อนำเสนอรูปแบบการสอนแบบยืดหยุ่นที่จะทำให้ผู้เรียนสามารถเข้าถึงข้อมูลข่าวสารได้จากการใช้อุปกรณ์สื่อสารที่หลากหลาย ตลอดจนการนำไปประยุกต์ใช้ในการพัฒนาการเรียนรู้ในรูปแบบของการฝึกอบรมที่มีรูปแบบและสถานการณ์ที่แตกต่างกันไป

คำสำคัญ : แนวโน้มของการศึกษา การเรียนรู้ผ่านอุปกรณ์เคลื่อนที่ การสอนแบบยืดหยุ่น

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Introduction

The evolution in education and training at a distance can be characterized as a move from d-Learning to e-Learning to m-learning. Started from the era of distance learning that enable people to study from different places that far from school or university via educational technologies and communication. Then, forward to the era of electronic learning which internet and World Wide Web have been used to support on educational communication. And nowadays, mobile learning is taking the vital role of information and communication technology for educational transform. These three stages of development correspond to the influence on society of the industrial revolution of the 18th to 19th centuries, the electronic revolution of the 1980's and the wireless revolution of the last years of 20th century and now it's mobile revolution. E-Learning is the state of the art in distance learning at the time of writing. Mobile learning seeks to put in place a new virtual learning environment for the future which might be represented thus. This will be followed by the mid 2000's by the introduction of voice input and voice recognition into wireless devices to create a more user friendly environment for learners. A first step in postulating a theory of mobile learning is to distinguish what is special about mobile learning compared to other types of learning activity.

Educational technology has vital influence on training procedure also. According to Eraut and Reiser, educational technology has three major concepts; audiovisual devices, the systems approach, and individualized instruction (Eraut, 1989 & Reiser, cited in Samruayruen, 2013). These three concepts of educational technology have played an important role in learning procedure since the previous period until nowadays. Due to the fact that technology has changed every day, three concepts of educational technology have combined into the blended learning technology. Technology's effectiveness as a tool for learning has been showed at every level of learning, from computers and Internet to pilot flight simulators. The use of blended learning technology in industry, company, government, health care, and education has increased dramatically. Technology-based learning today uses text, graphics, video, animation, and sound to convey technical skills, concepts, and behavior equally well. It is cost-effective, saves valuable learning time and increases the effectiveness of achieving learning goals.

Several learning technologies have been used, such as web seminars, telephone seminars, webcasts, podcasts, online classes, e-learning, and mobile learning. All of these

online learning opportunities may [e integrated into an in-house learning program (Wilson, 2007). Either way, distance learning can save time and money. Multiple learners can participate at the same location for the cost of a single connection or registration fee. With the need for travel eliminated, more learners are able to participate stretching the practicing even further. Plus, the time associated with traveling to a central learning location is not an issue. Scheduling is easier for everybody. There is no need for learners to travel to a central location to get the learning and information they need. The challenge for many is in understanding the differences and possible applications of the various types of online learning. The integrated of learning technology is powerful. Organizations using these resources are saving time and money. This is an alternative form of technology integrated that should be used for the future education.

Definitions

According to Quinn (2000), "Mobile learning is learning through mobile computational devices." Shepherd (2001) Says: M-learning is not just electronic, it's mobile. Kynaslahti (2003) identifies three different elements for mobility and all of these are valuable to teachers and students while they are teaching and learning –

- Convenience: Mobility makes it easier and more effortless to access more information.

- Expediency: Mobility can make more chance for all students with no one left behind.

- Immediacy: Mobility has the quality of bringing information into direct and instant involvement with something and someone, giving rise to a sense of urgency or excitement.

Teachers are able to work anywhere even if that requires access to the Internet or a connection to others kind of electronic environment, but the main focus of mobile learning should be on mobility. M-learning should be restricted to learning on devices which a lady can carry in her handbag or a gentleman can carry in his pocket. I therefore define mobile learning as "the provision of education and training on PDA's/ palmtops/smart phone and mobile phone.

When one is discussing the question of the incorporation of mobile learning into mainstream education and training it is important to realize that these projects were projects. That is, they were research undertakings to set out the first building blocks of a

new sector of education and training provision. The problem is that wireless applications are being developed for wireless devices for all walks of life.

