# APPS AND GAMES AS THE IMPACT OF TECHNOLOGY IN FORMING STUDENT'S CHARACTER: A SISTEMATIC STUDY OF TEACHING

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## **ABSTRACT**

The purpose of this research is to get information concerning a systematic study of teaching in the era of technological advances in which social media and games become the triggers in forming student's characters in the context of learning. The subject of this research is the students of second year of SMP N 01 Sitimsel and represented by 40 students. The method used in this research is qualitative and the way of analysis used character analysis in term of psychological aspects. The researcher depicted the psychological aspect faced by students here are external and internal. As the conclusions, the writer found that they need to develop internalized processes to filter messages and acquire content knowledge. Such process skills, grounded in values and character, will enable youth to benefit from technology, to manage the risks they encounter, and to make responsible choices on a lifelong basis. Student need to be formally taught these process skills, which facilitate knowledge acquisition, problem solving and citizenship. First, they must understand their own being and how they may represent themselves to others. This can be accomplished by educating students about identity and branding systems that pervade both the local and global villages, and that relate to personal identity and representation in today's online world. Second, students need arts training to understand persuasive techniques and to enable self-expression. Third, children must internalize the media literacy process skills so they learn to apply a methodology for critical thinking in understanding and creating messages. Content today is infinitely accessible, media literacy allows for accessing, analyzing, evaluating, creating and participating with multi-media messages.

Key words: APPs and Games

## INTRODUCTION

Starting from the concept and the characteristics of the mobile application presented. M-learning is a subcategory of e-learning which is a macro concept of education. With the use of technology well spread among young pupils and students across the globe, learning and particularly m-learning is already being redefined as "learning" across multiple contexts, through social and content interactions, using personal electronic devices. Most of the theory about m-

learning is based on critical social- cognitive beliefs that learning is situated in the sum of interactions and conversations between people while the use of tools for learning is also an important and recognized factor of learning.

There are only two ways to think about the use of technology in education. You can either consider it as an add-on to existing educational practices. Thus, technology can only support learning in average school-based environments where electronic whiteboards and standard personal computer classrooms unfold a classic paradigm. Or as an agent of transformation facilitating a maximum boost of lifelong learning and purpose wherever you want it, whenever you want it. In the second case, you have m-learning enabling authentic interactions between learners of the same or different culture, providing quick access to diverse data from the web and accommodating knowledge on the pace of each individual.

The basic tools (hardware) available for m-learning are the W/H (wireless hand held devices). First the wireless phones and later on the PDAs (Personal Digital Assistant) with the use of WAP (Wireless Access Protocol) technologies in combination with WML (Wireless Markup Language) and automated SMS (Short Message Service). Despite the fact that in early formal education had not a learner center orientation, the adaptation from universities and organizations of the new innovative technology gave the necessary jumpstart for m-learning projects to built-up. Mobile technology contains the mobile hardware and the software included, because their sum plus the interaction with the user/learner results the end product we call m-learning.

Consider gaming apps that have an entertaining purpose. Still the possibilities are endless and many games are developed with an educational orientation. For mobile games used in classroom settings research shows increase in problem solving skills and collaboration skills, attract and maintain attention, active teamwork throughout gameplay and civic engagement. Of course, there are many different types of applications and technologies utilized within education besides gaming apps. In this research the writer try to recognize type of active learning that takes place along with various advantages and disadvantages in each case. Ending summarizing results.

## RESEARCH METHODOLOGY

In conducting the research it needs to determine the most appropriate research metho to answer the research questions. The first are those

# Research Design

The method used in this research is descriptive qualitative method. Qualitative research method is a certain tradition in social science which fundamentally depends on the person and his surrounding through his language. The results of qualitative research are descriptive rather than predictive. Mason (2002, p.199) stated that qualitative is an analysis, explanation and argument building method which involves understandings of complexity, detail and context. The purpose of this method is to produce rounded and contextual understandings on the basis of rich, nuanced, and detailed data. Taylor, Bogdan & DeVault (2015, p.7-11), qualitative method is more than a set of data gathering technique; it is a way of empirical world approach. Qualitative method has some features. First, it is concerned with the meaning that people attach to the things. It focuses on the phenomenological perspective and understands people from their reference frame and experience thing as they experience in reality. Qualitative researchers identify and empathize with the people they study to know and understand how people's perspective about the things. A qualitative researcher should set aside their own perspective and see things as if it is the first experience for them. Second, qualitative research is inductive where the researcher develops concept, insight, and understanding from the patterns of the data rather than collecting the data to evaluate models, hypothesis, or theories. In addition, in qualitative research, all perspectives are worthy to study. This method focuses on the meaningfulness of the research and the researchers are the key instrument of the research.

# Technique of Data Collection

Technique of collecting data in this research using qualitative data (experienced based). The qualitative data consist of observation within the

physical activity in the classroom and interview to be presented for the teacher. The completely explanation as follows:

## a. Observation

In this case, the researcher uses the unstructured or opened observation to know the occurrences within learning process. It may be about the teacher's performance during Classroom Action Research (CAR), class situation in the classroom activity.

