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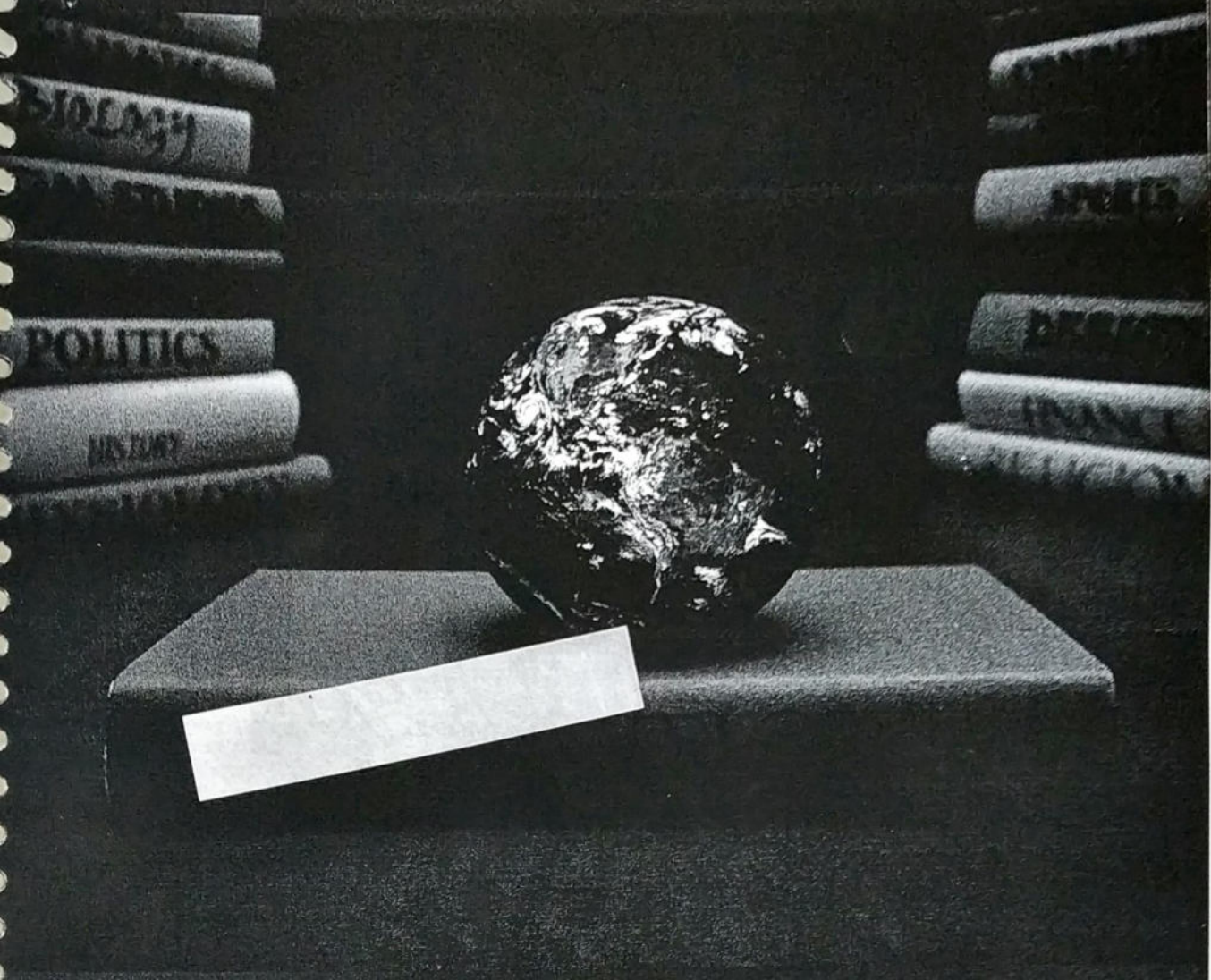
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Mobile technologies: A threat on performance potential of secondary school students

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Abstract

The purpose of this article is to explore the impact of mobile phone technologies on the Performance Potential of Secondary School Students. The use of modern mobile smart phone technologies has become a symbol of status and strength among students. The mobile phones with the support of internet open to the learners an endless world of information, music, video, fun and other entertainments. As a learning tool the main attraction of mobile phones for learners at secondary school level is not the information aspects but its entertainment and other pleasing features. In these aspects, the nature of this flood of information while using mobile technologies makes young learner a passive mechanic who cannot actively interact with anything in a comprehensive manner. This passiveness and spontaneity in the behaviour of learners slow down their critical thinking ability and thereby it negatively affects performance potential.

