**The NMC Horizon Report: 2012 Higher Education Edition. Austin, Texas: The New Media Consortium.**

**Horizon Report, Game Based Learning**

This report remarks that nearly 62 million people participated in on-line games in 2011, and explains why gaming is so appealing to players; the article illustrates some of the many benefits obtainable through Game based learning and explores barriers to its inclusion. This report helps to exemplify the great potential of game based learning in education. Despite many positive reports over the years and pronouncements of its forthcoming inclusion into formal curriculum, Game Based Learning still remains according to this report at a mid-term horizon for widespread adoption into the learning environment.

A major aim of the Serious games movement is to unite educational content with play, research has indicated that this is an important goal because gamers are for the most part goal driven and are more likely to relate with learning material which can help them to achieve important goals.

From the point of view of players most games are goal orientated therefore achieving success helps to motivate, in the most recent American National Education Technology Plan gaming was named as an ideal method of assessing student knowledge comprehension, “citing the ability of games to provide immediate performance feedback to the players. Students are engaged because they are motivated to do better, get to the next level, and succeed. Proponents also underscore the productive role of play, which allows for experimentation, the exploration of identities, and even failure”. (Transforming American Education: Learning Powered by Technology - Executive Summary, National Education Technology Plan). The article notes that since game-based learning incorporates essential skills for students such as team work, problem solving, role-playing, communication, critical thinking, and digital literacy both employers and educational institutions recognise its merit in helping to develop these skills and why it is so desirable to integrate these skills into the curriculum. The Serious Games movement focuses on using games to address social, environmental and educational issues. (Chiang, O, J., 2010). This can help players gain a new perspective through active engagement. “Research shows that players readily connect with learning material when doing so will help them achieve personally meaningful goals.”(NMC Horizon Report: 2012 Higher Education Edition. P 18).

This article gives quite a few examples of how simulation-based games are used in education, as the progress and insights discovered and developed by military applications diffuse into civilian usages. One example specific to medicine is, “Emergency Room: Code Red” in this game simulated medical emergencies are created and the success or failure of the medical outcome will depend on the decisions made by the players, also outcomes can be varied in an attempt to more accurately reflect real life conditions, the aim is to create an open-ended, challenging and team-based engagement in which students learn that there decisions can lead to a myriad of consequences.

SimSchool is an illustration of game based learning techniques and the use of simulation to help create realistic situations in teacher training. It is hoped that by creating a variety of realistic and challenging teaching scenarios the student teacher will gain in experience and confidence, and learn how best to respond to, and resolve the variety of issues that are commonly faced in a classroom.

One of the major reasons for the time lag in initiating game based learning into the formal curriculum, is that practitioners in education find it challenging to make obvious associations between specific course content i.e. SLO’s in FETAC (Specific Learning Objectives) and the gaming objectives i.e. it is arduous to make educational materials look and feel like playing a game. As mentioned the formal syllabus makes it taxing to incorporate game based learning but also the culture of education which traditionally was designed to train students to work in a formal industry setting, where timekeeping, knowing your specific role and adhering to strict rules were part of educational training, and far removed from play.

This article puts game based learning in an intermediate time to adoption timeframe of two to three years; the paper describes good examples of the transformative outcomes possible using game based learning. Overall I thought the paper did not explore many of the barriers and limitations that have held back the widespread inclusion of game based learning in education so far, such as parental attitudes to games in the classroom, institutional resistance, financial pressures, logistical constraints ( timetables etc), and teacher training.

In my own teaching practice, I can envisage using game based learning to teach specific areas in Maths, especially in Co-ordinate Geometry, Geometry and possibly Statistics. I have examined certain games that are suitable to improving student motivation and interest, for example “Battleships” in Co-ordinate Geometry and Geometry wars for Geometry. Although these are small steps, it does connect the course content and specific learning objectives with Games that will allow the student to explore and to put the subject into a wider context, making it more relevant and realistic to the wider world.

**References:**

Chiang, O, J. (April, 2010). Games That Can Change The World. Forbes Magazine.

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Transforming American Education: Learning Powered by Technology - Executive Summary, (National Education Technology Plan)