# b. Study Documentation

Study documentation use to show the teaching and learning process by using the photograph. The researcher takes the picture when they were studying it shows that they are serious or not when learning.

# Technique of Data Analysis

Observation students' activities during learning process then interview before and after Classroom Action research (CAR).

## RESULT

Wireless E-learning and Communication Environment is an application that com- bines push and pull technology through browser and WAP tech to supplement the student's device with info about event alerts and campus services. This is content delivery in the simplest possible format.

# MOOsburg:

Developed with Java software, MOOsburg is an application for W/H devices where students can discuss their findings about environment and ecology at the spot. The most known and widely used m-learning applications are the social media networking applications.

#### Facebook:

Basic characteristics are easy access, quite simple GUI and the free and open use for all. The average millennial student has already a profile in Facebook

and friended his peers. In some cases, groups of students come together to organize events. Comments posted on each other's walls, creating opinion threads and course related material exchange, which also helps to check the accuracy of the information. All these digital interactions from the instructors point of view might seem impersonal since these trends developed the last decade and don't belong to the core values of past generations. If an instructor wants to call himself a pro must be able to utilize these technologies. Initiate discussions about class sessions, provide feedback where need- ed, assign tasks in order to improve his students learning through repetition and generally blend in.

#### Twitter:

On the other hand, Twitter is a light application for quick short message exchange. These short messages are called tweets. Some instructors allow the use of tweeter during a course session in order to develop an in-classroom community and increased interaction. Chances are that it may end up more of a distraction rather than an in- structional or educational tool. Advanced users that are more content aware and usually professionals prefer applications like:

## YouTube:

YouTube's most viewed videos are the Tutorials which are clearly for educational purpose and DIY videos, also famous are the Flogs users upload from their travels to present their findings and everyday life experiences from native or foreign places. Very popular are the Web 2.0 tools. Wikis, Podcasts and Blogs.

# Wikipedia:

Wikipedia is a multilingual, web-based, free-content encyclopedia project. That consists of a vast collection of info webpages with open access for everyone to create and edit. Crosslinks between internal pages is a useful feature. Actually, podcasts are excellent for revising, which is a substitution use, especially for learners who miss lectures constantly. They can be used as additional material to broaden and deepen students understanding, this is a supplementary use. Last, they make a very good creative use for extra active students and learners as user

generated podcasts. To gain access to podcasts you need a pod catching application. All Apple's iTunes store, Google's Play store and Microsoft's Marketplace offer their own exclusive pod catching applications alongside extra third party developed apps. This alone is a proof how much attention podcasts gained after their first entry to the market. Today just in Apple's iTunes alone you can find over 8 million free podcast episodes in over 100 languages.

# Google Listen:

Google Listen is a fine option for android costumers. Once you have found some-thing worth listening to, you can either choose to stream it immediately or add it to your list for later use. Important feature is the auto-remove capability for the podcasts you have finished.

#### Zune:

Zune is the equivalent pod catching application for Microsoft's marketplace. It combines all the above options only it has to be installed first to your desktop person- al computer and then synchronized to your windows smartphone. Blogging is an easy way to publish information and opinions. Most bloggers form their blog like a personal diary where they keep track of their thoughts about everyday life and situations.

## M-learning:

M-learning is an EU funded program which delivers learning content to young adults who no longer participate in formal education or training. The idea is that through the use of a mobile phone one may be more likely to engage young learners in a time and a place more conducive to their learning preferences. The m-learning Infrastructure is quite sophisticated, incorporating its own learning management system and speech/text tools. Interactive puzzles for teaching languages and activities designed to develop aspects of literacy and numeracy are some of the tools that are available. Another category is the course specified content applications.

# Graph2Go:

Graph2go is a mathematics application. Innovative graphs, mathematic functions and geometrical constructs used to improve arithmetic skills and make the course more enjoyable and interactive.

#### Mobile Math:

Mobile Math is a mathematics game application. Design for K12 students. Helps them experience mathematical concepts in the physical world. The in-app learning environment is based on geography, maps and location technology. Users can also play in teams, gain points by creating virtually constructed mathematical shapes. The construction process is done by physically walking and pin pointing locations. Users can recognize constructs like squares, rectangles and parallelograms. A device with GPS capabilities is required. The augmented reality applications are considered to be the most innovative category for m-learning. Very familiar to technology enthusiasts, augmented reality concerns any technology that blends real and virtual information in a meaningful way.

Broadly could be defined as "a situation in which a real-world context is dynamically overlaid with coherent location or context sensitive virtual information". Specific in-between reality and virtually exists the mixed reality. On the side border of mixed reality, augmented reality takes shape. Augmented reality is the personal perception one does, created by any fusion of digital information with physical world settings. Such applications considered of being able to augment immediate surroundings with electronic data or information, in a variety of formats including visual/graphic media, text, audio, video and haptic overlays.

#### SCHOLAR:

SCHOLAR is an ICAI system that was designed to teach facts about South American geography. Both the system and the student can initiate a dialogue by asking questions. All questions, answers and decisions are preceded.

