

Chapter 5.18

Not Just Playing Around: The MoLeNET Experience of Using Games Technologies to Support Teaching and Learning

Rebecca Petley
LSN, UK

Jill Attewell
LSN, UK

Carol Savill-Smith
LSN, UK

ABSTRACT

MoLeNET is a unique collaborative initiative, currently in its third year, which encourages and enables the introduction of mobile learning in English post 14 education via supported shared-cost projects. Mobile learning in MoLeNET is defined by MoLeNET as “The exploitation of ubiquitous handheld technologies, together with wireless and mobile phone networks, to facilitate, support, enhance and extend the reach of teaching and learning.” MoLeNET projects use a wide range of handheld devices with their learners including two handheld game platforms: the Sony PSP and Nintendo DS. A small number of projects have also experimented with educational and therapeutic use of the Nintendo Wii game console and experienced considerable success in engaging reluctant learners and supporting learners with difficulties and/or disabilities. This paper explores the impact that mobile game technologies have on teaching and learning for those involved in MoLeNET, including the development of academic and social skills and the improvement of mobility and health related issues.

DOI: 10.4018/978-1-61350-101-6.ch518

INTRODUCTION

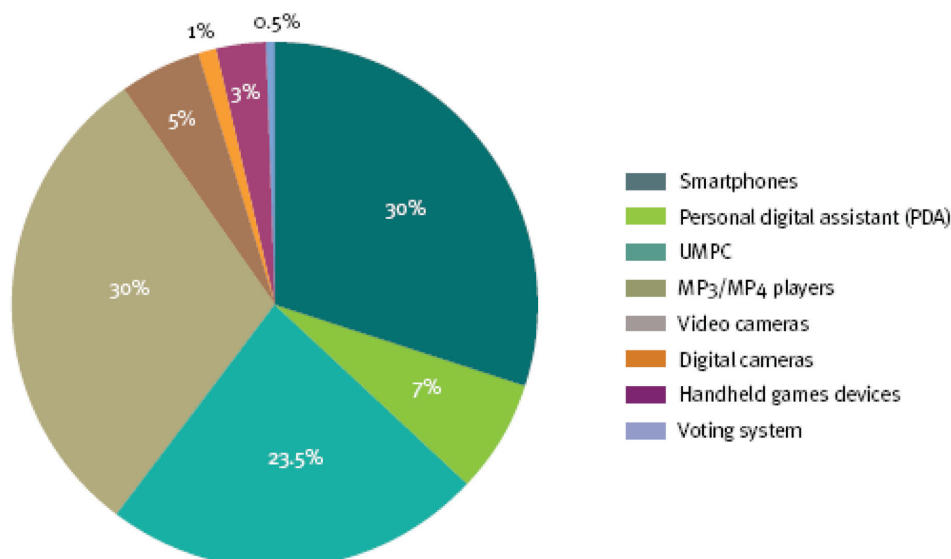
The Mobile Learning Network (the MoLeNET programme; www.molenet.org.uk) uses a shared cost funding model with the Learning and Skills Council (LSC, now the Skills Funding Agency: www.skillsfundingagency.com) providing capital funding to procure handheld and supporting infrastructure technologies to introduce and embed mobile teaching and learning. The participating institutions contribute to the cost of the LSN (www.lsnlearning.org.uk) support and evaluation programme which provides training, support, mentoring, research resources and systems. Over twenty thousand learners and four thousand teaching staff took part in phases one and two of MoLeNET (2007-2009). In the third and current phase (2009/10), a further eighteen thousand learners and three thousand teaching staff are expected to take part from over seventy colleges and schools across England.

Throughout the MoLeNET programme, the projects involved have purchased a range of mobile devices and technologies depending on their individual aims and objectives, and the

project participants. Such technologies include mobile phones and Smartphones, personal digital assistants (PDAs), ultra mobile personal computers (UMPCs), MP3 and MP4 players, digital still and video cameras, specialist scientific survey equipment, voting systems, handheld games devices (Sony PSP, Nintendo DS) and, in some cases, Nintendo Wiis. They have also purchased the wireless technology and servers required to maximise the potential of the mobile equipment. The number of games technologies purchased by MoLeNET projects (Figures 1 and 2) increased substantially after the first year in which they represented only 3% of all handheld technologies purchased. In year two 22% of all handheld technology purchases were games technologies.

The MoLeNET programme is far reaching and diverse in its application and impact (Attewell, Savill-Smith, & Douch, 2009). However the research findings reported in this paper specifically relate to the use of games and games technologies for teaching and learning. In particular five case studies are presented in which MoLeNET projects used the Nintendo DS and Nintendo Wii

Figure 1. Pie chart to show range and spread of devices purchased in MoLeNET phase 1



12 more pages are available in the full version of this document, which may be purchased using the "Add to Cart" button on the publisher's webpage:

www.igi-global.com/chapter/not-just-playing-around/58850

Related Content

Mobile WiMAX Bandwidth Reservation Thresholds: A Heuristic Approach

Sondes Khemiri, Khaled Boussetta, Nadjib Achirand Guy Pujolle (2011). *International Journal of Wireless Networks and Broadband Technologies* (pp. 42-61).

www.irma-international.org/article/mobile-wimax-bandwidth-reservation-thresholds/55882

Comparing Machine Learning Models for the Predictions of Speed in Smart Transportation Systems

Amtul Waheed, Jana Shafiand Saritha V. (2022). *Handbook of Research on Advances in Data Analytics and Complex Communication Networks* (pp. 34-46).

www.irma-international.org/chapter/comparing-machine-learning-models-for-the-predictions-of-speed-in-smart-transportation-systems/287226

Cooperative Diversity Techniques for Energy Efficient Wireless Sensor Networks

Tommy Hultand Abbas Mohammed (2012). *Wireless Sensor Networks and Energy Efficiency: Protocols, Routing and Management* (pp. 262-273).

www.irma-international.org/chapter/cooperative-diversity-techniques-energy-efficient/62739

DMT Optimal Cooperative MAC Protocols in Wireless Mesh Networks with Minimized Signaling Overhead

Benoît Escrig (2011). *International Journal of Wireless Networks and Broadband Technologies* (pp. 56-72).

www.irma-international.org/article/dmt-optimal-cooperative-mac-protocols/53020

Sinkhole Attack Detection-Based SVM In Wireless Sensor Networks

Siheem Aissaouiand Sofiane Boukli Hacene (2021). *International Journal of Wireless Networks and Broadband Technologies* (pp. 16-31).

www.irma-international.org/article/sinkhole-attack-detection-based-svm-in-wireless-sensor-networks/282471