Keywords: mobile technologies, music, video, fun

Introduction

Technology has influenced every walks of society. The number of people who use modern technology has significantly increased in recent years. One of the most profound changes in the past decade was the widespread proliferation of information and communications technologies (UNICEF, 2011) ^[19]. This has resulted in enormous changes in the daily lives of adolescents and school going students as well.

Dehmler (2009) ^[5] asserts that children today are growing up in an interconnected, networked world. The youth have unprecedented access to modern technologies and use them in a variety of ways. Teens all over the world are growing up in a way in which the Internet, cell phones, text messaging, television and video games, and other technologies dominate their communication and are an integral part of everyday life. Social network sites, online games, video-sharing sites and gadgets, such as iPods and mobile phones are now fixtures of youth culture (UNICEF, 2011) ^[19]. Technological advancement is one of the most essential factors for teenagers in many societies. Mobile technology is an integral part of secondary school students lives, hence it is important to understand the impact it has on performance potential of them. An important question which this paper tries to address is how mobile technologies affect performance potential of secondary school students. Before looking into the ways in which technology affect performance potential it is important to understand what is meant by performance potential. Performance Potential is the tacit ability of a student to be successful in academic pursuits engaged. This tacit ability is a combination of multiple dimension of an individual leading him/her to be successful. The idea of combination of multiple dimension is used in a collective way and it is never been the domination of the one of the abilities on the other. Instead it is a proper blend of intellectual, emotional, social and many other dimensions which help an individual to possess ability to perform in a

latent form. This article explores the impact of mobile phone technologies on the Performance Potential of Secondary School Students.

Use of Mobile phone in Teaching and Learning

While technology is often described as the most important influence upon school going students research investigating its relationship to academic performance of learners is limited. In a study conducted by Sanchez-Martinez and Otero (2009) ^[17] found out that intensive cell phone use was related to school failure as well as other negative behaviors. Cell phone usage has been studied by Jacobsen and Forste (2011) ^[11] in relation with academic performance and it identified a negative relationship between calling, texting, and self-reported grade point average (GPA) among university students in the United States. While these studies provide a starting point for understanding the relationship between mobile phone use and academic performance, they neither use objective measures of academic performance nor do they take into account the mobile phone's expanding capabilities beyond calling and texting.

Modern mobile phones enable users to access a variety of electronic forms at almost any time and any place by cracking the limit of time and space. Popular activities such as playing video games, surfing the internet, and engaging in social media sites are now all easily accomplished with most smart mobile phones. Researchers have linked each of these activities with many factors like academic performance, low self esteem and many other factors. For example, heavy video game playing has been associated with lower achievement of students (Jackson, von Eye, Fitzgerald, Witt, & Zhao, 2011; Jackson, von Eye, Witt, Zhao, & Fitzgerald, 2011) ^[10]. In a study Chen & Peng (2008) found that low levels of Internet usage has been associated with higher level of academic performance. Chen and Tzeng (2010) ^[2] found that video game playing was associated with lower levels of academic performance. Many a

recent studies have identified a negative relationship between social-networking site usage and academic performance (e.g., Rosen, Carrier, & Cheever, 2013; Stollak, Vandenberg, Burklund, & Weiss, 2011) [16].

In this google generation there won't be much opposition that texting, internet usage, email, and most usable social networking sites such as Facebook and whatsapp can potentially increase multitasking and task-switching during academic activities and decrease academic performance.

Mobile learning applications

The use of mobile phone technology has gone beyond the traditional communication role that it is now used in supporting teaching and learning. The new term mobile learning itself shows its wide importance in education. According to Huang *et al.*, (2010) [9], mobile learning applications can facilitate students not only learning contents conveniently but also interacting with others collaboratively anytime and anywhere. Hence, the development of m-learning as a new strategy for education has implications for the way students and tutors in educational institutions interact

Modern mobile phones can be used to help students to access web based contents, remix it, share it, collaborate with others and create media rich deliverable for the classroom teachers as well as global audience.

A study done by UNESCO, (2012) has shown that mobile learning projects in South Africa have been used to improve teaching system especially teaching biology subjects. It is also noted that mobile phone uses for teaching and learning purposes in primary, secondary and tertiary education is in a highly gradual process in Indian educational system.