Learning and training do not figure in these developments. Learning and training do not seem to be high on the list of applications that are receiving attention today. Isn't it strange that all higher and further education institutions today have frequent needs for providing information to their students about timetable changes, assessment deadlines, feedback from tutors and other urgent administrative details? Nearly all of these students carry a sophisticated communications device which they use constantly in all walks of life except in their education or training program. The answer to these questions that I have been posing about why mobile learning has not moved from project status into the mainstream is well known. It is that mobile learning is not seen as a satisfactory revenue stream for the telecommunications operators. The urgent need for mobile learning is to emerge from its fragile project status and convince the telecommunications Operators that it represents a viable and valuable revenue stream. Towards a solution: a matrix for mainstream provision. We have posed the problem of the status and acceptance of mobile learning –we must now look for solutions to the problem.

One can develop a nine-point matrix for the use of mobile learning in mainstream education and training. One axis is made up of the three types of devices that make up mobile learning provision:

- PDAs
- Smartphones
- Mobile phones.

The other axis is the types of education provision that can reasonably be provided by mobile learning:

- Mobile learning academic administration SMSs.
- Mobile learning academic summaries.
- Full modules by mobile learning.

This is the presentation of full courses, or full modules of courses, on mobile devices. This gives the following nine possibilities:

- Mobile learning for academic administration on PDAs
- Mobile learning for academic administration on smartphones

- Mobile learning for academic administration on mobile phones
- Mobile learning academic summaries for PDAs
- Mobile learning academic summaries for smartphones
- Mobile learning academic summaries for mobile phones
- Full modules by mobile learning for PDAs
- Full modules by mobile learning for smartphones
- Full modules by mobile learning for mobile phones.

Towards a solution: criteria for inclusion in the mainstream

There are four criteria for the inclusion of mobile learning in mainstream education and training. These are:

1. Enrolment of mobile learning students in courses on the institution's official prospectus. This is essential for incorporating mobile learning into the mainstream. If the mobile learning course is not included in the institution's prospectus and listed as available for student enrolment, it remains peripheral with the status of a research project in an isolated university department and cannot be considered as part of mainstream provision.

2. Enrolment of mobile learning students into fee paying courses. This is essential for incorporating mobile learning into the mainstream. This is applicable to countries in which fees are payable for enrolment in further and higher education courses.

3. Enrolment of mobile learning students into assessed courses. If the mobile learning course is not assessed with the same procedures as other courses offered by the institution, it remains peripheral with the status of a research project and cannot be considered as part of mainstream provision.

4. Enrolment of mobile learning students into accredited courses. As happened in the field of distance education and then in e-learning, the achievement of accreditation for mobile learning is an indication that the sector has entered into the mainstream.

Towards a solution – the literature

The development of the literature of mobile learning has high importance in the move of mobile earning into the mainstream. Mobile learning will never emerge from its present fragile project-based status and take its place in mainstream education and training unless it has a vibrant literature. Deans of Faculties at universities throughout the world will never

accept the introduction of mobile learning into their courseware unless they can verify the claims of mobile learning by consulting the research literature.

Similar initiatives are necessary for the literature of mobile learning if it is to convince academics in universities worldwide that it is a viable form of educational provision.

Conclusion

Finally, the problem of the incorporation of mobile learning into mainstream education and training has been addressed in this presentation. The answer to the question "Why has mobile learning not moved from project status to the mainstream?" has been identified.

It is that mobile learning is not seen as a satisfactory revenue stream by the telecommunications operators. Solutions have been proposed for this problem. Firstly, there are thousands of universities and further and higher education colleges all over the world. If they can all be convinced to accept mobile learning as their normal means of communication with all their students on changes of timetable, submission deadlines, enrolment procedures and other administrative necessities, a massive mobile learning revenue stream will already be set up. Secondly, the production of a mobile learning development kit for distribution to universities and colleges to enable them to introduce mobile learning will set up another revenue stream. Thirdly, the production of course guides, course summaries, examination reminders, helps with difficult parts of a course, will set up another revenue stream. Fourthly, the production of full course modules for PDAs, handhelds, palmtops, and also for smartphones and eventually for mobile phones, will set up another revenue stream Finally, the literature of the field needs to be developed, books on mobile learning need to be written, conferences like this one need to be organized. The challenge to all of you attending this conference is to go away from here convinced of the need to establish mobile learning as a viable and valuable revenue stream for the telecommunications industry.

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