## SOPHIE:

Sophisticated Instructional Environment is another ICAI system about electronic troubleshooting that provides a learning environment in which the user can acquire problem solving skills by trying out ideas.

## Mobile Author:

Mobile Author is an authoring tool that helps you create your own ITS systems. Students can access the platform either from computer or mobile phone. As an ITS system, it can assess the student's performance, inform the databases that record the student's progress and provide advice based to the needs of each individual student.

Last the games category. There are many types of games; however, it is easy to separate them. There are games that are made for entertainment, the ones that have a more educational theme and the hybrids that combine both. Educational games focus on pedagogy; they have well defined learning objectives and can be played either inside or outside school.

M-learning applications contribute to all three key curriculum elements. Mobile devices are a technology that can be of use within education. Act as a medium to enhance learning and teaching. Even more important is that the world beyond school is not a "pen and paper" world but it is becoming more and more digitalized. An effective education should focus to real world requirements. That answers only our first question: if technology can assist student learning.

#### **DISCUSSION**

The teacher competence

M-learning has grown exponentially during the past decade and is flourishing in contemporary social constructivist learning environments. However, although mLearning might be thriving at the moment, it is still a long way from maturity. M-learning will continue to grow. Innovative mobile technologies and new mobile tools geared towards accessing and manipulating information will provide new opportunities for M-learning in the future.

Future mLearning environments will provide more opportunities for personalised and contextual learning in pervasive settings. Further developments

in social-constructivist learning environments with more examples of classsourced and expert/teacher reviewed learning resources being made available to mobile and distance learners from anywhere in the world. New mobile and wireless technologies will provide opportunities to create resource-rich learning resources and learning environments. The steep growth of free Wi-Fi infrastructure in public areas, public transport and very soon even in rural settings as access to Wi-Fi infrastructure and satellite technologies will increase rapidly also in developing countries. Wearable technologies and bio-technology will become more and more commercially viable and will path the way for the seamless integration of technologies for true ubiquitous learning. Foresee exponential growth in the use of simulations and augmented reality in mLearning. The possibilities and benefits of mobile augmented reality have not become main stream yet due to various reasons, for example, the skills required for the development of mobile augmented reality applications and the cost of technologies and devices used in such environments. However, with the number of open-source and free augmented reality software and applications becoming available, the uptake into mainstream will snowball soon. Just as it has become fairly easy to create eLearning content - which was a strenuous and elite novelty just a few years ago – educators will be able to create augmented reality content artefacts almost on the fly.

It certainly also see more and more comprehensive and complex mLearning apps being developed and available at low or no cost to learners and educators, allowing for rich and complex teaching and learning activities to take place in creative and innovative new learning environments. Similarly, edugaming will win much field and take learning beyond the area of simulations and serious games. The value of and motivational factors embedded in "competition" have an influential impact on learning and contributes significantly to the popularity of using serious games in learning environments.

Technological developments continuously introduce new and alternative views about our interaction with information and people, and about the skills and competencies to survive in the knowledge era and in future. Some of the underlying or fundamental skills required are problem solving skills, digital

literacy skills, information literacy, visual media literacy, as well as psychological and emotional competence. In addition to these skills, the following are some examples of the skills and competencies required in navigationist paradigm and future M-learning environtments (Brown, 2006).

Finding relevant and up to-date information.

- Contributing meaningfully to the knowledge production process. This
  includes the mastery of networking skills and skills required to be part
  of and contribute meaningfully to communities of practice and
  communities of learning.
- 2. Analysing, synthesising and evaluating connections and patterns.
- 3. Contextualising and integrating information across different forms of information.
- 4. Reconfiguring, re-presenting and effectively communicating information.
- 5. Managing information (identifies, analyse, organize, classify, assess, evaluate). Distinguishing between meaningful and irrelevant information for the specific task at hand or problem to be solved.
- 6. Distinguishing between valid alternate views and fundamentally flawed information.
- 7. Sense making and chaos management.
- 8. Information literacy and metaliteracy.

Future mLearning environments will require of learners to be competent in these type of navigating skills to be able to learn effectively.

#### **CONCLUSION**

Children need internalized processes to filter messages and acquire content knowledge. Such process skills, grounded in values and character, will enable youth to benefit from technology, to manage the risks they encounter, and to make responsible choices on a lifelong basis. Student need to be formally taught these process skills, which facilitate knowledge acquisition, problem solving and citizenship. First, they must understand their own being and how they may represent themselves to others. This can be accomplished by educating students

about identity and branding systems that pervade both the local and global villages, and that relate to personal identity and representation in today's online world. Second, students need arts training to understand persuasive techniques and to enable self-expression. Third, children must internalize the media literacy process skills so they learn to apply a methodology for critical thinking in understanding and creating messages. Content today is infinitely accessible, media literacy allows for accessing, analyzing, evaluating, creating and participating with multi-media messages. On the other side, there are some negative aspects considering the difficulty to access an available network, the use of technology and the limitation of physical communication.

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