Mobile devices include smart phones, tablets, net-books, laptops, etc. Adolescent young learners spend many hours in these devices. These technologies help to integrate a series of features used in various learning environments. In some mobile learning applications, currently available, mobile features are being utilized for various educational practices include the use of Short Message Services (SMS), GPS, camera, browsing, downloading, bluetooth, Wi-Fi, voice calls and gaming (Kizito, 2012; Hoppe, 2009; Cui and Wang, 2008) [4]. According to Cui and Wang (2008) [4], SMS System can be used to help students learn foreign languages and teachers can use SMS to communicate with one student or even one group of students. For instance teachers in higher education in UK have made use of SMS as prompt for course requirements, polling classes, pop quizzes to students and sending information about time table and reminding students about dates for examination (Ferry, 2009) Highlighting the major features of mobile learning applications Alan Schwartz (2016) [1] points out that mobile learning content needs to be packed into small nuggets to engage students on their phones. Mobile learners are swipers and tappers, and therefore a user experience that relies on typing, clicking or even search can be quite painful on mobile.

Browsing with cell phones is a convenient way for students to surf online. Most of the modern mobile phones are incorporated with browsing applications such as Opera Mini, Internet explorer, Mozilla fire fox, Opera and Google chrome. Ferry (2009) points out the advantages of browsers for learners in their educational atmosphere like checking emails, reading materials such as e-books, and watching lecture from anywhere and at any time. Mobile phones have downloading

feature as the students can use it to download various kinds of materials like speeches and other informative things through their mobile phones easily. AS Kafyulilo 2012 [14] states teachers can download video through their mobile phones and present them to students through a TV set available in the classrooms.

Mobile phones can be used for sharing information resources through Infrared, Bluetooth and Wi-Fi. Other applications including emails, Google drive and social media can equally be used for sharing academic information resources.

After the wide coverage of smart phones most of the mobile phones have many attractive features like recording and playing multimedia contents. As Cui and Wang (2008) [4] suggests students can greatly benefit from having a camera on their mobile phones for documenting different types of visual materials and collecting scientific data for academic purpose and others.

Mobile phone usage and performance potential of learners

The frequent and excessive use of mobile phone of secondary school students has a remarkable effect in shaping their overall development. In contemporary society it is very important to analyze this influence in terms of their performance potential, as this study argues that addiction to technological devices and learners performance has regressive effect in education.

Learners mainly use mobile phone for delivering SMS and social media messaging, making phone calls, playing mobile driven games, listening music and accessing internet from their phones. Researchers like Echeburua and Corral (2010) [6] have suggested that the excessive use of new technologies especially online social networking may be particularly addictive to young people. The frequent use of mobile phones of young learners creates a sort of addiction in their personality and it negatively affects their academic performance. Addiction in its every form creates a sort of escapism from real world settings. This withdrawal tendency creates a laziness and lack of interest to certain academic and other activities. Hess (2014) [8] asserts that students are searching social media to get some relief from their emotional and mental pain.

The online social interactions of secondary school students are mainly characterized by its entertainments and self image creation tendency. They spend many hours online not for indulging in intellectual discussions or academic interactions but for creating and sharing very peripheral, emotional and sentimental messages. As they are staying online hundreds of messages are received at a short span of time and a very little time and opportunity is given to attain to lead intellectual interventions, internalization of content, producing self opinion and reflection. The lack of meaningful participation creates a type of alienation in learners. This alienation lowers meaningful interaction in the tasks they engaged and it causes to the low the level of their productivity in discussions and thoughts. This lowered productivity is a hindrance to the performance potential. As Ira Shore (1992) [18] points out it may lead to an 'informal and unacknowledged strike'. This low performance of students will cause to low achievement in their academic pursuits

While engaging in discussions or chatting in social media secondary school students merely copy and share the information from one social media group to another even without knowing its authenticity. The authenticity of information they receive through social media is to be

supported by a scaffolder or knowledgeable adult. If it is edited, checked critically and supported by a scaffolder the strength of authenticity will increase and moreover it create an authenticity based learning tendency in students. The lack of this external support leads to slow down their ability for critical intelligence. Critical intelligence is the ability of an individual to look critically once own surroundings and thereby able to resolve one's own issues in a socially accepted manner. The low level of critical intelligence will be a hindrance in academic pursuits. This also negatively affects their performance potential.

Conclusion

The use of technology has influenced the entire social interactions. As far as secondary school students are concerned, technology has become a part of their social and educational lives. They spend many hours a day in internet from their smart phones. Entertainment and pleasing features of mobile phones attract school going students to use mobile phones in academic purpose also. Lack of time for intellectual interventions while indulging in social media leads to slow down the ability of critical intelligence of the young learners. The low level of meaningful participation creates a type of alienation in learners. This causes to a fall in their intellectual productivity and thereby a potential harm for their performance potential. This is high time that educationists and pedagogues to pay attention to the threat on performance potential created by this new generation gadgets.

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